PREVENTION OF MATERNAL MORTALITY: A COMMUNITY ACTION RESEARCH IN BAKASSI LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA

A THESIS SUBMITTED TO THE UNIVERSITY OF MANCHESTER FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE FACULTY OF MEDICAL AND HUMAN SCIENCES

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# LIST OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF CONTENTS</td>
<td>2</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>9</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>10</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>11</td>
</tr>
<tr>
<td>COPYRIGHT STATEMENT</td>
<td>12</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>13</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>14</td>
</tr>
<tr>
<td>THE AUTHOR</td>
<td>15</td>
</tr>
<tr>
<td>GLOSSARY OF KEY TERMS</td>
<td>16</td>
</tr>
<tr>
<td>CHAPTER ONE</td>
<td>19</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>19</td>
</tr>
<tr>
<td>1.2 Contextual information about Nigeria</td>
<td>19</td>
</tr>
<tr>
<td>1.2.1 Background information on Nigeria</td>
<td>19</td>
</tr>
<tr>
<td>1.2.2 Healthcare delivery system in Nigeria</td>
<td>20</td>
</tr>
<tr>
<td>1.2.3 Cross River State</td>
<td>21</td>
</tr>
<tr>
<td>1.3 The Study Area</td>
<td>21</td>
</tr>
<tr>
<td>1.3.1 Bakassi LGA</td>
<td>21</td>
</tr>
<tr>
<td>1.3.2 Ekpri-Ikang Community (the study setting)</td>
<td>22</td>
</tr>
<tr>
<td>1.3.3 Contemporary health facilities in Ekpri-Ikang</td>
<td>23</td>
</tr>
<tr>
<td>1.3.4 Traditional health facilities</td>
<td>23</td>
</tr>
<tr>
<td>1.4 Background to maternal mortality</td>
<td>23</td>
</tr>
<tr>
<td>1.5 Justification of the study</td>
<td>27</td>
</tr>
<tr>
<td>1.5.1 What is already known</td>
<td>27</td>
</tr>
<tr>
<td>1.5.2 What could be known?</td>
<td>27</td>
</tr>
<tr>
<td>1.5.3 What this study will add</td>
<td>28</td>
</tr>
<tr>
<td>1.6 Purpose of the study</td>
<td>28</td>
</tr>
<tr>
<td>1.7 Objectives of the study</td>
<td>28</td>
</tr>
<tr>
<td>1.8 Research questions</td>
<td>28</td>
</tr>
<tr>
<td>1.9 Outline of the thesis</td>
<td>29</td>
</tr>
<tr>
<td>1.10 Summary</td>
<td>30</td>
</tr>
<tr>
<td>CHAPTER TWO</td>
<td>32</td>
</tr>
<tr>
<td>LITERATURE REVIEW</td>
<td>32</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>32</td>
</tr>
<tr>
<td>2.1.1 Search Strategy</td>
<td>32</td>
</tr>
<tr>
<td>2.2 Concept of Maternal Mortality</td>
<td>33</td>
</tr>
</tbody>
</table>
2.3 Measures of Maternal Mortality .......................................................... 35
2.4 Global and Regional Estimates of Maternal Deaths .......................... 36
2.5 Maternal Mortality in the Developing Countries ............................. 38
  2.5.1 Causes of Maternal Deaths in the Developing Countries .......... 38
  2.5.2 Factors Influencing Maternal Mortality ................................. 38
2.6 Maternal Mortality in Nigeria ......................................................... 40
2.7 Maternal Healthcare in Nigeria ...................................................... 40
2.8 Political Commitment .................................................................. 41
2.9 Policies on the Reduction of Maternal Mortality ............................ 41
  2.9.1 World Health Organisation Policies ........................................ 42
  2.9.2 The fourth world conference on women ................................... 43
  2.9.3 The International Confederation of Midwives (ICM) and the White
       Ribbon Alliance.............................................................................. 44
  2.9.4 Relevant Policies in Nigeria ...................................................... 45
2.10 Strategies for the prevention of maternal mortality ........................ 47
  2.10.1 Skilled birth attendants ......................................................... 47
  2.10.2 Emergency Obstetric Care (EmOC) ......................................... 49
  2.10.3 Community Mobilisation ....................................................... 50
  2.10.4 Summaries of the studies ....................................................... 54
2.11 SUMMARY OF LITERATURE REVIEW ........................................ 57
2.12 CONCLUSION .............................................................................. 57

CHAPTER THREE ................................................................................. 59
EPISTEMOLOGICAL POSITIONING AND SUPPORT FOR ACTION RESEARCH 59
3.1 Introduction .................................................................................. 59
3.2 Nature and development of action research ................................... 59
  3.2.1 Kurt Lewin and action research .............................................. 59
  3.2.2 The participatory paradigm of action research ....................... 61
  3.2.3 Commitment to improvement/change ...................................... 61
  3.2.4 Criticisms of Kurt Lewin ...................................................... 63
3.3 Philosophical approaches related to action research ...................... 64
  3.3.1 Positivist notion (dialectical view of reality) ............................ 64
  3.3.2 Interpretivism ......................................................................... 66
  3.3.3 Critical theory ........................................................................ 68
3.4 Conclusion .................................................................................... 69

CHAPTER FOUR .................................................................................. 71
METHODOLOGY .................................................................................. 71
4.1 Introduction .................................................................................... 71
4.2 Methodology .............................................................................................................................. 71
  4.2.1 Rationale for Action Research .......................................................................................... 72
  4.2.2 Rigour of action research ................................................................................................. 75
  4.2.3 Action Research Process .................................................................................................. 77
4.3 Ethical Issues ............................................................................................................................ 80
  4.3.1 Negotiating and Securing Access .................................................................................... 80
  4.3.2 Protection of Participants ............................................................................................... 81
  4.3.3 Assuring Good Faith ....................................................................................................... 82
CHAPTER FIVE ................................................................................................................................ 84
FACT-FINDING (PHASE ONE) ........................................................................................................ 84
5.1 Introduction .............................................................................................................................. 84
5.2 Selection of the Action Research Group .................................................................................. 84
  5.2.1 Inclusion Criteria ............................................................................................................. 86
  5.2.2 Exclusion Criteria ........................................................................................................... 87
5.3 Immersion ................................................................................................................................ 87
5.4 Induction of the Action Research Group (Co-researchers) ...................................................... 89
5.5 Data Generation Methods ....................................................................................................... 91
  5.5.1 Fact Finding Phase .......................................................................................................... 91
  5.5.2 Sample .............................................................................................................................. 91
  5.5.3 Sample size and recruitment method ............................................................................. 93
  5.5.4 Development of the data-generation tools ..................................................................... 94
  5.5.5 In-depth interviews ......................................................................................................... 95
  5.5.6 Individual interviews ....................................................................................................... 96
  5.5.7 Focus Group Discussion ................................................................................................... 98
  5.5.8 Participant Observation .................................................................................................... 100
  5.5.9 Field Notes ...................................................................................................................... 103
5.6 The role of the town crier ......................................................................................................... 104
5.7 Data Management .................................................................................................................... 104
  5.7.1 Data analysis ................................................................................................................... 105
5.8 Results ..................................................................................................................................... 107
  5.8.1 Causes of death due to pregnancy and childbirth ............................................................ 110
  5.8.2 Community perspectives on the prevention of maternal deaths .................................... 142
5.9 The action research group ......................................................................................................... 145
5.10 Conclusion ............................................................................................................................... 145
CHAPTER SIX .................................................................................................................................. 148
(PLANNING AND ACTION) PHASE TWO .................................................................................... 148
6.1 Introduction ............................................................................................................................... 148
6.2 Community education on maternal mortality .................................................150
6.3 Career counselling of youths to train as midwives ........................................153
6.4 Training of TBAs on danger signals in pregnancy and delivery, need for referrals and maintenance of hygiene to prevent infection ........................................153
6.5 Common forum between TBAs, the midwife and other health workers in the community. .................................................................155
6.6 Advocacy discussions .................................................................................157
    6.6.1 Objectives of the advocacy/lobbying .....................................................157
7.1 Introduction .................................................................................................163
7.2 Evaluation approach ..................................................................................163
7.3 The objectives of the evaluation ................................................................163
7.3 Data Management ....................................................................................166
7.4 Findings from the focus groups and one to one interviews .........................166
    7.4.1 Community education ........................................................................167
7.7.2 Training of Traditional birth attendants ................................................188
7.5 Changes already taking place in the community due to this project ..........192
7.6 Continuity/Sustainability ........................................................................195
7.7 Summary ...................................................................................................198
8.1 Introduction .................................................................................................202
8.2 Overview of findings ................................................................................202
    8.2.1 Phase 1 ..............................................................................................202
7.4.2 Findings from the evaluation following action in Phase 2 .....................203
8.3 Causes of maternal deaths .........................................................................206
    8.3.1 Maternal health problems that result in death ....................................206
8.3.2 Sociocultural factors ............................................................................207
8.3.3 Nutritional taboos ...............................................................................211
8.3.4 Other social factors ............................................................................212
8.3.5 Attitudes towards maternal deaths ......................................................213
APPENDIX 12: PARTICIPANT INFORMATION SHEET .......................................................... 281
(For the action research group) ..................................................................................... 281
APPENDIX 13: PARTICIPANT INFORMATION SHEET .................................................. 286
(for the general participants) ....................................................................................... 286
APPENDIX 14: CONSENT FORM ................................................................................. 290
(Action research group [co-researchers]) ...................................................................... 290
APPENDIX 15: CONSENT FORM .................................................................................. 291
(other participants apart from action research group) .................................................... 291
APPENDIX 16: GROUND RULES BY ACTION RESEARCH GROUP ......................... 292
APPENDIX 17: INTERVIEW GUIDE (for women of childbearing age) ....................... 293
APPENDIX 18: BROAD TOPICS FOR FOCUS GROUP DISCUSSION.............................. 295
APPENDIX 19: OBSERVATION GUIDE ........................................................................ 296
APPENDIX 20: HEALTH CENTRE AT THE COMMUNITY ............................................ 297
APPENDIX 21: DILAPIDATED STAFF QUARTERS AT THE HEALTH CENTRE .......... 298
APPENDIX 22: MAKE-SHIFT BOILER FOR DELIVERY INSTRUMENTS AT THE HEALTH CENTRE ...................................................................................................................... 299
APPENDIX 23: THICK BUSH AROUND THE CLINIC ..................................................... 300
APPENDIX 24: DELIVERY ROOM AT THE HEALTH CENTRE ...................................... 301
APPENDIX 25: A TBA’S DELIVERY HUT ................................................................. 302
APPENDIX 26: INTERIOR OF THE DELIVERY HUT ................................................. 303
APPENDIX 27: TBA’S DELIVERY EQUIPMENT ......................................................... 304
APPENDIX 28: A TBA’S PLACE OF DELIVERY ....................................................... 305
APPENDIX 29: HERBS PROVIDED FOR THE PREGNANT WOMEN BY THE TBA FOR ENEMA ......................................................................................................................... 306
APPENDIX 30: DELIVERY ROOM ATTACHED TO A CHURCH .................................... 307
APPENDIX 31: INTERIOR OF THE CHURCH DELIVERY ROOM ............................... 308
APPENDIX 32: A TBA’S PRAYER ALTAR ................................................................. 309
APPENDIX 33: A TBA’S DELIVERY ROOM ............................................................... 310
APPENDIX 34: A TBA’S LYING-IN ROOM ................................................................. 311
APPENDIX 35: TBA DURING A TRAINING SESSION ................................................ 312
APPENDIX 36: TBAS WITH DELIVERY KITS AFTER TRAINING ................................. 313
APPENDIX 37: DETAILS OF THE WHO POLICY ON THE REDUCTION OF MATERNAL MORTALITY ...................................................................................................................... 314
APPENDIX 38: COMMUNITY EDUCATION GUIDE ON MATERNAL MORTALITY .......... 317

Total word count: 80,000
LIST OF TABLES

Table 2.1: Estimates of maternal mortality ratio by selected regions of the world ............................ 36
Table 2.2: Maternal Mortality Ratio and number of maternal deaths by selected countries ..................... 37
Table 2.3: Interventions involving mobilisation for maternal and child health ..................................... 52
Table 5.1: Focus groups in the fact-finding phase......................... 109
Table 5.2: Focus groups and codes ........................................... 110
Table 6.1: Actions to prevent maternal mortality ....................... 150
Table 7.1: Focus groups in the evaluation phase ....................... 165
Table 7.2: Data generation for evaluation ............................... 166
LIST OF FIGURES

Fig 8.1: Diagrammatic presentation of the findings of the study ........................205
ABSTRACT

THE UNIVERSITY OF MANCHESTER


Maternal mortality in Nigeria is one of the highest in the world. The rate is higher in the rural communities than in the urban. Given the complexity of causes of maternal mortality, it appears that the community is an important resource that is frequently overlooked. The contribution of which could be explored through collaboration with professional healthcare providers, to bring about reduction in maternal mortality.

This study, proposed to empower members of the community to take action to prevent maternal mortality. Action research design was utilised, comprising cycles of fact-finding, planning/action, and evaluation with the aim of working towards a change in the status quo.

In collaboration with the action research group, data were generated through 29 interviews, 8 focus group discussions and observation of 7 persons. Women of childbearing age were interviewed to gain understanding of their knowledge, attitude and practice towards maternal mortality. Focus group discussions were carried out with a cross section of the community. Observations were undertaken of skilled and traditional birth attendants (TBAs) in their places of practice. Altogether, there were 86 general participants and 12 action research group members in the study.

Thematic data analysis and critical reflection were undertaken with emphasis on data which promote learning and change. The study revealed childbirth fallacies as evidenced in the causes of maternal deaths being attributed to superstitious beliefs. Other findings included religious beliefs/practices, birth practices, negative attitudes, lack of money, lack of transportation and health facilities issues as contributory factors. These findings were critically reflected upon by the action research group and actions based on the findings, aimed at empowering the people to take action to prevent maternal deaths were undertaken. The actions included community education, TBA training and development of a common forum between skilled birth attendants and TBAs.

Participatory evaluation was undertaken from the perspectives of the participants to identify what made sense to them from the actions. Findings included some degree of empowerment and emancipation of the people evidenced in the acquisition of new knowledge which led to the repudiation of certain superstitious beliefs. Other findings include resumed utilisation of the service of skilled birth attendants at the local health facility by the women. The findings of this study have demonstrated implications for practice, policy and research to prevent maternal mortality in Bakassi LGA, Nigeria.

Conclusion drawn is that, the community is an important resource which if mobilised through the process of action research, would be empowered to take action to prevent maternal mortality. The process will also foster the collaboration between skilled birth attendants and traditional birth attendants to improve maternal health care in the rural community.
DECLARATION

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To Esienumoh and our children as well as Eric and Kense, I will always remain grateful for their encouragement, love and bearing my long absence from the home.
DEDICATION

I dedicate this thesis to the Almighty and Sovereign God with whom there is no variableness and in His own time, makes everything beautiful. In His good benevolence, He granted me every resource that was required for the success of this work.

I also dedicate this thesis with tears to my mother, Nkoyo, who passed on while I was still on this programme. I wish she lived to see me return with the ‘golden fleece’.

Also, to my husband Esienumoh, who had encouraged me to undertake a degree programme in Nursing, which journey has culminated in this great achievement. Finally, to my children who bore the discomfort of my absence from home throughout this programme.
THE AUTHOR

I am a practising nurse/midwife, as well as an educator. I obtained a Bachelor of Science degree in Nursing from the University of Ibadan, in 1988 and a Master’s degree in Public Health from the University of Calabar in 1998, both in Nigeria. After my first degree, I was deployed to teach in Schools of Nursing and Midwifery, Calabar. I took up an appointment as a lecturer in the University of Calabar in 2001 where I have been working until I gained admission into the University of Manchester to undertake my PhD.
GLOSSARY OF KEY TERMS

The following terms are the definition of terms as they are used in this study.

**BEOC**: Basic Emergency Obstetric Care

**EmOC**: Emergency Obstetric Care

**FMOH**: Federal Ministry of Health

**FOS**: Federal Office of Statistics

**Home Deliveries**: Home deliveries in this context refer to those deliveries which take place outside the formal health care setting and not attended by professional healthcare providers.

**ICM**: International Confederation of Midwives

**LGA**: Local Government Area

**Maternal Mortality**: This is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of duration and site of pregnancy from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (WHO, 1992, WHO, 2008).

**MMR**: Maternal Mortality Ratio. This is the number of maternal deaths in a given period per 100,000 live births during the same time period (WHO, 2008).

**MMRate**: Maternal Mortality Rate. This is the number of maternal deaths in a given period per 100,000 women of reproductive age during the same time period (WHO, 2008).

**MSS**: Midwives Service Scheme. This is a recent project in Nigeria aimed at increasing skilled birth attendance.

**Patent medicine dealer**: A person who is licensed to sell simple medications that do not require prescription by the statutory health professionals.

**Quacks**: Unqualified persons who meddle with some form of health care.

**RAMOS**: Reproductive Age Mortality Studies

**RCOG**: Royal College of Obstetricians and Gynaecologists

**Skilled Birth Attendants**: This refers exclusively to people with midwifery skills, these are doctors, midwives and nurses who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose, manage or refer complications (WHO, 1999).

**TBAs**: Traditional Birth Attendants. This is a person who undertakes maternity services through skills that are not scientifically acquired.
UN: United Nations
UNICEF: United Nations Children’s Fund
UNFPA: United Nations Population Fund
WHO: World Health Organisation
CHAPTER ONE
CHAPTER ONE

INTRODUCTION TO THE THESIS

1.1 Introduction

This thesis will present a community action research project on the prevention of maternal mortality in a rural setting in Cross River State of Nigeria. It utilises the participatory paradigm with members of the community and health care professionals to carry out fact-finding on their knowledge, attitudes and practices with regard to maternal mortality and to empower them to take action as well as evaluation of the action with regard to the prevention of the problem.

1.2 Contextual information about Nigeria

The study setting is Ekpri-Ikang community in Bakassi Local Government Area (LGA) in Cross River State of Nigeria. This community is selected because it is rural and maternal mortality is found to be higher in rural settings (Federal Office of Statistics and UNICEF, 1999). The community has a Health centre and its geographical location makes access to the research setting easy.

1.2.1 Background information on Nigeria

Nigeria is a federally constituted republic comprising thirty-six states and a Federal Capital Territory (Appendix 1). It is a Sub-Saharan Country located in West Africa and lies between the Equator and the Tropic of Cancer. It shares land border with the Republic of Benin in the west, Chad and Cameroon in the east and Niger in the north (Appendix 2). It has a coastal border in the south formed by the Gulf of Guinea and the Atlantic Ocean (Federal Ministry of Information, Nigeria, 2008).

Nigeria has a total area of 923,768 square kilometres (356,669 square miles), it is the world’s 32nd largest country. Its size is about four times that of the United Kingdom which ruled the country from the nineteenth century until 1st October, 1960 when Nigeria gained independence (Abasiattai, Ukpong, Esenowo,2004; Federal Ministry of Information, Nigeria, 2008). It has a varied landscape ranging from the Obudu hills in the southeast
through the beaches, rain forest and mangrove swamp in the south and Niger Delta; savannah in the middle and southwest and the sahel to the encroaching Sahara desert in the extreme north (Abasiattai et al, 2004; Federal Government of Nigeria, 2010).

The climate of the country varies from tropical in the coastal areas to subtropical in the north. There are two main seasons, the dry, extending from November to March and the wet or rainy season from April to October. The rainy season is characterised by thunderstorms and heavy rains in the coastal areas, while the north experiences less heavy rains. Generally, the south is moist and warm with humidity of about 95% and temperature rarely above 32°C, while the north is dry and dusty and experiences sandstorms occasionally and temperature ranges between 12°C and 36°C.

The population of Nigeria is about 140 million, making it the most populous country in Africa and the eighth most populous country in the world (National Bureau of Statistics, 2010). There are about 36 major ethnic groups in Nigeria with diverse cultural heritage, thus, making it a very complex and highly heterogeneous society. Hausa, Yoruba and Igbo ethnic groups make up about 40% of the population (Abasiattai, 2004; Federal Ministry of Information, Nigeria, 2008). Two major religions are practised in the country, Christianity predominantly in the southern states while Islam is predominant in the north (Federal Ministry of Information, Nigeria, 2008).

Administratively, the country is governed through a three tier system in the following hierarchical order: the Federal, State and Local government. There is one Federal Capital territory, thirty-six states and each state is further divided into Local Government Areas (LGAs). There is a total of 774 LGAs.

1.2.2 Healthcare delivery system in Nigeria

Healthcare in Nigeria is organised in three tiers, primary, secondary and tertiary and these are under the control of the corresponding tiers of government, the Local, State and Federal Governments respectively (Constitution of the Federal Republic of Nigeria, 1999). The primary level utilises the primary health care approach which involves the strategy of taking health service to where the people live and work. It is the entry point into the health system and provides general health services through preventive, promotive, curative and rehabilitative strategies (Adeyemo, 2005).
Secondary healthcare is offered in General Hospitals and provides support for referrals from the primary health care facilities and also makes referrals to the tertiary hospitals. At the apex, is the tertiary level and comprises the Teaching and Specialist Hospitals (Constitution of the Federal Republic of Nigeria, 1999; Egwu, 2000; Adeyemo, 2005). Recent data show that there are about 96,379 (ninety-six thousand, three hundred and seventy-nine) midwives in Nigeria (Nursing and Midwifery Council of Nigeria, 2010).

1.2.3 Cross River State
Cross River State is one of the 36 states of Nigeria, it is located in the south-eastern coastal part of the Niger Delta area of the country. It shares a common boundary to the east with the Republic of Cameroon, to the west, with Enugu and Abia States, to the north with Benue State and to the south with Akwa Ibom State and the Atlantic Ocean. Its land mass is about 21,637 sq. km. and is subdivided into eighteen LGAs, (Appendix 3) with a total population of about 3,104,446 people (Federal Ministry of Information, Nigeria, 2008). The vegetation ranges from the mangrove swamp and tropical rain forest in the coastal and southern parts of the State, through the savannah in the central and northern parts, with a typical temperate zone in the hilly area of Obudu. The major ethnic groups in this state are the Efiks, Bekwara and Ejagham, and are mostly Christians.

1.3 The Study Area
1.3.1 Bakassi LGA
The new Bakassi LGA was created from Akpabuyo LGA in 2007 following the ceding of the Bakassi peninsula, which was the former Bakassi LGA, to Cameroon by the Federal Government of Nigeria. Akpabuyo is located in the hinterland, while Bakassi is in the south and forms part of the coastal border of the Atlantic Ocean. This LGA has a population of about 135,698 out of which about 65,533 are females (Federal Republic of Nigeria, 2007). The LGA is made up of several geographical communities and its Headquarter is at Ikang. The indigenes are Efik, although people from other ethnic groups such as Annang, Ibibios, Ijaws and Igbos also live here to do business. The major occupations of the people are farming, fishing and trading. The main religion is Christianity.
The LGA is administered by a Chairman of Council; a traditional ruler known as the Clan Head, oversees all the community leaders, who in turn traditionally administer each community. This LGA is chosen because it is rural, as literature review showed, the rural areas are where the biggest problem of maternal mortality is situated (Federal Office of Statistics and UNICEF, 1999). Many of the communities do not have access to contemporary health care services, although there is a secondary health facility located in Akpabuyo and is shared by the both Bakassi and Akpabuyo LGAs.

Bakassi LGA has four Primary Health Care Centres and each is located at Ikang, Ekpri-Ikang, Ifiang-Nsung and Esighi. There are only seven practising midwives in the whole of this LGA and one medical doctor. Alternative healthcare is provided by traditional healers and some maternal healthcare is given by the traditional birth attendants.

1.3.2 Ekpri-Ikang Community (the study setting)

This community is located in the central part of Bakassi LGA and has a population of about 8,000 people. It is administered traditionally by the community leader, supported by the members of the Council of Chiefs. There is also a Women leader who mobilises the women whenever there is any activity that requires them. Although she is not a member of the Council of Chiefs, her position is recognised by the community. The position of women leader arose following the awareness created in the Fourth World Conference on Women in Beijing which discussed, as part of its agenda, the discouragement of discrimination against women (UN, 1995). The conference was attended by the wife of the President of Nigeria and her entourage who in turn embarked on an enlightenment campaign for the women folk. This women leader is the daughter of a late Chief in the community and her opinion is highly respected in the community.

Ekpri-Ikang is a relatively small and vibrant commercial community which is only second to Ikang. Its market days are on Tuesdays, Thursdays and Saturdays, during which every other activity in the community receives less priority. The market is widely attended by people from the neighbouring communities. The major occupations of the people include petty-trading and subsistence farming. Like for the rest of the Local Government Area, the major ethnic group here is the Efik, though there are the Ibibios, Annangs, Ijaws and Ibos who live here to do some business. These various ethnic groups share some common cultural similarities.
The community has one major tarred road traversing its whole length as well as a network of earth roads and foot paths in the hinterland (Appendix 4). There is a Primary School but no Secondary School and so the youths who desire secondary education have to get that from neighbouring communities. Also available in this setting, are fourteen Churches.

1.3.3 Contemporary health facilities in Ekpri-Ikang

The Health Centre at Ekpri-Ikang is located in the outskirts of the community and is accessible through a lonely, bushy and earth road which is difficult to access at night because of darkness. This health facility has not been fully functional for the past fifteen years. No maternity services have taken place during these years due to non-utilisation by the women. There is only one midwife and two Community Health Extension Workers in the Health Centre. Due to the inadequacy of staff, the health facility functions for only eight hours a day, that is, from 8:00am to 4:00pm on week days and does not offer any service on Saturdays and Sundays.

1.3.4 Traditional health facilities

There are seven traditional birth attendants (TBAs) in this community. Some of the Churches, also attend to maternity needs of the women but through unskilled attendants. In addition, such Churches get the TBAs to work for them in this regard.

1.4 Background to maternal mortality

Pregnancy and childbirth are natural processes in the life of a woman. In some situations in Nigeria, when the pregnancy is wanted, childbirth is celebrated as it is the time for the mother to be showered with gifts from her husband (Izugbara and Ukwayi, 2007; Mboho, 2009). Unfortunately, in some situations, pregnancy and childbirth, rather than a call for celebration, could usher in mourning. The reason being that, the mother and/or baby lose their lives due to complication(s) of birth. This sad scenario is a common phenomenon in Nigeria, and particularly so in the rural areas.

Maternal mortality is the death of a woman while pregnant or within forty-two days or six weeks of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by pregnancy or its management but not from accidental or incidental causes (World Health Organisation, WHO, 2005). It is very frustrating to see a woman die, particularly if the cause of death is preventable. It has been
observed that most maternal deaths are avoidable, given the right strategies including skilled attendants, Emergency Obstetric Care (EmOC) and community mobilisation (De Brouwere, 2002; UN, 2007).

Receipt of this specialised care from doctors and midwives is limited in localities where maternal death is a major problem (Millennium Development Goal Report 35, 2007). Less than 50% of births in Africa generally, are attended by a skilled birth attendant, in spite of a lot of effort to improve the situation between 1990 and 2005 (Millennium Development Goal Report 35, 2007). These figures are much lower than the global target which states that at least 90% of births should be attended by skilled health worker (United Nations, 1999).

As shown, some pregnant women in Nigeria and other developing countries, otherwise known as resource-poor countries, do not have access to the services of professionally qualified staff who have the capacity to cope with obstetric emergencies, should they arise. Rather, as found by Demographic Health Surveys (Measure, 2002), Traditional Birth Attendants (TBA) assisted 1% to 66% of deliveries in 44 developing countries. This was found in an analysis of 200,633 live births (Sibley et al, 2008). This means that most mothers are cared for by unqualified personnel. This is also found in Nigeria for example, about 70% of deliveries are attended by TBA and these do not have the capacity to cope with obstetric emergencies (Ating, 1989). A group of authors define a traditional birth attendant as follows:

‘A traditional birth attendant is either a person who assists the mother during childbirth, who initially acquired the skills by delivering babies herself or by working with other TBAs… These are usually older persons and generally illiterate’ (De Brouwere et al, 2002).

The problem of maternal mortality in Nigeria appears to be multifaceted. It is assumed that, this problem not only stems from lack of access to appropriately qualified medical staff but also from the complex social, cultural and economic characteristics of the people which include traditional beliefs, poverty, ignorance and low literacy level (Chiwuzie and Okolocha, 2001; Okafor, 2000; Izugbara, 2000). Health-seeking behaviour is deeply entrenched in cultural beliefs and practices which include lack of autonomy in decision-making by women, male dominance, decision-making influenced by members of the
extended family, ‘supernatural powers’ of the TBAs and other traditional healers (Okafor, 2000). Many TBAs and traditional healers strongly believe that their practices are controlled by supernatural powers and so, claim the ability to cope with any health condition. Most TBAs also claim that they can successfully handle any obstetric condition including complications (WHO/Traditional Medicine Programme, TRM, 1995).

Although some TBAs have been trained, basically on hygiene and referrals, some of them do not refer their clients when it is necessary to do so, thus, training does not appear to change their behaviour. A typical TBAs’ training is usually short, spanning over five days or less, and it is aimed to improve their practice in order to reduce maternal and child mortality and morbidity (De Brouwere, Tonglet and Lerberghe, 2002). Areas of focus in the training include hygiene in the conduct of deliveries; discouragement of harmful practices; recognition of danger signal and referral of mothers with complications to contemporary health facility that can cope with obstetric emergencies (De Brouwere et al, 2002). However, Sibley et al (2008) in a systematic review of traditional birth attendant training for improving health behaviours and pregnancy outcomes, concluded that there was no evidence that training TBA reduces maternal mortality. Education often does not lead to behavioural change, what is required is behavioural interventions that involve active learner participation the stages of development and implementation of the learning activities (Tilbury and Wortman, 2008).

Where complications arise, the TBA tend to delay in referring women to hospital as they try out their own remedies first, such as incantations, roots and herbal drinks among others. Sometimes, the delay in referral could also be caused by unavailability of a means of transportation of the woman to the hospital (Fawcus, Mbizvo, Lindmark, Nystrom, 1996; bij de Vaale, Coleman, Manneh, Walraven, 2002; Alya van den Pol, 2007). Unfortunately, some of the women die on their way to the hospital or in the hospital. Asuquo, Otong, Olaniran, Duke (1992), in a study of obstetric haemorrhage in two rural communities of Cross River State, Nigeria, found that TBA refer the women in a moribund state to the hospital when little or nothing could be done to save them.

This situation suggests that some people in Nigeria do not have understanding of what action to take to prevent maternal mortality. This is in spite of prevention of maternal mortality programmes by the WHO, government, professionals and multinational agencies
like United Nations Children’s Fund (UNICEF) and United Nations Population Fund (UNFPA). Significant among the programmes and projects are the training of TBA and the package of Emergency Obstetric Care. That maternal mortality is still high, shows a gap between theory and practice. Living in the sub-Saharan region of the world, I have a personal desire to assist in the prevention of maternal mortality because the news of a woman dying in pregnancy and childbirth is received every other week. Besides, as a professional, I have also witnessed some of these deaths which would have been averted if there have been prompt and appropriate interventions.

Community oriented primary health care programme has been observed to be the most appropriate approach to addressing the health needs of poor people (Rosato, Laverack, Grabman, Triphathy, Nair, Nwansambo, Azad, Morrison, Bhutta, Perry, Rifkin and Costello, 2008). The success of this approach is evidenced in national and sub-national health programmes in China, Cuba, Sri Lanka, Tanzania and Venezuela. Other countries which recorded such success include Guatemala, India, Indonesia, Iran, Kenya and Niger (Rosato et al 2008).

The lack of substantial reduction in maternal mortality in sub-Saharan Africa between 1990 and 2005 is thought to be partly due to lack of community involvement (DIFD, 2004). It has been observed that community intervention programmes were not adequately done because such programmes targeted at a passive recipient community, in that, mobilisation consisted of communities responding to the directions of professionals to improve their health (Rosato et al, 2008). However, a few studies have shown the effectiveness of community mobilisation interventions where the community provides the resources and is the active agent of change (Rosato et al, 2008). This means that, the community is actively involved in the plan and implementation of activities that would lead to change. For instance, such interventions in Ethiopia and Nepal, resulted in the reduction of under-5 mortality and neonatal deaths by 40% and 30% respectively. There was also a significant reduction of maternal deaths (Rosato et al, 2008). Community involvement appeared to have been effective in the mentioned settings, it might also be useful in Nigeria.

There is need, therefore, for a shift in paradigm from the top down community approach with regard to strategies for the prevention of maternal mortality. An approach which
involves interaction among care-givers, mothers and significant others, directed towards empowering the community to be actively involved in the solution of this problem might be necessary. This approach is aimed at empowering the people to take the right action towards the prevention of maternal mortality. Also, this will create a common forum for collaboration between care-givers and mothers as well as other members of the community. Such forum will create a milieu to learn more about the different perspectives of the problem, and together, the people will see themselves as stakeholders in proffering solution to maternal deaths (Rasch, 2007; Kongnyuy, van den Broek, 2008).

1.5 Justification of the study

1.5.1 What is already known
Maternal mortality in Nigeria is one of the highest in the world (WHO et al, 2005). The rate is higher in the rural areas than in the urban and the pattern shows regional variations, higher in the north than in the south. Only about 31% of deliveries are assisted by skilled birth attendants and over 70% of maternal deaths in Nigeria are preventable (Federal Ministry of Health, 2001). The causes of these deaths in Nigeria include postpartum haemorrhage, sepsis, obstructed labour, eclampsia and complications of unsafe abortion (Maine, 1991; Asuquo, Ottong, Olaniran and Duke, 1992; Shehu, 1992; Kisekka, Ekwempu, Essien and Olorukoba, 1992). Most of the maternal deaths occur outside the medical system either at the TBA’s home or on the way to the hospital (Maine, 1995). The national health policy of Nigeria did not lay special emphasis on the prevention of maternal mortality in spite of the global actions to reduce the burden of death. Example of such actions include the 5th Millennium Development Goal, which states that maternal mortality should be reduced by 75% by the year 2015 (UN, MDG Report, 2007). However, the Reproductive Health policy of Nigeria states that the risk of death should be reduced by 50% through access to emergency obstetric care (Federal Ministry of Health, 2001).

1.5.2 What could be known?
Given the complexity of causes of maternal mortality, it appears that the community is an important resource that is frequently overlooked. The contribution of which could be explored through collaboration with professional healthcare providers, to bring about reduction in maternal mortality. Community in this context refers to a group of people with
a common cultural and political background living in the same geographical area (Encarta Online Dictionary, 2011).

1.5.3 What this study will add
To the best of my knowledge, based on literature search, I am not aware of any community action research in Nigeria, especially on the prevention of maternal mortality. This is going to be the first of such study in Nigeria and it will attempt to empower the people and facilitate collaboration between members of the community and health professionals to take action towards the reduction of maternal mortality.

1.6 Purpose of the study
This study aims to empower members of the community to take action with health care professionals to prevent maternal mortality.

1.7 Objectives of the study
1.7.1 To carry out a participatory fact-finding exercise with the research participants in the study setting as regards maternal mortality.
1.7.2 To facilitate the creation of a common forum between health care professionals and the community members to take action on the prevention of maternal mortality.
1.7.3 To collaborate with the participants to develop a plan of action and programme to meet the identified needs.
1.7.4 To carry out a participatory evaluation of the impact of the actions on the participants.
1.7.5 To discuss the implications of the findings in the light of relevant theory on the involvement of community in the prevention of maternal mortality.

1.8 Research questions
1.8.1 What constitutes knowledge of the people about maternal mortality?
1.8.2 What are their maternal health and birthing practices?
1.8.3 What is the attitude of the people toward maternal mortality?
1.8.4 What gap exists between theory and practice with regard to maternal mortality in this community?
1.8.5 What strategy can be taken to empower the people to take action in collaboration with health care professionals to prevent maternal mortality?

1.9 Outline of the thesis
Chapter 1 offers contextual information on maternal mortality, the study setting and Nigeria as a whole. Emphasis is placed on the political structure, health policies and background to maternal mortality in Nigeria. Also discussed, is the justification for this study and the purpose as well as the objectives of the study.

Chapter 2 appraises the literature on maternal mortality in Nigeria and all over the world. This section is discussed in themes which include the concept of maternal mortality together with global estimates; factors influencing maternal mortality; maternal mortality and maternal healthcare in Nigeria; global and local maternal healthcare policies as well as strategies for the prevention of maternal mortality.

Chapter 3 examines the nature, development and epistemological perspectives of action research, which is the design utilised in this study.

Chapter 4 discusses the methodology of this study. The action research paradigm and its justification as the most appropriate approach to achieve the purpose of this study, is discussed.

Chapter 5 (Phase 1) presents the fact-finding phase of the action research in the field. This involves the formation of the collaborative group, otherwise known as the co-researchers as well as immersion in the community. Furthermore, data were generated, analysed and the results were fed into the next phase.

Chapter 6 (Phase 2) consists of planning and taking action based on the findings in Phase 1. Here, the reflective process is described with regard to what action is appropriate and who is to take action to solve the identified problems as well as the actual implementation of the action.
Chapter 7 (Phase 3) focuses on the evaluation of the actions that were taken in the previous chapter. Evaluation was based on the perspectives of the participants and the features included new knowledge, value added to their lives and new ways of behaviour.

Chapter 8 discusses the findings of the study from both fact-finding and evaluation phases. It also discusses the community organisation model as a parallel to the process of this study and concludes with the concepts of empowerment and emancipation which enables the establishment of the emergent change.

Chapter 9 presents the conclusions of the study with implications for practice, policy and research.

1.10 Summary
In this chapter, I have provided background information about Nigeria, Bakassi Local Government Area as well as Ekpri-Ikang community which is the study setting. The background of maternal mortality in Nigeria was discussed, also, the purpose, objectives and justification of this study. I have also presented an outline of the thesis and given an idea about each chapter. As a continuation of this discussion, in Chapter two, I will now present the literature review on various aspects of maternal mortality.
CHAPTER TWO
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
In this chapter, literature on maternal mortality will be reviewed. This will be organised thematically to include the concept of maternal mortality, global and regional estimates of maternal deaths and maternal mortality in developing countries including Nigeria. The review will also include relevant policies as well as community involvement and interventions towards the reduction of maternal mortality.

2.1.1 Search Strategy
As opposed to a systematic review (Polit, Hungler, 1995; Cronin, Ryan, Coughlan, 2005) a traditional literature review is undertaken with the aim of providing a comprehensive background on the research topic. This gives an orientation on what is already known about maternal mortality. At the end, the information is summarised, critiqued and conclusion drawn. In contrast, systematic review is a concise summary of the best available evidence that addresses sharply defined clinical questions with the aim of providing best evidence to improve practice. This uses explicit and rigorous methods that limit bias to identify, critically appraise and synthesise relevant studies. The methods of review include uniform criteria applied to extract information by more than one reviewer (Mulrow and Cook, 1998; Magarey, 2001). The traditional literature review does not involve the mentioned rigours of the systematic review. In this instance, traditional review is preferred because it is more wide-ranging, exploratory and is not limited by pre-set criteria (Cronin et al, 2005).

The literature review in this study involved the electronic search of databases such as MEDLINE, PUBMED, CINAHL (Cumulative Index of Nursing and Allied Health Literature), MIDIRS (Midwives Information and Resource Service), ASSIA (Applied Social Science Index and Abstracts), BNI (British Nursing Index), EMBASE (the European Medical Database), PSYCHinfo (Psychological literature) and Cochrane Library. These are the relevant databases that contain up-to-date information on midwifery and obstetrics as well as the related socio-cultural factors. Hand searching of some journals was done, for example, African Journal of Midwifery, Africa Journal of Nursing and
Midwifery. Books and anecdotes were also searched. An attempt was made to search comprehensively by also examining grey or unpublished literature as well as the websites of the World Health Organisation, UNICEF, World Bank and UNFPA. The keywords that guided the literature search were related to the themes identified by me. These are: maternal mortality, developing countries, health policies, community mobilisation and obstetric emergency.

2.2 Concept of Maternal Mortality

Generally, maternal mortality refers to the death of a woman due to pregnancy-related causes. The commonest definitions of maternal mortality as presented by the World Health Organisation (WHO) will be critiqued. As stated in Chapter 1, the WHO in the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10), defines maternal death as ‘the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes’ (WHO, 1992). This definition identifies that maternal death is caused by complications either directly or indirectly related to pregnancy.

Direct obstetric complications are those arising from the pregnancy, delivery and the postpartum period such as haemorrhage, eclampsia, obstructed labour, unsafe abortion and sepsis (WHO, UNICEF, UNFPA, The World Bank, 2005). These also include complications from interventions, omissions, incorrect treatment or from a chain of events resulting from any of the mentioned complications (WHO et al, 2005). Specific examples of these complications and the proportion they contribute to maternal deaths are: obstetric haemorrhage (25%); sepsis (15%); eclampsia (12%); obstructed labour (8%) and complications of abortion (13%). These five complications are responsible for 80% of maternal deaths and all these can be prevented (Royal College of Obstetricians and Gynaecologists, 2007).

More than 529,000 women worldwide die each year from the mentioned complications (WHO, 2000). This translates to one woman’s death every minute. For every woman that dies, twenty others suffer ill health and disability as a result of these complications (Abou Zahr, 2003, Millennium Development Goals Database, 2007; Sibley, Sipe, Brown, Diallo,
McNatt and Habarta, 2008). It should also be noted that the health of the neonate is closely related to that of the mother and an estimated 70% of deaths of the newborn within the first month of life could also be prevented, were intervention in place for good maternal health (Royal College of Obstetricians and Gynaecologists, 2007, MDG Database, 2007). It is worth noting that in about 15% of all women, complications will be unexpected and life-threatening unless she has (they have) access to emergency obstetric care. This area of emergency care is equipped with resources to recognise and respond effectively to such unexpected events (Royal College of Obstetricians and Gynaecologists, 2007). A recent WHO (2008) document shows that globally, the number of maternal deaths is now estimated to be 358,000 which indicates a decline by 34% from the level obtained in 1990. The decline is thought to be due to increased attention given to the development and implementation of policies as well as strategies to reduce maternal deaths (WHO, 2008). Unfortunately, despite the global decline, the rate is still high in the developing countries which still account for 99% of the global maternal deaths (WHO, 2008).

Indirect obstetric deaths result from previously existing diseases that developed during pregnancy but not due to direct pregnancy causes. These diseases are aggravated by the physiological effects of pregnancy. Such diseases include renal diseases, malaria, hepatitis, heart diseases and HIV/AIDS (WHO et al, 2005).

Differentiating the extent to which maternal death can be due to direct or indirect cause is not always possible in settings where deliveries take place at home and in which there is an inadequate attribution of the causes of death in the civil registration system (WHO et al, 2005). Home deliveries in this context refer to those deliveries which take place outside the formal healthcare setting and not attended by professional healthcare providers.

There is an alternative definition of maternal mortality referred to as ‘pregnancy-related death’ (WHO, 2005). This definition became necessary in recognition of the fact that in home deliveries not attended by skilled birth attendants, it is difficult to categorise maternal deaths according direct and indirect causes. This definition comprises all maternal deaths from any cause, including accidental and incidental causes during pregnancy, childbirth and the postpartum period. This alternative definition allows measurement of deaths that are related to pregnancy even though they do not conform strictly with the standard of maternal death definition. It is useful in settings where accurate information about causes of deaths based on medical certificates is unavailable. This is used in
maternal mortality surveys utilising the ‘sisterhood method’ where relations of a deceased reproductive aged woman are asked about her pregnancy status at the time of death. This does not elicit further information on the cause of death (WHO, 2005).

The WHO (2005), also describes the concept of late maternal deaths. This concept, which is also one of the definitions of maternal mortality included in the International Classification of Diseases (ICD-10), recognises maternal deaths occurring between six weeks and one year postpartum as applicable to countries with more developed vital registration systems and sophisticated technology for life-sustaining procedures. In such settings, women can survive maternal complications beyond 42 days post-partum. The ICD-10 definition which limits maternal deaths to 42 (forty-two) days post-partum mainly suits the developing countries because of under-development of healthcare technology (WHO, 2005).

Having established the definition and causes of maternal deaths, it is pertinent to present an overview of the measures and estimates of maternal deaths in some regions of the world. The ICD-10 definition which limits maternal deaths to 42 days or six weeks postpartum, will be used in this study.

### 2.3 Measures of Maternal Mortality

The numbers of maternal deaths are expressed statistically as Maternal Mortality Ratio (MMR) and Maternal Mortality Rate (MMRate). MMR is the number of maternal deaths during a given time period per 100,000 live births during the same time period. MMRate is the number of maternal deaths in a given period per 100,000 women of reproductive age during the same time period. This reflects not only the risk of death per pregnancy or birth, but also, the level of fertility in the population (WHO, 2005). As discussed previously, WHO definitions are standard and universal definitions, however, these apply more appropriately in settings where civil registration are effective. In most developing countries where routine registration of death are not done, medical certification of the cause of death does not exist, therefore, accurate attribution of female death as maternal death is difficult (WHO 2005).
The true number of maternal deaths may require an additional special investigation such as the Confidential Enquiry into Maternal Deaths (CEMD) which first started in the British health system. This procedure revealed 44% more maternal deaths between years 2000 and 2002 in the United Kingdom, than the routine civil registration (WHO, UNICEF, UNFPA, and The World Bank, 2005). Confidential enquiry aims to identify areas of clinical deficiency which leads to maternal death. It is mainly done in the developed countries though few developing countries like Egypt, Malaysia, Jamaica and South Africa have in recent years also been engaged with this enquiry (WHO, 2004; Hussein, 2007). To the best of my knowledge, Nigeria has not yet started this form of enquiry. It is envisaged that if Nigeria embarks on this, the data will not be representative of the true situation of maternal deaths since most births are not attended by skilled birth attendants. Where civil registration is absent, MMR estimates are based on the following variety of methods which include household surveys, sisterhood methods, Reproductive Age Mortality Studies (RAMOS), verbal autopsies and censuses (WHO et al, 2005, Adegoke, 2008).

### 2.4 Global and Regional Estimates of Maternal Deaths

Globally, there is an estimated total of 358,000 maternal deaths every year or 260 maternal deaths per 100,000 live births (WHO et al, 2008). Out of this number, the developing countries accounts for 99% of the deaths. About three fifths of the global maternal deaths (204,000) occur in the sub-Saharan African region followed by 109,000 in South Asia (WHO et al, 2008). From these details, it could be seen that sub-Saharan Africa and South Asia accounted for about 87% (313,000) of the global maternal deaths.

<table>
<thead>
<tr>
<th>Region of the World</th>
<th>Maternal Mortality Ratio (MMR) per 100,000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>640</td>
</tr>
<tr>
<td>South Asia</td>
<td>280</td>
</tr>
<tr>
<td>Oceania</td>
<td>230</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>92</td>
</tr>
<tr>
<td>Western Asia</td>
<td>68</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>85</td>
</tr>
<tr>
<td>*Developed regions</td>
<td>14</td>
</tr>
</tbody>
</table>

(WHO et al 2008)

* Developed regions include Europe, United States of America, Australia, Sweden and Japan.
Table 2.2: Maternal Mortality Ratio and number by selected countries of the world

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of maternal Deaths</th>
<th>Maternal Mortality Ratio (MMR) per 100,000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>63,000</td>
<td>230</td>
</tr>
<tr>
<td>Nigeria</td>
<td>50,000</td>
<td>840</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>19,000</td>
<td>670</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>18,000</td>
<td>1400</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>14,000</td>
<td>470</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>12,000</td>
<td>340</td>
</tr>
<tr>
<td>Indonesia</td>
<td>10,000</td>
<td>240</td>
</tr>
<tr>
<td>Pakistan</td>
<td>14,000</td>
<td>260</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>14,000</td>
<td>790</td>
</tr>
<tr>
<td>Niger</td>
<td>6,500</td>
<td>820</td>
</tr>
<tr>
<td>Angola</td>
<td>4,800</td>
<td>610</td>
</tr>
</tbody>
</table>

(WHO et al, 2008)

Country estimates of maternal mortality in 2008, showed that India had the highest number of maternal deaths (63,000) but with an MMR of 230 per 100,000 followed by Nigeria (50,000) with an MMR of 840 per 100,000. Niger with an estimated number of 6,500 maternal deaths has an MMR of 820 per 100,000. The high number of maternal deaths in India and Nigeria could be relative to the high population density in these countries. However, the MMR gives a clearer picture of the true maternal mortality situation. As shown in Table 2.2, Nigeria has a higher MMR than India.

In the developed world, the lifetime risk of death due to childbearing is estimated at 1 in 4,300 and in sub-Saharan Africa, it is about 1 in 31. Having presented the global estimate of maternal mortality, it is necessary at this point to discuss maternal mortality in the developing world with emphasis on Nigeria.
2.5 Maternal Mortality in the Developing Countries

An overwhelming majority of 99% of the total global maternal mortality occurs in the developing countries (WHO et al, 2005, WHO et al, 2008). On average, MMR in the developing countries is about 290 per 100,000 live births (WHO et al, 2008). Regionally, the risk of maternal death is most acute in sub-Saharan Africa, contributing 84% of the 99% of maternal deaths in the developing world. Maternal mortality ratio (MMR) in selected sub-Saharan African countries are as follows: Sierra Leone, 970 per 100,000 live births; Liberia, 990 per 100,000; Nigeria, 8400 per 100,000 and Ghana, 350 per 100,000 (WHO et al, 2008). Although Sierra Leone has a higher maternal mortality ratio than Nigeria, it has a fewer number of maternal deaths, 2,200 compared to 50,000 in Nigeria (WHO et al, 2008). These figures need to be put in perspective because the population of Nigeria is far higher than that of Sierra Leone.

2.5.1 Causes of Maternal Deaths in the Developing Countries

The direct causes of maternal mortality in the developing countries are the same as for the developed countries. The indirect causes include malaria, anaemia, meningitis and renal failure (Sloan et al, 2001; Ujah et al, 2005). Others are: hepatitis, heart diseases and HIV/AIDS (WHO, 2005). Women’s overall health status, including their nutritional and HIV status, influences the chances of a positive outcome to the pregnancy and childbirth (UNICEF, 2008).

2.5.2 Factors Influencing Maternal Mortality

Several factors in the developing countries influence maternal mortality. These include family and societal factors such as poverty, inequity and poor attitude towards women and their health, cultural/traditional practices that prevent women from seeking delivery or post-partum care (UNICEF, 2008). Poverty has been identified as a major barrier to human development. It makes standard healthcare unaffordable (Bolatito, 2007). A woman classified as poor, cannot afford adequate nutrition in pregnancy, thus, she becomes malnourished. Consequently, she is susceptible to infections because of inadequate natural defences which her body would have synthesised from adequate nutrition, and also, she is
likely to develop anaemia (Bolatito, 2007). This situation predisposes her to puerperal sepsis and postpartum haemorrhage (McCarthy and Maine, 1992; Okolocha et al, 1998). However, Loudou (2000) has argued that poverty and the associated malnutrition play only a little part in determining the rate of maternal mortality. He states that lack of adequate obstetric service is a major determinant of maternal mortality. However, poverty and the lack of services are not the only significant reasons.

Inequity and poor attitude towards women is a significant precursor of maternal mortality. Discrimination against girls, often resulting from son preference, endangers the health and well-being of women (UN, Beijing, 1995). In some cultures, the woman in an attempt to have at least one son, gambles by getting pregnant frequently and some could have as much as ten children or more (Deepankar, de Jong, 2006). Medically, this is not advisable because it predisposes her to rupture of the uterus and postpartum haemorrhage (Agola, Kereny, Torok, Grazi, Lapinski, Berkowitz, 1999). These can occur as a result of the relatively poorer integrity of the uterine muscles in the grand multiparous woman and these could rupture easily when there is an obstruction in the birth canal, for example, due to feto-pelvic disproportion, as subsequent babies tend to be bigger than the previous. This situation is common in parts of the world where there is deficiency in antepartum and intrapartum care (Henderson, MacDonald and Davis, 2009). Haemorrhage can be the result of uterine rupture or from ineffective contraction and retraction of the muscles to control bleeding following delivery (Henderson, MacDonald and Davis, 2009). Many studies have found significant relationship between grand multiparity and uterine rupture (Onwudiegwu and Okonofua, 1995; Aboyeji, Ijaiya and Yahaya, 2001; Ebeigbe, Anabudosu and Ande, 2005) Some cultures also force the ‘girl-child’ into early marriage, pregnancy and childbearing. The health implication is that her bony pelvis is not fully developed for childbirth and so, predisposes her to obstructed labour (Shehu,1992; Airede and Ekele, 2003). If intervention is not prompt, the condition could degenerate to rupture of the uterus and she could die from excessive bleeding (Royal College of Obstetricians and Gynaecologists, 2007).

In addition, the low status of girls and women in many developing countries, limits their access to economic resources and basic education. Thus, their ability to make decisions about their health and good nutrition is jeopardised. Some are denied access to healthcare because of cultural practice of seclusion. In some cultures, the woman is subservient, as
such, decision-making power is the responsibility of other family members. These limitations make access to essential obstetric care difficult, thus contributing to high maternal mortality. The lack of alternative opportunities for many women in this setting consigns them to a life of repeated childbearing. This, coupled with excessive physical labour and poor nutrition lead to poor maternal outcomes (WHO, UNFPA, UNICEF, The World Bank, 1999).

2.6 Maternal Mortality in Nigeria
As already highlighted, Nigeria has the second highest number of maternal mortality in the world (WHO et al, 2008). Several studies have shown high national maternal mortality levels, large urban-rural disparities and variations across geographic regions. The severity of this problem is more in the northern states (FMOH, 2001). This may be attributed to the cultural practice which restricts women from seeking maternity care unless permitted by their husbands. In such situations, permission may only be granted when severe complications develop. A study gave an estimate of Maternal Mortality Ratio of 704 per 100,000 live births in the north. It was also found that the mortality ratio was higher in the rural areas (828 per 100,000) than in the urban areas (531 per 100,000). This is probably because rural dwellers have limited access to skilled attendants and emergency obstetric care. This study also found regional variation of maternal mortality ranging from 165 per 100,000 in the south-west to 1549 per 100,000 in the north-east (Federal Office of Statistics and UNICEF, 1999). The direct and indirect causes of maternal mortality in Nigeria are the same as for other developing countries already discussed. Although MMR is declining globally, Nigeria is grouped among the countries with insufficient progress toward decline (WHO et al, 2008).

2.7 Maternal Healthcare in Nigeria
The state of maternal healthcare in Nigeria is far from being adequate. The WHO ranked Nigeria’s healthcare system as 187th out of 191 UN member nations in the year 2000 (WHO, 2000). About 32.6% of women had their babies in the contemporary health facilities. It is estimated that about 67% of all Nigerian women and about 75% of the rural women deliver outside contemporary health facilities and without skilled attendants (Ating, 1989; Shiffman, Okonofua, Ved, 2006).
This situation exposes the woman to the risk of mortality in the event of complications requiring emergency care. Most of the deliveries that take place outside the health facilities are conducted by TBA and as stated previously, these do not have the capacity to cope with emergencies, though some of them claim to have supernatural powers to cope with any complication their clients may present. Where they fail and the woman dies, it is attributed to nemesis by the TBA, probably, that the woman is paying for an alleged adultery she may have committed during pregnancy (WHO/Traditional Medicine TRM, 1995, Etuk et al, 2000, Umoiyoho et al, 2005, Mboho, 2009). Although the TBAs are blamed for the high level of maternal deaths, judging from the poor situation of health infra-structure in Nigeria as discussed, the TBAs are filling the gap as it were, by rendering maternity service which the contemporary health service is not adequately providing.

2.8 Political Commitment
The status of maternal health is made worse by the deplorable state of Nigeria’s health care system. The political commitment towards safe motherhood is still developing. This is evident in the dearth of budgetary allocation for maternal mortality reduction. In 2004, the equivalent of US $ 800,000 was released for this cause and was found to be inadequate to deal with the national crisis of maternal mortality (Shiffman et al, 2006). Though the details of how this money was spent was not made explicit, greater part of it may have been used to improve the state of the tertiary hospitals, to the detriment of community or rural health services.

Having highlighted the state of maternal mortality in the developing countries, the policies and strategies that have been put in place to reduce maternal mortality will now be discussed.

2.9 Policies on the Reduction of Maternal Mortality
Maternal mortality is a great burden to the world community because it is a global phenomenon, though the magnitude of the problem varies with regions of the world. As has been discussed earlier, it is more in the developing world (WHO, 2008; Population Resource Centre, 2001). Policies have been made at various levels to facilitate the reduction of this problem ranging from the World Health Organisation to the various governments of the affected nations including Nigeria.
2.9.1 World Health Organisation Policies

The World Health Organisation is the highest authority in health matters for the member nations. It is the directing and coordinating authority for health within the United Nations system. The functions of the WHO include: responsibility for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries as well as monitoring and assessing health trends (WHO, 2008). WHO also works closely with some other United Nations Agencies like UNICEF, UNFPA and the World Bank which usually funds some of the programmes.

Emphasis on healthcare had been on hospital based care prior to the Alma Ata Declaration of 1978 by the WHO, which advocates a shift to Primary Health Care (PHC) with a strong referral system to the secondary and tertiary levels. Although maternal and child care made up a component of the PHC, it appeared not to have received the needed attention, especially in the developing regions of the world. This is evidenced by the rising figures of maternal deaths. Based on this, the WHO developed further policies which are more specific to the reduction of maternal mortality. These policies include, promotion of family planning, advocacy for the prevention of child-marriage, skilled birth attendance at all levels of care, decentralisation of maternal health facilities and safe abortion care.

These policies advocate coordinated and long-term efforts which should be multi-sectorial including families, communities, health systems, the national legislation and policy (WHO, 1999). This body also advocates changes in legislation and policy to ensure safe motherhood. This calls for long-term political commitment by decision-makers at the highest levels because it is thought that, when this happens, the needed resources will be mobilised so that projects will become programmes and activities will be sustained. See details of these policies in the appendix.

Policies were also formulated at other forums to aid the reduction of maternal deaths, one of significance was the fourth World Conference on Women in Beijing which was held in 1995. The main focus of the conference was to address the well-being of women generally. The sub-themes included human rights of women, poverty and inadequacies in health.
2.9.2 The fourth world conference on women

This conference was informed by the need to promote gender equality and the empowerment of women. Among the issues of concern, was the health of women of childbearing age. At this conference, it was observed that health and well-being elude majority of women and that complications related to pregnancy and childbirth are among the leading causes of mortality and morbidity in women of reproductive age in many parts of the world. These deaths are preventable. It was also observed that inequality between men and women in some parts of the world pose as a barrier for the achievement of the highest attainable standard of health by women. Based on this, it was declared that women have the right to the enjoyment of the highest attainable standard of physical and mental health.

The conference also highlighted among other issues, the discrimination against girls, often resulting from son preference. Other issues were girl-child marriage, and harmful traditional practices against women such as female genital mutilation. These pose grave health risks to girls. Based on these observations, it was declared that governments in collaboration with Non-Governmental Organisations (NGOs), employers and workers’ organisations, with the support of international organisations should increase women’s access throughout the life cycle to appropriate, affordable and quality health care, information and related services. This conforms with the WHO policies of decentralisation of health care, skilled attendants and advocacy against child-marriage. At the women’s conference, it was also decided that gender-sensitive initiatives that address sexual and reproductive health issues should be promoted (Beijing Declaration, 1995).

Five years after the Beijing Conference, women empowerment as a means of combating poverty, hunger and disease, was adopted as one of the eight millennium development goals in the year 2000. Appraisal after ten years indicated that there were positive policy reforms and increased awareness towards women empowerment by member the nations (United Nations Office of the Under-Secretary, 2005).

The report of the appraisal of the Beijing Conference five and ten years after, gives the impression that the status of women has improved, however, this is far from the situation in Nigeria, where the women in some cultures do not have the right to take decisions about their health care and some other personal issues (Shehu, 2000, UNICEF, 2008, Mboho, 2009). There is a large gap between policy and practice which requires unrelented effort
toward sensitisation and advocacy for the empowerment of women. It is important to note that sixteen years after the Beijing conference, no other major conference has been organised to address comprehensive issues that affect women. It appears to me that this long silence does not augur well for sustaining changes.

2.9.3 The International Confederation of Midwives (ICM) and the White Ribbon Alliance

The ICM is an international non-governmental organisation of midwives whose membership is drawn from over one hundred countries all over the world. ICM aims to promote a world where every childbearing woman has access to a midwife’s care for herself and her new-born. Thus, this promotes the autonomy of midwives as the most appropriate care-givers for the childbearing woman and in keeping birth normal, in order to enhance the reproductive health of women and health of their new-born and families (ICM, 2008). It attempts to achieve the aim and vision through the policy of strengthening midwifery globally. This is done by working with professional associations of midwives and UN agencies which include WHO, UNFPA to secure women’s right and access to midwifery care before, during and after childbirth (ICM, 2008). ICM policy is further strengthened through collaboration with the Royal College of Obstetricians and Gynaecologists (RCOG), International Federation of Gynaecologists and Obstetricians (FIGO). The ICM could be more proactive by devising a strategy which would enable the voices of women from sub-Saharan Africa to be heard, probably through policy thrust in community involvement toward the prevention of maternal mortality.

The White Ribbon Alliance is also an international non-governmental organisation which promotes having skilled birth attendant at every birth (Internet, 2008). It’s visions include optimal health care in pregnancy and childbirth as a fundamental human right; empowerment of women to demand quality, safe and respectful motherhood services and that men and women should come together to promote safe motherhood. In addition, it advocates that government should set policies in collaboration with the women and the communities to support safe motherhood. The white ribbon symbolises the memory of women who have died needlessly in pregnancy and childbirth (White Ribbon Alliance, 2008).
The ideals of the ICM and the White Ribbon Alliance are yet to be fully achieved in Nigeria, where at present, about 70% of births are attended by unskilled birth attendants. Thus, it appears that many women lack the empowerment to demand health care that is of good quality in Nigeria, probably because they could lack adequate knowledge about what constitutes good care and are not involved in decision-making about their health care.

2.9.4 Relevant Policies in Nigeria

The goal of the national health policy of Nigeria is a level of health that will enable all Nigerians to achieve socially and economically productive lives. The policy states that maternal and child healthcare is based on primary health care (Federal Ministry of Health, 2004). Although the national health policy of Nigeria puts the Maternal Mortality Rate at 8 per 1000 (800 per 100,000) (Federal Ministry of Health, 2004), surprisingly, no special commitment was given to the reduction of maternal mortality. The question raised in my mind concerning the lack of special commitment is: Could that be due to an oversight or as a result of the male centric culture? Maternal care was subsumed in the general health plan for the Nigerian citizens. One would have expected that, with such a high level of maternal deaths, the government would make a specific policy for its reduction. The reason for the lack of distinct commitment in the health policy may be due to the following:

1. Paternalistic nature of the policy-makers in Nigeria. Most of the health policy-makers are men, thus, resulting in lack of voice given to the women in the government. Childbirth is seen as a natural process that does not require any special attention.

2. Emphasis on HIV/AIDS leading to insufficient funding of maternal health care. The prevalence rate of HIV/AIDS in Nigeria is 4.6% (NACA, 2008), while the MMR is 840 per 100,000 live births (WHO et al, 2008).

However, following the International Conference on Population and Development (ICPD) in Egypt in 1994, Nigeria formulated the reproductive health policy in 2001. This policy emphasises that reproductive rights are indispensable to people’s health and development and set the goal of achieving universal access to reproductive health information and services for the year 2015 (Federal Government of Nigeria, 2001). This policy addresses the problem of high maternal mortality. It was remarked that low level of access to and
utilisation of quality reproductive health services play significant roles in the high maternal mortality in Nigeria. The Reproductive Health policy declares, among others, that the risk of maternal and perinatal deaths should be reduced through improved access to EmOC and post abortion services. This policy is run in conjunction with the National Health Policy (Federal Government of Nigeria, 2001).

Most recently, in 2009, the Midwives Service Scheme (MSS) project was developed in Nigeria in response to the decision made at the WHO conference in 2005 with the theme ‘making mothers and children count’. The aim of this project is to provide a quick means to reduce the maternal mortality ratio as a means of achieving the 5th Millennium Development Goal of reduction of maternal mortality ratio by 75%. The strategy of the MSS involves the mobilisation of three categories of midwives and deploying them to work mandatorily in the rural communities for one year. The midwives mobilised are the unemployed, the retired but still capable to work and the newly qualified basic midwives. The overall purpose of this project is to increase skilled birth attendance so as to reduce maternal, newborn and child mortality and morbidity (Federal Government of Nigeria, 2009).

This project targets the rural communities and is quite timely in view of the estimate that about 75% of births in the rural areas of Nigeria are attended by unskilled attendants (Shiffman, Okonofua and Ved, 2006). The poor state of the rural health infra-structure in Nigeria suggests that the government would need to enhance the equipment of the health facilities to enable the midwives to work effectively. Also, in my opinion, the complexities of the rural health care service requires a great degree of independence in the midwife, therefore, I doubt the effectiveness of the newly qualified midwives in this project. I feel that the new midwifery graduate needs some time for internship, to be able to develop some degree of proficiency before being exposed to a situation where she is required to make quick decisions concerning the live of both mother and baby, particularly during obstetric emergencies.

Having presented an overview of the various policies as they apply to maternal mortality in Nigeria, the strategies for prevention will now be discussed.
2.10 Strategies for the prevention of maternal mortality
The magnitude of maternal mortality had attracted international effort in its reduction since in the 1980. The World Health Organisation, UNICEF, and United Nations Population Fund (UNFPA) are the main multilateral agencies at the forefront supporting countries to reduce maternal mortality. Others are The World Bank as the largest investor in the health sector; the Gates Foundation which funds ‘Averting Maternal Deaths and Disability as well as Department For International Development (DFID) and USAID funding safe Motherhood projects in some countries.
Without specific strategies for action adopted globally and by the affected countries, the effort of the multilateral organisations would be futile.

The Millennium Development Goals (MDGs) agreed by the 192 United Nations member states in the year 2000, to set a target to be achieved by 2015. The 5th out of the 8 millennium development goals, is to improve maternal health through reducing maternal mortality ratio by 75% (UN, 2000). Several strategies have been identified as important means to achieve this goal. These strategies are interventions to avert mortality and they are skilled attendants at birth, emergency obstetric care and community mobilisation (De Brouwere, 2002; UN, 2007). These strategies will now be discussed.

2.10.1 Skilled birth attendants
A skilled birth attendant is somebody who is trained and is proficient in midwifery skills. Training alone does not necessarily mean that one is skilled (Starrs, 1997). It is emphasised that these ones must be able to manage normal labour and delivery, recognise the onset of complications, perform essential interventions, start treatment and supervise the referral of mother and baby for interventions that are beyond their competence or not possible in the particular setting. To explain this further, midwifery skills are described as a set of cognitive and practical skills that enable the individual to provide basic health care services throughout the period of perinatal continuum and also to provide first aid for obstetric complications and emergencies, including life-saving measures when needed (WHO, 1999).

The definition of a skilled birth attendant by the WHO does not accommodate the TBA. See the Glossary for the WHO definition. The term ‘trained attendants’ was used until the
mid-1990s, this was more liberal because it included trained TBA but was changed to ‘skilled attendants’ from 1996. The change may have been necessary because of the controversy about the effectiveness of TBA in reducing maternal mortality. A systematic review on TBA training for improving health behaviour and pregnancy outcomes, did not yield evidence that training TBA improved maternal outcomes (Sibley, Sipe, Diallo, McNatt, Habarta, 2008). On the other hand, Bergstrom and Goodburn (2001), in a narrative review, made a case for the relevance of TBA in that, in many countries, they are an important source of social and cultural support to women during childbirth. Bergstrom and Goodburn also noted that there was no conclusive evidence that trained TBA can prevent maternal deaths. However, they suggested that the TBA should be closely linked with contemporary health services and supported to refer women to hospitals providing essential obstetric care. They concluded by remarking that, the role of TBA should not be ignored but that their training should be given low priority and precedence should be given to the provision of skilled attendant at delivery. As much as the suggestion of Bergstrom and Goodburn favour the training of more midwives, it is important to note that this is a long-term plan because it takes about three to five years to train a midwife in Nigeria. Alternatively, I would suggest that while midwives’ training is going on, the TBAs who are already available to render service to the women should also be equally given some training as was previously done, to make their service safer. This suggestion holds for rural areas where midwives are rarely available.

Training more skilled birth attendants may not be the only option in this strategy to prevent maternal deaths. Attention should also be given to the provision of maternal health service that is culturally acceptable, especially in settings where most births are attended by the TBA. Such service should be adapted to include some cultural practices that are not harmful, for example, delivering in the squatting position instead of the dorsal or lithotomy position and also, giving women their placenta to bury at home where that is practised. Culturally sensitive health care has been found to be acceptable by the people (Shehu, 2000). In as much as this is encouraged, I feel that much culturally sensitive behaviour could be construed as dangerous. The recommendation by Bergstrom and Goodburn that TBA training should not be ignored may have taken cognisance of regions where most women are attended in childbirth by these traditional personnel, thus, their training will probably ensure that the TBA is continually reminded of how to make their practice safe until they are gradually phased out of the system.
There is evidence that the second stage of labour is shorter as a result of gravity when the woman is in the upright position which includes squatting, kneeling, standing and sitting at more than 45 degrees (Henderson and Macdonald, 2004; Walsh, 2009). Other gains of the upright position include easier bearing down, less pain, fewer assisted births, fewer fetal heart abnormalities and fewer episiotomies (Walsh, 2009). On the contrary, dorsal or supine position, usually preferred in our hospitals has been described as a phenomenon related to the myth of delivery on the bed, because this position has not been tested empirically. In this position, the woman is passive, powerless and compliant patient who is made to fit around the birth attendant. Whereas the attendant should ‘fit’ around the woman in labour (Flint, 1986; Henderson and Macdonald, 2004). In addition to that, the dorsal or recumbent position may result in supine hypotension, inefficient uterine contractions and less space in the pelvic outlet (Henderson and Macdonald, 2004; Walsh, 2009). The argument in favour of the dorsal position is that it provides easy access during technical interventions such as forceps delivery and the administration of anaesthetics (Donnison, 1988; Henderson and Macdonald, 2004).

2.10.2 Emergency Obstetric Care (EmOC)
Most causes of maternal deaths are preventable although about 15% of all pregnancies will develop complications that were not possible to predict, such as haemorrhage, shoulder dystocia (Royal College of Obstetricians and Gynaecologists, 2007). Most of the women that die could have been saved if there were good quality obstetric care available for 24 hours a day and 7 days a week, staffed with at least two skilled attendants and support staff 24 hours a day. Emergency Obstetric Care is designed to provide such service at both the basic and comprehensive levels of care (UNFPA, 2002; Royal College of Obstetricians and Gynaecologists, 2007). In Nigeria, EmOC is currently difficult to provide due to the problem of inadequate personnel, material and financial resources.

Basic Emergency Obstetric Care (BEOC) can be obtainable at the Health Centre and does not require an operating theatre. The services rendered at this level include intravenous (IV) and intramuscular (IM) antibiotics such as Ampicillin; IV and IM oxytocics such as Ergometrine; IV and IM anticonvulsant such as Magnesium Sulphate ; manual removal of placenta; assisted vaginal delivery with vacuum extractor or midwifery forceps and removal of retained products of pregnancy following a miscarriage or abortion (Royal
College of Obstetricians and Gynaecologists, 2007). The problem associated with BEOC in Nigeria is that most of the midwives working at basic level do not have the skills required for some procedures such as vacuum extraction and forceps delivery. This is because, these procedures were regarded as doctors’ procedures (Federal Ministry of Health, 2005). The Nursing and Midwifery Council of Nigeria is trying to remedy this situation by developing a training programme on Life Saving Skills (LSS) for midwives. Though this is ongoing, the rate is very slow and it is capital intensive.

Comprehensive Emergency Obstetric Care (CEOC). This is obtained in the secondary health facility and requires operating theatre. The services here include caesarean section, blood transfusion and all the services of the BEOC. Although doctors are available to perform caesarean section, blood for replacement transfusion if haemorrhage occurs, is not readily available in most secondary health facilities in Nigeria, thus, many women also die at this level of care.

It is recommended that for every 500,000 people, there should be at least four health facilities offering the basic emergency obstetric care and one, offering the comprehensive emergency obstetric care (UNFPA, 2002, Royal College of Obstetricians and Gynaecologists, 2007). With this structure, universal access is facilitated so that every woman and newborn baby with complications should have a rapid access to well-functioning facilities for treatment (UNFPA, 2002, Royal College of Obstetricians and Gynaecologists, 2007). The mentioned structure is ideal but, unfortunately, this is not all available in Nigeria. The few that are available are not utilised by most women. Therefore, as Roth and Mbizuo (2001) state, community mobilisation to sensitise and empower the people towards their health needs is essential in addition to biomedical interventions in strengthening health care services.

2.10.3 Community Mobilisation

It is now increasingly recognised that the action required to achieve improvement in reproductive health outcomes and particularly maternal health, should involve communities in the process and men as active participants (Roth, et al 2001). They also advocate improving the awareness of obstetric complications among members of a woman’s immediate and wider social network as this could be an important step of
increasing the woman’s chances of survival when complications occur. This will enable the people involved to take informed action, rather than act by superstition which could endanger the life of the woman further. For example, in some rural communities in Nigeria, prolonged or obstructed labour is attributed to infidelity and so, the TBA does not refer the woman to the hospital. Her death is seen as a just reward for her adultery (Mboho, 2009).

The National Health Policy of Nigeria states that maternal and child health will be achieved through the primary health care approach. This approach involves making essential health care universally accessible to individuals and families in the community by means acceptable to them and through their full participation (WHO, 1978, Egwu, 1989). Input from community members which include religious leaders, women’s groups, elders, youth groups, healthcare professionals among others, therefore, is essential. Community participation in health care is the key principle of the Alma Ata declaration on primary health care by the WHO (WHO, 1998). To emphasise the need for community involvement in health care, some authors remarked that, in the developing countries, antenatal, delivery and postnatal experiences usually take place in the communities rather than in the contemporary health facilities, therefore, strategies to improve maternal and child health should involve the community as well (Rosato, Laverack, Grabman, Tripathy, Nair, Mwansambo, Azad, Morrison, Bhutta, Perry Rifkin and Costello, 2008). Also, article 4 of the Alma Ata declaration states that people have the right and duty to participate individually or collectively in the planning and implementation of their health care. Article 7 of the same document states that primary health care requires and promotes maximum community and individual self-reliance and participation in the planning, organisation, operation and control of primary health care (WHO 1979; Rosato et al. 2008). There is evidence that community mobilisation can bring about reduction in mortality and improvements in the health of children and mothers. Below is a summary of some studies to support this assertion.

The relevant studies on community mobilisation to reduce maternal mortality were retrieved through the electronic databases enumerated earlier in this chapter. This part of the search focussed on finding studies which aimed to reduce maternal deaths in the community by community intervention and actions to prevent death in childbirth in developing countries. The search spanned a period of fifteen years and yielded only six...
relevant studies of which only three were carried out in Africa (Nigeria and Ethiopia) while the others took place in Bolivia, Nepal and Pakistan (Table 2.3).

Table 2.3: Interventions involving community mobilisation for maternal and child health

<table>
<thead>
<tr>
<th>Authors and sites</th>
<th>Design</th>
<th>Intervention</th>
<th>Sample</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>O’Rourke (1998) (Warmer Project, Bolivia)</td>
<td>Before and after analysis (comparing perinatal mortality rate and obstetric behaviour before and after intervention)</td>
<td>Initiating women’s organisations, developing their skills in problem identification and prioritisation and training community members in safe birthing techniques</td>
<td>Remote Bolivian mountain villages. Population 15,000. Sample=409 women</td>
<td>Perinatal mortality rate decreased from 117 to 43.8 per1000 births. The proportion of women receiving prenatal care and initiating breastfeeding on the first day after birth was significantly larger. Number of infants attended to immediately after delivery increased.</td>
</tr>
<tr>
<td>Kidane (2000) (Tigray, Ethiopia)</td>
<td>Cluster randomised controlled trial (cRCT)</td>
<td>Mother coordinators trained to teach other local mothers to recognise symptoms of malaria in their children and to properly give chloroquine.</td>
<td>Total population of 70,506 in 37 villages in two districts were paired according to under 5 mortality rates. 24 villages with the highest malaria morbidity were selected.</td>
<td>29.8 per 1000 aged below 5 years died in the intervention villages compared with 50.2 per 1000 in the control villages.</td>
</tr>
<tr>
<td>Manadhar (2004) (Makwanpur district, Nepal)</td>
<td>cRCT</td>
<td>Women’s groups through community action cycle.</td>
<td>24 clusters of mean 7000 people per cluster</td>
<td>Newborn mortality rate was lower (26.2 per 1000) live births in the intervention clusters than in the</td>
</tr>
<tr>
<td>Study</td>
<td>Methodology</td>
<td>Outcomes</td>
<td>Interventions</td>
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<td>Bhutta (2008) (Hala, Pakistan)</td>
<td>Before and after analysis</td>
<td>Health workers and TBA providing health education and maternal and child health services.</td>
<td>Stillbirth rate reduced from 66 to 43 per 1000. Newborn mortality rate reduced from 57 to 41 per 10,000 and skilled birth attendance increased from 18 to 30%</td>
<td></td>
</tr>
<tr>
<td>Okafor (2000) (Nigeria)</td>
<td>Qualitative</td>
<td>Community mobilisation through seminars, focus groups and training of community health extension workers as pregnancy monitors (to visit pregnant women in their homes and refer those with complications to the hospital).</td>
<td>Insight was provided into pregnancy beliefs and practices in the study area.</td>
<td></td>
</tr>
<tr>
<td>Shehu (2000) Nigeria</td>
<td>Qualitative (social enquiry) and quantitative methods</td>
<td>Community mobilisation through meetings, focus groups, community education to improve maternal health outcomes.</td>
<td>Improved transportation and reduced delays in reaching emergency obstetric care. Increased awareness about causes of maternal deaths. Community involvement in sustainability of</td>
<td></td>
</tr>
</tbody>
</table>
2.10.4 Summaries of the studies
All the studies except for the ones carried out in Nigeria, used the quantitative design. The quality of these studies was assessed using the Critical Appraisal Skills Programme (CASP) tool. This tool was developed by the Public Health Resource Unit, England (2006) and comprises of questions which assess rigour, credibility and relevance of qualitative studies. The quantitative studies were assessed using the Critical Review Form for Quantitative Studies designed by Law et al (1998). The areas of assessment in this tool include study purpose, design, sample, outcomes, interventions, results, conclusions and clinical implications.

Each of the quantitative studies showed reduction of various forms of mortality following an intervention in the community (Table 2.3). Although O’Rourke (1998), Kidane (2000), Manadhar (2004) and Bhutta (2008) mobilised members of the community for the interventions as shown in Table 2.3, the degree of involvement of the participants in the planning of the interventions was not made clear. Being quantitative studies, controlling for confounding variables may not have allowed participants the opportunity to contribute their ideas to the research and particularly, the intervention. It does appear that probably, the ‘top-bottom’ kind of relationship existed between the researchers and the community, thus making the participants to be passive recipients of what the researchers offered. In such situations, the opinions of the members of the community are not heard and as such, some data, for example, subjective and socio-cultural factors were not generated.

The strength of these studies is that they are RCTs and ‘before and after trials’ which are considered as valuable sources of evidence for the improvement of practice (Greenhalgh, 2001; Sackett, Richardson, Rosenberg, 2000). However, there is an argument that change which does not emanate from the people is not sustainable (Rimer and Glanz, 2005). The interventions presented in these studies appear to be ‘one-off’ events carried out by the researchers and it is not clear if any mechanism was put in place to reinforce the effect of
the interventions for sustained reduction in mortality after the researchers had left the field. Given that there is no evidence that the sample populations were involved in the development and implementation of the projects it would be difficult for them to take over ownership and continue when the researchers left.

I suggest that because change occurred as a result of the interventions evidenced by the reduction in the various mortality rates (Table 2.3), for sustainability, these study designs should be modified to include participatory approach like action research. This may give the people the opportunity to get involved in a reflective process and help them to correct their distorted meanings about their situation and so participate in improving their situation as advocated by Greenwood and Levin (2007).

On the contrary, Okafor (2000) through a qualitative approach, stimulated community participation to develop strategies to reduce maternal mortality. With that, she was able to conclude that insights were gained about the beliefs and cultural practices of the people as they influence maternal mortality. These findings provided a more comprehensive background for the development of interventions. In comparison with the quantitative studies already discussed, this approach is more likely to result in change that is sustainable (Rimer and Glanz, 2005). Although Okafor’s study stimulated community participation, the role played by the participants in developing the intervention was not made clear. I suggest that it is important for such studies to be more explicit with regard to the extent of community participation, in order to help establish the key components of their effectiveness and increase the efficacy of future projects.

Secondly, Shehu’s study used a participatory approach (but not action research) with members of the community through the social enquiry method to obtain baseline information about the maternal mortality situation in her study area. Focus group discussions, were used to generate some data from the members of the community. Although data were also generated through interviews of health professionals and government official, it was not clear if these interviews were qualitative in nature. By not utilising in-depth interviews to obtain data from the women in such a male-dominant setting, the quality of data may have been limited. Although Shehu involved members of the community in the implementation of interventions, the extent to which they were involved in the development of the interventions was not made clear. However, her study
showed improved outcomes in the areas of reduction of delays in obtaining emergency obstetric care through the availability of improved means of transportation as well as increased awareness of the causes of maternal deaths and improved attendance at the hospital for maternal health care. Nonetheless, it was not shown if these interventions reduced the maternal mortality ratio.

The search for relevant studies in the context of prevention of maternal deaths revealed very few studies. Thus, indicating that though high maternal mortality is quite topical globally, interventions to prevent it, appear to be grossly understudied and more so in the sub-Saharan Africa where the burden is greatest. Contrarily, there are many studies on the causes of maternal mortality especially in the developing world which includes Nigeria where my study took place because of the high maternal mortality ratio. As revealed earlier in this chapter, such findings usually showed high ratios of maternal deaths as well as high level of ignorance and poor maternal health practices as aetiological factors. The authors would usually call for interventions to prevent the problem.

The WHO concludes that a joint forum of health professionals and the community can investigate maternal deaths and help identify and implement strategies for improvement through referrals, emergency transport, cost-sharing and support of healthcare providers (WHO et al, 1999). It is important to recognise the magnitude of the problem and that most maternal deaths are preventable (Royal College of Obstetricians and Gynaecologists, 2007). There should be mobilisation of both professionals and members of the community to work towards the reduction of maternal deaths (De Brouwere, 2002). This implies focus on increasing access, use and quality of health services that ensure access to skilled attendant at birth and an effective referral system that can cope effectively with life-threatening complications. There must be access to safe abortion where this is legalised as well as structure to cope with post abortion care. Interventions should include advocacy for the promotion of the status and right of women. For the mentioned strategies to be successful, sustained political will is required. The various governments should be committed to the Millennium Development Goal; the commitment should be reflected in poverty reduction strategies and commensurate budgetary allocation (DFID, 2004).
2.11 SUMMARY OF LITERATURE REVIEW
Maternal mortality is a global problem and every part of the world experiences it in varying degrees. The greatest burden of these deaths is borne in the resource-poor regions otherwise known as the developing world. These include the sub-Saharan and south Asian countries among others and they contribute about 99% of the total number of maternal mortality. Of the 99%, sub-Saharan Africa is responsible for 84%.

Direct causes of maternal deaths include haemorrhage, sepsis, eclampsia, obstructed labour and complications of unsafe abortion. These constitute 80% of maternal deaths but, fortunately, deaths from these are all preventable. Several factors influence maternal mortality especially in Nigeria. These include cultural and traditional practices, poverty, gender inequality, illiteracy and lack of basic infrastructure like good road network and substandard work equipment.

Policies have been designed globally and locally to guide the activities geared towards the reduction of maternal mortality. The 5th Millennium Development Goal targets 75% reduction of maternal mortality by the year 2015. Strategies have been mapped out to facilitate this reduction; they include skilled attendance at births, emergency obstetric care and community mobilisation.

2.12 CONCLUSION
Since 80% of maternal deaths are preventable, it is possible to reduce maternal mortality if the right strategies are employed. Training of skilled attendants and the provision of emergency obstetric care appear to receive more attention than community mobilisation towards the reduction of maternal mortality in Nigeria. Taking cue from the concept of community development, if community members are involved in the design and implementation of project, they get committed to the cause and develop a sense of ownership. Therefore, empowering members of the community to take action to reduce maternal mortality will be an asset to complement the efforts of the professionals, government and other stakeholders. This might accelerate the process of reduction of maternal mortality in Nigeria. Having reviewed the relevant literature, in the next chapter, the design for this research will be discussed.
CHAPTER THREE
CHAPTER THREE

EPISTEMOLOGICAL POSITIONING AND SUPPORT FOR ACTION RESEARCH

3.1 Introduction
In this chapter, I will examine the nature, development and epistemological perspectives of action research which is the design utilised in this study. Additionally, philosophical approaches as they relate to action research will be discussed. These include positivism and interpretivism and critical theory.

3.2 Nature and development of action research
In the words of Kemmis and McTaggart (1988), action research is described as follows:

‘...a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out’ (Kemmis and McTaggart, p 5).

Winter and Munn-Giddings (2001) also described action research as a study of a social situation carried out by those involved in that situation in order to improve both their practice and the quality of their understanding.

3.2.1 Kurt Lewin and action research
Action research as a term was first used by Kurt Lewin, a social psychologist in 1946, in the post war America, in his quest for empowerment and justice for the oppressed (Kemmis and McTaggart, 1988). Lewin’s central thrust was in social change with particular emphasis on how to conceptualise and promote it (Greenwood and Levin, 2007). His concern included the need to solve social problems like discrimination against the minority groups because he believed that social and psychological researches did not improve the lives of people. Unfortunately, he did not live long enough to achieve his aspirations, however, other authors which include Carr, Kemmis and McTaggart; developed Lewin’s work further (Waterman, 1994). As explained by Waterman, Lewin’s work, as was common in his time, did not discuss epistemology and ontology explicitly.
However, it was possible to draw conclusions from his philosophical expressions. It was highlighted that Lewin advocated social change through the education of both researchers and the research participants, believing that independence, equality and co-operation among the people would lead gradually to change through the process of action research (Carr and Kemmis 1986; Waterman, 1994). Lewin conceptualised social change as a process which has three stages namely: dismantling former structures; changing structures and finally locking them back to a permanent structure (Greenwood and Levin, 2007). In addition, action research is positioned in the fact that power and social values facilitate change (Ketterer, 1980). This implies that through the process of action research, people get empowered by acquiring ‘new knowledge’ as a result of critiquing their previously held knowledge/belief. In turn, the new knowledge influences their social value, thus posing a challenge to the status quo and this may facilitate change.

Furthermore, two fundamental ideas identified in Lewin’s work as described by Kemmis and McTaggart (1988) were, group decision and commitment to improvement. These have become distinctive features in the process of action research and in the words of these authors:

‘those affected by planned changes have the primary responsibility for deciding on the courses of critically informed action which seem likely to lead to improvement and for evaluating the results of strategies tried out in practice’ (Kemmis and McTaggart, 1988, p 6).

Thus, action research is described first, as a group activity. It works on the premise that change comes more easily when the people with a shared concern work in a group rather than as individuals, towards a solution (Kemmis and McTaggart, 1988; Greenwood and Levin, 2007). Taken together, Kemmis and McTaggart argued that the approach is only action research when it is collaborative, though it is important to realise that the action research of the group is achieved through the critically examined action of individual group members. Subsequently, the participatory paradigm of this research methodology as well as its other characteristics are discussed.
3.2.2 The participatory paradigm of action research

The definitions of action research as stated earlier, emphasise the participatory nature of action research to bring about social change (Kemmis and McTaggart, 1988; Waterman, 2007; Greenwood and Levin, 2007). Many action researchers have emphasised participation as the key point in this research approach. For example, Carr and Kemmis (1994) argue that transformations of social reality cannot be achieved without involving the social actors concerned. In this regard, the outside researcher and the insiders (participants) work together to achieve the desired goals. The involvement of the participants in the research process as co-researchers creates an opportunity for the use of individual capacities (Greenwood and Levin, 2007). Greenwood and Levin further maintained that having a diverse group of co-researchers brings a broader set of experiences and attitudes to the research process which could permit more creative solutions to develop. They further argued that action research must be constructed to gain strength from the creative potential in diversity of the participant group and not to create solutions to problems that unnecessarily reduce diversity. This stance, according to Dewey as cited by Greenwood and Levin (2007), is based on the philosophy that democracy is an on-going, collective process of social improvement in which all levels of the society should participate. Dewey emphasised that democracy should evolve through people’s active involvement in making sense of their world and not through solutions imposed by powerful outsiders (Greenwood and Levin, 2007). Dewey also believed that because the community has a common stake in solutions, they can work through the problems together. This implies that change could be more easily achieved when people work together as a group. This belief is also held by Kemmis and McTaggart as already mentioned in the previous paragraph. John Dewey was an American philosopher who worked greatly to promote public education and democracy (Greenwood and Levin, 2007).

3.2.3 Commitment to improvement/change

The second concern of action research as identified in Lewin’s work is that it is committed to the improvement of practices, situations and understandings, therefore, it is underpinned on the view of truth and action as socially construed (Carr and Kemmis, 1994). This means that entities are not fixed but that they are created, developed, modified and are capable of changing within the process of interaction (Haralambos and Holborn, 2008). This view corroborates the position of Gadamer as cited by Waterman (1994) who suggested that
certain perspectives held by people have been developed over time and considered better, until different perspectives are put forward which add to and develop further understanding. This idea is based on philosophical hermeneutics, which is a way of representing the notion of interpretive understanding (Gadamer, 1970; Denzin and Lincoln, 2000). Gadamer further argued that understanding is not an isolated activity of human beings, but a basic structure of our experiences in life which is shaped through socio-historically inherited bias and prejudice. He described this situation as tradition and went on to explain that tradition is not something that is external, objective and past, rather it is a force that enters into all our understanding. It, therefore, follows that tradition shapes our understanding of the world and how we see ourselves (Gallagher, 1992). This suggests that tradition can pose as an obstacle to the change that action research aims at. Although Gadamer (1975) emphasised that philosophical hermeneutics is not a problem-solving method, rather it is a means of clarifying conditions in which understanding takes place. I view this stance as an important characteristic which is relevant to action research project in order to guide the process of facilitating change or improvement of situations, practices and understandings. In support of the foregoing, action research authors, for example Kemmis and McTaggart (1988); Winter and Munn-Giddings (2001) argued that action research requires that people put their practices, ideas and assumptions about their situation to test by gathering compelling evidence which could convince them that their previous practices, ideas and assumptions were wrong. This involves the participants making critical analysis of their situation.

Knowledge generated from action research inquiry should improve or change the circumstances that had oppressed the people. Greenwood and Levin (2007) posit that the democratic nature of action research supports the creation of new knowledge that has a potentially liberating effect. This is supported by the idea that the inquiry process in action research aims at solving problems which are important to the participants. Therefore, the outcome of such an inquiry process should be knowledge that increases the participants’ ability to have control over their own situations (Greenwood and Levin, 2007). This area of concern in action research appears to be consistent with Freire’s (1970) concept of conscientisation which argues that inquiry process should aim at shaping knowledge that is relevant to action built on critical understanding of historical and political contexts within which the participants act. He further stated that the participants should be able to use the emerged knowledge to support the enhancement of their goals (Greenwood and
Levin, 2007; Freire, 1970). Having discussed the people’s participation and improvement of their situations or change which are the two major concerns of action research accredited to Kurt Lewin, I now turn to his critics.

3.2.4 Criticisms of Kurt Lewin

Although Lewin was the first to describe action research, he was criticised for utilising positivist method in conducting action research through the use of mathematical and conceptual analysis as well as laboratory and field experiments (Greenwood and Levin, 2007; Waterman, 1994; Carr and Kemmis, 1994). In favour of Levin, however, Waterman argued that his ideology may have been influenced by the domination of social science by positivism during that era. While Lewin conceived social change as a sequential and discrete process, he was criticised for his idea that change was intermittent which comprised of short-term interventions (Greenwood and Levin, 2007). This idea of Levin’s change is seen as very limiting, whereas contemporary action research is modelled as a continuous and participative learning process and not a short-term intervention (Greenwood and Levin, 2007). Nonetheless, these criticisms do not undermine the basic idea of action research but rather showed the limitations of Lewin’s use of the approach. Modern-day action researchers emphasise ongoing dialogue (Gustavsen, 1992) and co-generative learning (Elden and Levin, 1991) as tools for sustained change (Greenwood and Levin, 2007).

Following the discussion on the two major characteristics of action research deduced from Kurt Lewin’s work, that is, participation and change, further criteria which differentiate action research from other methodologies have been described by Hart and Bond (1995). These include practicality and context-specificity; political, emancipatory and developmental roles; reflection and reflexivity and its cyclical nature as well as theory generation ability.

Action research is broadly described in relation to five parameters of critical social science as proposed by Habermas (Carr and Kemmis, 1994). The parameters are: rejection of the positivist notion of rationality, objectivity and truth in favour of the dialectical view of rationality; acceptance of interpretive categories; provision of means through which distorted self-understanding may be overcome; linkage of reflection to action to bring
about change and facilitation of the formation of self-critical social organisation in which truth is determined by the way it relates to practice (Carr and Kemmis, 1994). Each of these parameters has been developed and incorporated in the critical theory which is discussed subsequently. Prior to the discussion of critical theory, some philosophical approaches as they relate with action research will be discussed. These are positivism, interpretivism and hermeneutics.

3.3 Philosophical approaches related to action research

3.3.1 Positivist notion (dialectical view of reality)
Positivists treat the objects of research involving human subjects as phenomena which compare with objects of physical or natural science (Carr and Kemmis, 1994; Haralambos and Holborn, 2008). In other words, the positivist assumes that a science of society is possible through objective observation and analysis of social life in which facts and frameworks are provided devoid of the observer’s feelings and opinions (Carr and Kemmis, 1994; Haralambos and Holborn, 2008). The proponent of positivism, Auguste Comte, believed that evolution of society resulted from invariable laws and that behaviour of humans was controlled by the principles of cause and effect similar to the behaviour of matter in the natural sciences (Carr and Kemmis, 2004; Haralambos and Holborn, 2008). Comte’s position conveyed opposition to any metaphysical or theological claims that some kind of non-sensorily apprehended experience could form the basis valid knowledge (Carr and Kemmis, 1994). The desire to liberate thought from strongly held beliefs as well as an optimistic belief in the power of positive knowledge as a way of solving practical problems, made positivism popular in the second half of the nineteenth century (Carr and Kemmis, 1994). Since positivism did not appear to fulfil the promise of intellectual freedom, its appeal began to wane. This position appears not to appreciate the fact that natural sciences deal with inanimate objects which do not have subjective states like humans.

Another criticism of the positivist approach is that factors that are not directly observable, for example meanings, feelings and purposes, are thought not to be important. Kolakowski cited by Carr and Kemmis (1994) describes this situation as ‘the rule of phenomenalism’ which means that positivism claims that valid knowledge can only be established by reference to what is manifested by experience. This implies that only what is founded in
reality is labelled as knowledge, thus phenomenalism is the belief that since value judgements cannot be founded in empirical knowledge, it cannot be classified as valid knowledge.

As seen from the arguments presented, I believe that the application of this philosophy to the study of human behaviour is misleading because it does not allow for a full picture of the situation to be obtained. This is particularly of concern in action research as it aims at a change to improve the situation of the people, therefore an inductive approach which is exploratory to enable the generation of both objective and subjective data is preferred to the deductive approach of positivism. Waterman (1994) argued that a typical positivist’s research design is the experiment and that in experiments, knowledge is gained deductively (from general to particular) from testing hypotheses drawn from theory. Carr and Kemmis (1994) also support Waterman’s view by stating that scientific (positivist) enquiries proceed by proposing hypotheses in the form of universal laws. They further added that the hypotheses are assessed by comparing their deductive consequences with the results of the observations and experiments.

According to Haralambos and Holborn (2008), an increasing number of sociologists maintain that a value-free science of society is not possible and they argue that the values of the sociologists influence every aspect of their research. They further argued that theories are influenced wholly or partly by value judgments and ideological positions.

In-spite of the criticisms against positivism, this approach has been credited for certain developments in research, for example, quoting Waterman:

‘Logical positivism, however, should not be totally discounted. Associated with the promulgation of positivist thought, notions of causality and with advances in statistical knowledge, highly structured research methods (including experiments and surveys) tended to be favoured by researchers in preference to less rigid qualitative research methods…also develops some interesting statistical data (for example) on the relationships between age and unemployment in the United States of America’ (Waterman, 1994, p 30).

Positivism has contributed to contemporary thought and some similar features of this approach is seen in philosophical hermeneutics, interpretivism and qualitative research, for
example in qualitative data analysis, patterns could be sought and according to Waterman (1994), this is similar to the development of laws as obtained in the positivist philosophy.

Drawing conclusion from the preceding arguments as well as the objectives of my research stated in the previous chapter, positivism will not help me to achieve appropriate answers to my research questions and objectives. I now turn to interpretivism, another parameter as it relates to action research.

3.3.2 Interpretivism
Following the challenge of positivism, new epistemologies were sought and the interpretive tradition appeared to be an alternate option. This is because the interpretive approach seeks to replace the scientific notions of explanation, prediction and control with notions of understanding, meaning and action (Carr and Kemmis, 1994). This approach is derived from social phenomenology and sociology of knowledge credited to Alfred Schutz (1899-1959) and Berger Luckman respectively. The interpretive philosophy has two main branches, namely the European branch which focuses on phenomenology and the second is the American branch which focus is symbolic interactionism (Waterman, 1994).

Interpretivism maintains that the society possesses an intrinsic structure of meaning constituted and sustained through the routine interpretive activities of the individual members (Carr and Kemmis, 1994; Denzin and Lincoln, 2000). Illuminating this ideology further, Denzin and Lincoln argued that what distinguishes human action from the movement of physical objects is that the human is inherently meaningful. This implies that to understand a particular social action, the inquirer must understand the meanings inherent in that action.

Society is sustained by relationship of external factors which are thought to control its members. It is further argued that research must be more concerned with how social order is produced and this involves revealing the network of meanings. This ideology suggests that enquiry should focus on understanding the social process through which reality is produced and taken for granted (Carr and Kemmis, 1994; Waterman, 1994). In turn, Waterman (1994) argued that, to understand social reality, the subjective experiences of people must be included in our analysis. He further argued that our actual or potential knowledge of the meaning of human action are taken for granted. This knowledge, otherwise known as common sense knowledge, is shared and constructed by people. It then
follows that laws about social life are constructed by people and though they appear stable, they are amenable to change and so, can be altered (Waterman, 1994).

To explain interpretivism further, Blumer (1969) discussed the concept of symbolic interactionism propounded by George Herbert Mead (1863-1931). He argued that human beings interpret or define the actions of others based on the meaning they attach to such actions. In other words, this process is equivalent to inserting the mechanism of interpretation in-between ‘stimulus’ and ‘response’. Blumer went on to explain that although many authors recognise that human beings interpret the actions of others, they failed to analyse the implications of such interpretations except for Mead. According to Blumer, Mead argued that the human being has a self which is an object of his/her own actions. This means that the individual is capable of acting towards himself in a similar way that he/she may act towards others. Examples of such self-actions include, getting angry with oneself, engaging in self-argument, telling oneself what to do and what not to do.

Mead views this ability of human being to act towards oneself as central to how the individual faces and deals with his/her world. Thus, interpretation means that the individual constructs objects on the basis of his/her on-going activity instead of being controlled by pre-existing objects. In other words, people’s interpretations will vary according to their experiences, feelings, motivation, intended goals and their interpretation of other people (Blumer, 1969; Waterman, 1994). It is deduced from the arguments of both Shutz and Blumer that people structure their lives and because of this, researchers should immerse themselves in the lives of those they study (Waterman, 1994).

However, though interpretivism emphasises the importance of obtaining subjective data, thus quite relevant to my study, it has been criticised for advocating the separation of the activities of the researcher from the researched. This is viewed as impossible and impractical (Waterman, 1994). Although the interpretivists seek to explore meanings of social phenomena, their view does not support action research to bring about a change because they believe that transformation of consciousness is sufficient to produce transformation of social reality (Carr and Kemmis, 1994).
3.3.3 Critical theory

Critical theory was first articulated by a community of philosophers referred to as Frankfurt School who drew their inspiration from Marxism. These included Max Horkheimer, Herbert Marcuse and Theodore Adorno. More recently, Jurgen Habermas has also contributed to the development of critical theory. The unifying concern of these philosophers was the pervading influence of positivism which had resulted in instrumental reality and the tendency to see all practical problems as technical issues (Carr and Kemmis, 1994). That prevailing situation had created objective reality which led to a decline in the ability of people to reflect on their circumstances to bring about change. Therefore, the main purpose of these philosophers was to promote knowledge that would emancipate people from the domination of positivism (Carr and Kemmis, 1994). This means that critical theory involved the recovery of the elements of social thought which concerned values, judgments and interests of people and integrating them into a new framework of thought that is more justifiable (Carr and Kemmis, 1994). Kincheloe and McLaren (1994) view critical theory in terms of empowerment, stating that this theory must be connected with the attempt to confront injustice in the society. This implies that critical theorists produce dangerous knowledge, that is, the kind of information that upsets institutions and threatens to overturn regimes.

In his contribution to critical theory, Habermas described the critical social science (Carr and Kemmis, 1994; Denzin and Lincoln, 2000) which is an approach which generates emancipatory knowledge (Hope, 2001). He proposed that there is a basic human interest to gain rational autonomy and freedom, also that emancipatory interest transcends subjective meanings. Habermas critical social science aims to create awareness in individuals about how their aims and purposes may have become distorted and suggest means to eradicate such distortions. This process would then make a way for the pursuit of real goals (Carr and Kemmis, 1994). Carr and Kemmis further suggested that Habermas also accepts some interpretivist accounts of social life, for example, that people share common assumptions and meanings which help them to understand and structure their lives. He also believes that generalisations and predictions (universal laws) cannot totally explain social life (Carr and Kemmis, 1994; Waterman, 1994). Nonetheless, Habermas rejects interpretivism on the basis that it only portrays the intensions and values of people’s lives and that neither interpretivism nor hermeneutics is capable of making people overcome their social ideologies (Carr and Kemmis, 1994).
He further argued based on Marx’s ideology that people should relentlessly critique all existing conditions because through this, humanity would liberate itself from the dictates of oppressive norms. Habermas also draws from the psychoanalytic method of self-reflection as a means of enabling the individual to interpret his/her situation differently, thereby altering repressive conditions. The process of psychoanalysis is individualised, whereas, critical social science seeks to locate the cause of collective misunderstanding of a group’s social ideology (Carr and Kemmis, 1994). Habermas further argued that social groups are prevented from achieving a correct understanding of their situation because the ideological systems of ideas have caused them to passively accept an illusory account of reality which precludes their ability to recognise and pursue their common interests. This situation makes ideology critique necessary (Carr and Kemmis, 1994).

Habermas’ proposition is a social process that combines collaborative ideology critique with political determination to act to overcome contradictions. Therefore, this transcends mere critique to critical praxis. By critical praxis, it means that the actors have become enlightened and their new status now comes to bear in their transformed social action. This process involves the integration of theory and practice as reflective and practical moments in a dialectical process of reflection, enlightenment and political struggle. This is carried out by the group for the purpose of their emancipation (Habermas, 1992; Carr and Kemmis, 1994; Waterman, 1994).

3.4 Conclusion
In this chapter, the epistemological positioning of action research was discussed including the views of Kurt Lewin, the key advocate of this paradigm as well as the views of his critics. Lewin’s emphasis was on the empowerment of the oppressed for social change. In addition to these, the participatory nature of action research and its commitment to change were also explored. Some philosophical approaches as they relate to action research were also highlighted and these are positivism, interpretivism and critical theory. Further aspects of action research including its rationale for this study, will be discussed in the next chapter.
CHAPTER FOUR
CHAPTER FOUR

METHODOLOGY

4.1 Introduction
In this chapter, the methods that were employed in carrying out action research to prevent maternal mortality in Ekpri-Ikang community will be discussed. These include the study design, sampling technique and securing access into the community, data generation and analysis as well as reliability, validity and ethics.
As was stated earlier, the objectives of this study are:

4.1.1 To carry out a participatory fact-finding exercise with the research participants in the study setting as regards maternal mortality.
4.1.2 To facilitate the creation of a common forum between health care professionals and the community members to take action on the prevention of maternal mortality.
4.1.3 To collaborate with the participants to develop a plan of action and programme to meet the identified needs.
4.1.4 To carry out a participatory evaluation of the impact of the actions on the participants.
4.1.5 To discuss the implications of the findings in the light of relevant theory on the involvement of community in the prevention of maternal mortality.

4.2 Methodology
This study was carried out using an action research design. This design is a non-positivist form of social research suited to the problem-solving needs in various settings. The positivists assume that reality is concrete and constant, also that objectivity is achievable, therefore, human phenomena can be measured by the concepts and methods applied to the natural sciences (McNiff and Whitehead, 2006; Saks and Allsop, 2007). Whereas, action research is driven by the need to solve practical, real-world problems and it originates from the premise of Kurt Lewin which states that ‘research that produces nothing but books will not suffice’ (Lewin, 1946: 35; Denscombe, 2003). Thus, action research is appropriate where there is a desire to change and research simultaneously (Susman, Evered 1978; Gummesson, 1991; Eden, Huxham, 1993).
Quantitative design, based on the positivist ideology, mainly measures phenomena, attempts to bring the human world under scientific control, thus, missing out the essential subjective qualities of human experience (Silverman, 2001; Bryman, 2001; Rubin and Rubin, 2005). It limits the expression of the respondents/subjects through pre-coded responses. Quantitative studies use statistics which show proportions, such statistics can reveal patterns, confirm the existence of problems and suggest directions for inquiry, however, they do not tell us what to do to solve problems (Winter, Munn-Giddings, 2001). Similarly, qualitative designs like ethnography, phenomenology and others, present the problems the way they are, but generally do nothing to change the status quo (Meyer, 1993; Winter and Munn-Giddings, 2001). The purpose of inquiry in both qualitative and quantitative researches is to analyse a static situation either through manipulation of variables or through exhaustive observation. The roles of the researchers in both designs include observation, generating and analysing data provided by others and they are clearly distinct from the participants (Winter and Munn-Giddings, 2001). Also, the researchers in these designs try to avoid having any impact on the situation being investigated, otherwise, the situation will not be in its naturally occurring state (Winter and Munn-Giddings, 2001).

Based on the foregoing assertions, ‘traditional’ qualitative and quantitative designs were rejected in favour of an action research design as it seeks to solve community-based problems through mobilisation and empowerment. Thus it appears to be the most appropriate to achieve the research objectives.

4.2.1 Rationale for Action Research
Action research is the most appropriate design for this study because it works towards a change. It facilitates the possibility of working with the research population in a non-hierarchical and non-exploitative way (Greenwood and Levin, 2007). However, in practical terms, it may be difficult to achieve this non-hierarchical status. This is because the researcher is the facilitator and is probably more knowledgeable than the participants in research and some aspects of the topic under exploration, and so, implicitly controls the research. In this situation, it is not possible for the participants to completely be in charge of planning, taking action and critical reflection. This design also closes the gap between theory and practice by placing value on experiential basis of knowledge (Winter, Munn-
Giddings, 2001; Webb, 1990). It ensures that all those involved in the research contribute to creative thinking about the issue at stake; decide on what is to be looked at; the method of enquiry and contribute to the action to be taken to solve the problem. Participation of the research participants was the intention of this study. This was enhanced through explaining the process of action research to the participants and the need to express their views as well as respect the diversity of viewpoints (Greenwood and Levin, 2007). I anticipated that conflicting views might give rise to arguments or disagreements. When such situation arose, the issue at stake was subjected to critical reflection to resolve them.

In action research, there is no distinction between the researcher and the participants. All participants are co-researchers and co-subjects (Reason, 1988; Winter and Munn-Giddings), however, where there is an outside researcher, s/he acts as the facilitator. An outside researcher refers to a professional researcher who is not a member of the community from where the participants are drawn (McNiff and Whitehead, 2006). This paradigm does not view the subjects as passive in the research process, but empowers them to act on their behalf as active participants in charge. Empowerment is achieved through guiding the participants to identify or have a better understanding of their situation and thus, mutually resolve problems that confront them. This consequently leads to emancipation (Winter, 1989; Waterman, Webb and Williams, 1995; Stringer, 1996; Greenwood and Levin, 2007). Emancipation implies that there is an alteration from the initial situation of the participants or community members to a direction of a better and more self-managing and sustainable state (Greenwood and Levin, 2007). I attempted to guide the participants to understand the magnitude of the problem of maternal deaths in their community, and that most of these deaths could be prevented. This understanding was expected to motivate them to collaboratively develop plan of action to solve this problem. Although this research project lasted for about one year, it is hoped that having involved the participants in all the phases of this research spanning through fact-finding, planning, action, critical reflection and evaluation, they would have learnt new ideas about maternal deaths. With this new orientation towards maternal deaths they are expected to continue with actions on their own to ensure the reduction of maternal deaths.

Action research works on the premise that, all those affected by a problem, should participate in the process of rigorous inquiry about the problem, to acquire more information. This in turn is analysed by reflecting on the information to transform their
understanding about the nature of their problem. This new set of understanding is then utilised to develop plans to solve the problem. The process just described is expected to help the people repudiate social myths, misconceptions and misrepresentations, therefore, formulate more constructive analysis of their situation with the consequence of improved quality of life (Stringer, 1996). However, the complexity of the problem gave rise to a situation where we had to solve some problems as described in a subsequent chapter of this thesis.

Waterman (1994) and Webb (1989, 1990, 1993) commented on the lack of implementation of research findings and theory as justification for action research. Action research is immediately assimilated and can be brought to bear in practice (Waterman, 1994). Action research aims to establish conditions under which self-reflection is possible; aims and claims can be tested; practice can be regarded strategically and practitioners can organise as a critical community committed to the improvement of their work as well as their understanding (Kemmis et al, 1982:6). In this study, the participants are referred to as the action research group, they were guided by me to reflect on their beliefs, practices and other information as they unfolded with regard to maternal mortality. These ones formed the critical community to bring about change in their situation.

Although action research is seen as the standard research design that promotes democracy in research which motivates people to bring about a change that solves their problem, it has been criticised by some scholars as lacking the rigours of scientific inquiry, thus questioning the validity of action research (Stringer, 1996; Winter, Munn-Giddings, 2001). By democracy, it means that all the participants are expected to have equal rights in the study, thus, are also expected to be fully involved from the beginning by initiating area for the study such as is obtained in the fact-finding phase; conducting the research; interpreting the data and implementing actions for change. Other action research projects show that participants’ involvement waxes and wanes through the study for personal or professional reasons (Hope, 2001). Democracy in action research fosters mutual learning and change that can take place when academics, practitioners and community members collaborate to draw fully and creatively on their different forms of knowledge (Winter and Munn-Giddings, 2001). Democracy was feasible in this study in that, I tried to involve representatives from most of the community groups. Also, all the participants were
involved in all the phases of the research through encouraging each person to express his/her views as well as participate in the various actions.

4.2.2 Rigour of action research
As previously discussed, some scholars have criticised action research as lacking in rigour (Stringer, 1996). I hereby discuss this issue in terms of validity, reliability and generalisability of action research.

4.2.2.1 Validity of action research
Critics have raised concerns about the validity of action research findings (Koshy et al, 2011). Questions are raised over the objectivity of data generated when people are researching into their practice. Action researchers have acknowledged these concerns and devised ways of ensuring validity of this type of research. As pointed out by Waterman (1998), there is the tendency for action researchers to depend on the perspectives of validity from qualitative or ethnographic research. She argues that although the categories of validity in qualitative research can be applied to action research for example, triangulation, these only give a partial picture of what makes action research valid. Therefore, it is suggested that the qualitative categories be complimented by dialectical, critical and reflexive categories which emphasise the distinctiveness of action research (Waterman, 1998).

Dialectical validity describes the approach of action research to explore a problem in an attempt to resolve tensions or contradictions with the aim of improving the quality of the lives of people (Waterman, 1998). Critical validity explains the nature of action research which views the attempt to bring about a positive change in people’s situation as a moral responsibility. This is achieved through the inclusivity or the participatory approach which is aimed at encouraging the subjects to be co-researchers into their problem and eventually develop a sense of ownership. The third parameter for assessing the validity of action research as suggested by Waterman is reflexivity (Waterman, 1998). This explains the influence that the researcher exerts on the study based on h/her background. The meanings and description that qualitative researchers attach to events are products of their culture, social background and personal experiences (Denscombe, 2010). This is contrary to the stance of positivists who view the world from the perspective of objectivity (Denscombe,
Reflexivity has been described by action researchers as a means of enhancing the validity of action research, for example, in the words of Waterman:

‘...the questioning attitude, the active search for opposing perspectives, the movements between theory, research and practice, and the multiple researchers and methods should reassure readers that action has been taken to minimise the difficulty of vested interests’ (Waterman, 1998, p.104).

In broad terms, it is important to ensure the accuracy of the data generated and used as evidence in action research because this affects the conclusions that could be drawn. For this purpose, sharing data with the action research group and triangulation in data collection, ensure a good quality of data (Koshy et al, 2011). Triangulation, as described by Mason (2002), is the process of obtaining several perspectives about the issue under study. This process also allows for contrasting views about the situation (Hopkins, 2002). The whole process of triangulation in the sources of data provides some degree of authenticity to the overall data (Koshy et al, 2011). These sources include interview transcripts, questionnaire responses, observations and field diaries. In addition to the foregoing, the process of critical reflection further strengthens the validity of action research. This process involves the feedback of data to the action research group members for deliberation in order to inform the planning or replanning phase (Waterman et al, 2001).

4.2.2.2 Reliability of action research
Reliability refers to the extent to which the research instrument is consistent to produce the same result on different occasions (Denscombe, 2010). In the context of action research, data could either be qualitative or quantitative depending on the focus of the study. If the study involves quantitative tool like questionnaire, it must be reliable and valid (Koshy et al, 2011).

4.2.2.3 Generalisability
Action research may not be based on statistical procedures and thus its findings might not be generalisable on a larger population. Nonetheless, it is found that lessons learnt from a single action research project are as illuminating as outcomes from other forms of research (Winter and Munn-Giddings, 2005). Action research can uncover a wide variety of issues in a situation which can provide insights to a variety of other situations. In other words, generalisability is possible through application of the project to similar situations (Koshy et
al, 2011). Greenwood and Levin (2007) clarified this idea further by arguing that action research-developed knowledge can be valuable in contexts other than those in which it was developed but rejected the notion that the transferability of such knowledge is achieved by abstract generalisations about that knowledge. They further clarified that:

‘transferring knowledge from one context to another relies on understanding the contextual factors in the situation in which the inquiry took place, judging the new context where the knowledge is supposed to be applied and making a critical assessment of whether the two contexts have sufficient processes and structures in common to make it worthwhile to link them’ (Greenwood and Levin, 2007, p 66).

Action research has been criticised that it is so context bound that it is not possible to generalise its findings (Waterman, 1994) and to this end, Lincoln and Guba (1985) had argued that every research situation is unique, therefore, question the claim that research can be generalised. Nevertheless, transferability is possible if research situations have some similarities (Lincoln and Guba, 1985; Waterman, 1994). To facilitate transferability, it is suggested that researchers should clearly describe their research context because this is thought to enable other researchers to decide if the research findings could likely transfer to their own situation (Lincoln and Guba, 1985; Waterman, 1994). Waterman further acknowledged that findings will not be transferable in every context. I suggest that action researchers should describe their procedures clearly as this may facilitate their adoption by researchers in other settings.

4.2.3 Action Research Process
The action research process was first described by Lewin (1946) as a spiral of steps, each consisting of a circle of planning, action and fact-finding about the result of the action. Kemmis and McTaggart (1988), further elaborated Lewin’s description by saying that each circle is composed of planning, action, observation, reflection and drawing up a revised plan. Generally, action research consists of a spiral of cycles involving the interaction of research, action and evaluation, only one of these three strands in the spiral may be dominant at each phase, although it interacts with the other two (Carr and Kemmis, 1986, Hart and Bond, 1995).
Some other authors have described the process of action research in slightly different ways but basically involving planning, action and evaluation. The description by Somekh (2006) consisted of the following steps in the cycle:

1. Collection of data about the topic of investigation
2. Analysis and interpretation of those data
3. Planning and introduction of action strategies to bring positive change
4. Evaluation of those changes through further data collection
5. Analysis and interpretation of the further data collected.

Waterman, Harker, MacDonald and Waterman (2005) further described action research cycle as having the following phases. The first phase involves problem identification which entails fact-finding. It is exploratory and may include a literature review and other sources to gather information about the problem. The second phase is the planning stage and is concerned with setting objectives and developing strategies to solve the problems identified in the preceding phase. The third, is the action phase, activities are undertaken to meet the action objectives and thus solve the problem. In the fourth phase, the result is critically reflected upon and fed back into the action research cycle which is continuous.

Due to their similarities, in this study, I adopted the steps of action research as described by Waterman et al (2005) already discussed, and Kemmis and McTaggart (1988) which are as follows:

1. Initial reflection on the situation with regard to the thematic concern. This involves fact-finding and problem identification.
2. Planning about what is to be done to bring about a change. This involves strategic decision, setting objectives to achieve the overarching goals and prioritising action to be taken.
3. Enacting the plan and observing or evaluating how it works.
4. Critical reflection on the previous step is done through analysing, synthesising, interpreting and explaining what had happened. Consequently, a conclusion is drawn and is fed back into the cycle.
These steps practically in my research involved the following:

**Phase 1:**

1. Forming and facilitating the action research group. Explanation about the purpose of the action research was given by me to the action research group members.
2. Needs assessment or fact-finding on maternal mortality was done by the researcher and the co-researchers. This was done through in-depth individual interviews, Focus Group Discussions and observation. There was a plan to obtain data on maternal mortality from the Health Centre records in this community, should the need arise.
3. At the end of this, critical reflection was collaboratively done on the data generated. These were documented in field notes by the literate participants/ the researcher and were read out to those who were unable to write. Data from this source were fed into the next phase.

**Phase 2  Planning and Action**

In this phase, strategies were developed towards solving the problems identified in phase 1. This involved setting action objectives, making decisions about actions and critically reflecting on them. Data generated at this level were fed into the action phase for implementation.

**Phase 3  Reflection/evaluation, Final Phase, closure and withdrawal**

The actions were evaluated and findings were critically reflected upon and the data generated were fed back into the next planning phase of the action research spiral. This process continued until some elements of change were identified, although Winter and Munn-Giddings (2001) state that a successful action research does not stop because it looks forward to further developments. At this point, the community should have been empowered to continue with actions and planning to sustain the change.

Unlike the traditional researches, action research does not aim at closure. This is because it assumes that all answers are provisional and are open to critique and change as contexts and understanding develop (McNiff and Whitehead, 2006, Kock and Kralik (2006). Closure implies that the researchers have found the final answers to bring about a change. The process in this final phase should include consolidation of what has been learnt and review of experiences. I will evaluate the action research by asking the participants to discuss the most important outcome of the group, as well as their plan to sustain actions to
prevent maternal deaths. It is usual that following the disengagement of the facilitator from the field, the group continues to meet to ensure that the change is sustained.

### 4.3 Ethical Issues

Doing a research with human beings demands paying attention to ethical issues because it is a legal requirement and shows respect. McNiff and Whitehead (2006) argue that in action research, ethical consideration involves three dimensions namely: negotiating and securing access, protection of the participants and assuring good faith. The principles of ethics are the same but there are some specific considerations in action research, for example, enlightening the action research group members about research ethics since they are co-researchers.

#### 4.3.1 Negotiating and Securing Access

Whatever procedure is used for data generation in action research, leads to extensive demand on the participants. This makes it imperative to carefully address how to gain access to the field and the participants to ensure that the required data are generated. Generally, different levels are involved in the regulation of access and these include the persons authorising the research and those to be involved in the research. The latter group will be required to invest their time and willingness to participate in the study while the former, takes responsibility for the quality of the research including any difficulties that may arise in the course of the research (Flick, 2005).

It is important to gain access to the research setting by seeking the approval of ‘gatekeepers’ (Creswell, 2003). The gatekeepers are those in the position of authority to permit the research within their areas of domain. In this study, permission was obtained formally from the Ethics Committee of the School of Nursing, Midwifery and Social Work in the University of Manchester, the Cross River State Ministry of Health, the Bakassi Local Government Council as well as the officer in charge of health facility in Ekpri-Ikang. Approvals were also sought from the Community Leader and from the individuals that participated in the study. The patriarchal nature of families in the study setting was acknowledged with regard to access to the female participants. The process of gaining and sustaining access to the study setting is a very crucial issue in community-based research.
because this brings about an interaction of the researcher and the participants, therefore, raising some ethical and personal issues (Creswell, 2003; Flick, 2006; Denscombe, 2010).

4.3.2 Protection of Participants
Guidelines on research ethics have been developed throughout the world to prevent abuse of people participating in research (Hudson, 1999). Generally, ethical principles of autonomy, beneficence and justice are advocated. People should be treated as autonomous agents and those with diminished autonomy should be protected. The principle of autonomy is reflected in informed consent. Beneficence implies maximisation of possible benefits and minimising possible harm to the participants as a result of the research. The principle of justice stresses equitable distribution of burdens and benefits of the research (Koch and Kralik, 2006).

In action research, the foregoing ethical principles are upheld as well as relational ethics. Relational ethics refer to the code of conduct that should exist among the action research group members to enable cordial interpersonal relationship. This is based on the premise that human experience is a shared experience, therefore, there should be mutual respect for one another’s perspective and vulnerability (Koch and Kralik, 2006; Austin, Bergum and Dossetor, 2003). In this study, the need for mutual respect was emphasised during the induction programme for the action research group members. Detail of this is presented in the section which deals with the induction of the action research group in the next chapter.

Informed consent of the people in the study area was obtained through formal letters and also informally, explaining the nature of the research to be carried out and the impending benefits of the study to the people. The letters were sent to the Ethics Committee of the Cross River State Ministry of Health, Chairman of the Local Government Area, Head of the health facility in the area as well as to the community leader before embarking on the study. Verbal consent was obtained from the participants and this involved verbal translation of the letter of consent and the participant information sheet into the local dialect for those who do not understand English and could neither read nor write (Appendix 9 and 11). The information included explanation of the nature of the research, how this would involve their time and effort, the impending benefits of the study to the
people and that part of the data collection procedures will involve tape recording. Verbal consent, through the approval of the participants was tape recorded. Written consent was obtained from those who are literate.

The participants were assured of confidentiality in handling the data at all times as well as putting their interest first. Also, they were informed from the outset that any participant who wished to withdraw from the study could do so at any time. Benefits, such as the opportunity to learn from other participants; and impending risks for example, feeling hurt by co-researcher’s comments, were also discussed. It is also important to note that although informed consent should be on individual basis, in this context, consent was also given at the community level by the Community leader and in some instances, it was given at family level by husbands or anybody who is the head of the family. This was so because of the patriarchal nature of the typical Nigerian society. In my research setting, transferring the western ethics which permits that consent could be obtained directly from a wife, can be interpreted as an insult to the husband (Okolocha et al, 1998; Shehu, 2000). With this background knowledge, deliberate attention was given to this issue so that no one in the position of authority would feel slighted.

4.3.3 Assuring Good Faith
As the facilitator of this research, I aimed at maintaining a good reputation and integrity by keeping my promise of ensuring confidentiality of the people and data so as to develop trust for me. It is observed that people are more willing to work with someone they trust (McNiff and Whitehead, 2006). This was a necessary requirement to ensure the success of this research (McNiff and Whitehead, 2006). Also, data (transcripts and field notes) were stored in a safe and secure container, under lock and key, to prevent access by those whom they were not meant for (Flick, 2006).
CHAPTER FIVE
CHAPTER FIVE
FACT-FINDING (PHASE ONE)

5.1 Introduction
As has been previously discussed, the aim of this action research is to empower the members of the community including health care professionals, to take action to prevent maternal mortality. The preliminary processes undertaken towards the process of empowerment of the people are discussed here. These include selection and induction of the action research group members, selection of the general participants as well as methods of data generation, analysis, results and an initial discussion.

5.2 Selection of the Action Research Group
The reason for selecting people to form the action research group is based on the principle that action research procedure starts by getting a group of people together who are involved with the situation of interest in different ways. These people should demonstrate their willingness by accepting to participate in the research for their own purposes after an explanation of the topic and what action research entails (Winter and Munn-Giddings, 2001). The action research group would be empowered through sensitisation to identify their problems and eventually work as change agents in their community. By sensitisation, it means that they would be made more aware of the problem of maternal mortality through the process of co-learning with the researcher. As explained by Hammersley and Atkinson (1990), sensitisation is not definitive or directive but it gives a general sense of reference and merely suggests directions. Put differently, from the process of sensitisation, people would know their turf, and have the imagination to collectively envision a desirable new state and attract others who share that vision (Wadsworth, 1998). This means that sensitisation leads to knowledge which increases the people’s control over their situation. Such knowledge is relevant to action and is shaped based on critical understanding of their situation. This whole process begins with ‘sensitisation’ (awareness creation), during which people critically acquire an understanding of their circumstances, which is required prior to purposeful action, and was first described by Freire (1970) as ‘conscientisation’ (Freire, 1970; Greenwood and Levin, 2007).

The selection of these persons followed ethical approval to carry out this research from the State Ministry of Health. Subsequently, I also got consent from the Local Government
Council. At the community level, I obtained consent for the research from the Council of Chiefs during my initial meeting with them. At this meeting, I discussed the purpose and nature of the research which involves the empowerment of members of the community to take action to prevent maternal mortality. This would be done through the action research design which entails cycles of activities involving fact-finding, planning, interventions, evaluation and planning subsequent phases (Kemmis et al, 1982; Waterman, 1994; Winter and Munn-Giddings, 2001). Also, that the process would have to start with selecting a few volunteers as action research group members to work with me as co-researchers. The community leaders suggested that I should recruit members of the existing health committee in the community into the action research group.

In a subsequent meeting a few days later with the members of the community health committee, I explained the objective and nature of the research and called for volunteers who would be committed to work with me as co-researchers. From this group, it was possible to recruit purposively, four people who met the inclusion criteria out of the twelve proposed. The inclusion criteria will be discussed later. The remaining eight members were selected through snowballing by the initial members of the action research group (co-researchers). Thus, the members of the action research group were composed of twelve members of the community.

Purposive sampling is chosen because the aim of the study is not generalisability on the population, rather, it is to understand how the researcher can collaborate with members of the community and healthcare-providers and care-receivers, to facilitate solution of problems intrinsic to that community (Sandelowski, 1995, Coyne, 1997). Besides that, the people were selected because they have an interest in health and are interested in this study to reduce maternal mortality. Overall, the action research group is representative of the wider community, have the time for the study and want to make a change.

Further to the purposive sampling, snowball sampling method was utilised to select the remaining eight members of the action research group. Being a stranger to the community, it was difficult to readily identify people who meet the inclusion criteria to be recruited to complement the action research group. Based on the envisaged difficulty, it was easier to
use the snowball method to recruit other community members into the action research group through the recommendation of the initial members. Snowball sampling is an approach for locating information-rich key informants through the recommendation of initial contacts or participants in the study. Using this approach, a few potential respondents are contacted and asked whether they know of anybody with the characteristics of interest in the research (Patton 1990).

This begins by identifying someone who meets the criteria for inclusion in the study, you then ask the person to recommend others h/she may know who also meet the criteria (Flick, 2006). This method, however, would hardly lead to representative samples but because the aim of the study is not generalisability, snowball sample would facilitate recruiting people who are information-rich and have the right kind of experience to collaborate with the researcher to identify and facilitate the solution of problem of high maternal mortality in the community.

The chain referral process allows the researcher to reach populations that are difficult to sample when using other sampling methods. It has been observed that initial subjects tend to nominate people that they know well. Because of this, it is highly possible that the subjects share the same traits and characteristics (Castillo, 2009). However, to overcome this issue of nomination, the categories of persons listed in the inclusion criteria in this study were adhered to. Therefore, in this case this sampling method will allow the identification of the resources within a community and the selection of those people best suited for the needs of a project or process (Patton, 1990).

The details of the action research group members are discussed under the inclusion criteria.

5.2.1 Inclusion Criteria
1. Two women of child-bearing age (15 – 49 years). These are vulnerable women as they might die from pregnancy and childbirth.
2. One husband. Husbands are directly involved with pregnancy, decision-making and other family roles, so they are expected to share the responsibility of making pregnancy and childbirth safe.
3. One mother-in-law. In the typical Nigerian extended family system, mothers-in-law are influential in decision-making especially in pregnancy and related matters, their opinions are respected because they are older and more experienced.

4. Two Community leaders, that is, one village head or his representative and a women leader. These are mostly elders, and are held in high esteem in their domains and so, can be champions and agents of change.

5. One Clergyman. Religious leaders are also highly respected in the society.

6. One traditional birth attendant (TBA). As previously discussed, TBAs are deeply involved in the care of women during pregnancy and childbirth. They are respected and their judgment trusted by members of their communities.

7. One midwife, one primary healthcare co-ordinator, one medical practitioner and one other healthcare provider involved in midwifery care are mostly skilled birth attendants and creating a joint forum between these and other members of the community is expected to create a positive milieu for learning and interchange of ideas to reduce maternal mortality.

8. The Director of Midwifery education/service is at the apex of administration and can easily communicate the research findings to the Commissioner of Health and the National Health Council of Nigeria. This is expected to sensitise the health administrators about the need to mobilise the community in a larger scale to prevent maternal mortality.

5.2.2 Exclusion Criteria

Those that will not participate in the study are health workers not involved in birth attendance and any other member of the community not mentioned in the inclusion criteria. This is because they do not have the characteristics relevant to the study.

5.3 Immersion

The period of immersion in the study setting is said to minimise perceived difference between the researcher and the researched, promote inclusivity in the research and develop a smooth transition of subsequent change, for the purpose of achieving the aims of the research (Hope, 2001). In the course of this period, the researcher viewed as an ‘outsider’, integrates into the study setting in the attempt to develop a collaborative relationship with the researched and facilitate transition from being an outsider to a ‘semi-insider’ or a ‘closer outsider’ (Hope, 2001). During the initial period of the study and prior to data
collection, I was able to visit the community several times to familiarise myself with the health workers and tried to get acquainted with the structures and facilities available in the community such as contemporary and traditional health facilities, nature of the roads, means of transportation and schools. Also, this period enabled me to get to know the dates and times for major events in the community such as market days, as well as days for special programmes in the Health Centre such as National Immunisation Days (NID). This was important because it gave me an idea of when the people could generally be available to participate in the research.

At certain points in the course of the research, some difficult situations arose in the community which competed for time with this study and thus, led to distraction of the co-researchers. Notable among these were two major events which were: allocation of market stalls and the beginning of the planting season. First, there was so much tension in the community generally because certain members of the community including a few action research members were denied allocation of stalls in the newly reconstructed market by the government. Secondly, the beginning of crop farming season is marked by intensive involvement of the farmers to ensure that they have planted all their crops before the rains get heavy. Waterman (1994) also experienced a difficult situation during an action research programme. She had to hold back when nurses in the Out Patient Department in her study setting were stressed by the implementation of new government policy for ophthalmic clinics. Acknowledging these concerns of the community, I was careful not to allow my enthusiasm to get the research done to override the interest and priority of the community at such critical times. This was demonstrated by flexibility of the action research group in the scheduling of research activities, as an example, some meetings were held in the evenings and sometimes on Sundays after Church service.

Notable also about my immersion in the research setting was that I became familiar with the people to the extent that they would approach me for counsel on their individual health problems. They also referred to me as ‘mother’ of the TBAs because as this research unfolded, it allowed me to be involved in many sessions with the TBAs through Focus Group Discussions, observations and training of the TBAs.
5.4 Induction of the Action Research Group (Co-researchers)
The process of collaboration is the bedrock of action research (Kock and Kralik, 2006). By definition, action research aims to contribute to both practical concerns of the people in a problematic situation and to further the goals of social science simultaneously (O’Brien, 1998). This involves a dual commitment of studying the system and concurrently collaborating with members of the system in changing it in what is together regarded as a desirable direction. This twin task requires active collaboration of the researcher and members of the system or community and thus the importance of co-learning as a primary aspect of the research is emphasised (O’Brien, 1998).

The co-learning in this project was made possible during the induction workshop that was held after the recruitment of the action research group. The objective, therefore, of the induction workshop was to create a forum for mutual learning about maternal mortality in the community and how to bring about a change in the status quo. This was intended to make the people more aware of the burden of maternal deaths so that they could develop internal motivation to collaborate with me to identify their areas of problem in this regard and take action to bring about a change. This process also helped me to understand the community better.

Prior to the induction, copies of the participant information sheet were distributed to group members who could read and understand English, to read and make an informed decision as to whether to participate in the study. This information sheet was read and interpreted by me to the participants who could not read. The issue that arose from the participant information sheet was about the duration of the action research. This was proposed to last for about ten months and some of the co-researchers complained that the period was too long. In this regard I explained further that action research involves cycles of activities which is followed sequentially and so requires some time, however, that the activities would be worked out collaboratively with the co-researchers in such a way that it does not interfere with their individual activities.

The induction workshop was held for two days and the main issues discussed included the concept of maternal mortality, its global burden and that Nigeria ranked as the second highest in the whole world for maternal mortality. Causes and prevention of maternal mortality were discussed collaboratively and both contemporary and traditional perspectives were considered. I also discussed the nature of action research with emphasis
on its collaborative feature and that each member of the group is a co-researcher. Attempt was made to ensure that the action research group members understood the meaning of research by explaining that it is an organised method of enquiry or investigation about the issue of interest and that in this situation, the issue of interest is maternal mortality. Given the educational background of this group which ranged from primary to secondary school and only the health professionals had tertiary education, simple language was used and technical jargon was avoided. For example, maternal mortality was explained simply as women’s death while pregnant; giving birth or within about one and a half months after delivery. I was able to discern that they had understood the discussion by the way they interacted through asking and answering questions.

Data generation methods in research were also discussed which include individual interviews, focus group discussions, observation, field notes and review of health records. Practical sessions were held to demonstrate individual interviews with volunteers acting as interviewers and interviewees. We discussed ethical consideration in research and that it was particularly important to maintain confidentiality and anonymity with regard to data that will be generated from the general participants (Hudson, 1999). Confidentiality and anonymity were explained in simple terms to the people to mean not divulging the information to be obtained from the participants to the larger community and not identifying the names of the participants respectively.

Concerning inter-member relationship in the action research group, ground rules were developed collaboratively by members to ensure cordial relationship to encourage each member to have a sense of belonging and commitment to the group. We also stressed the importance of mutual respect for the contributions and opinions made by members (Austin, Bergstrum and Dossetor, 2003; Kock and Kralik, 2006). See Appendix 12 for summaries of the areas discussed.

The induction programme went on without hitch except that because it took so much of the co-researchers’ time, about eight hours each for the two days, they were warned ahead of time to make adjustments in their routine schedule to accommodate this.
5.5 Data Generation Methods
Data generation in action research is a collaborative process and it potentially involves all the action research members because they are co-researchers. ‘Central to all research is the generation and analysis of data, but within action research project, these activities are entwined with reading relevant literature, analysing emergent findings, evaluating progress and planning subsequent phases’ (Hart and Bond, 1995:72). The foregoing are the general methods.

5.5.1 Fact Finding Phase
In the first phase of this study, the objectives set in collaboration with the co-researchers focused on the following:

i) To determine the perspectives of the community members on the causes of maternal mortality.

ii) To determine their attitudes towards maternal mortality.

iii) To identify their maternal health practices.

iv) To identify their perspectives about factors which contribute to maternal deaths.

v) To identify their perspectives on the prevention of maternal mortality.

Based on these, the group decided that data should be generated qualitatively through individual interviews of women of childbearing age; focus group discussions with the husbands and various other groups in the community and observations of TBAs and skilled birth attendants.

5.5.2 Sample
To achieve the objectives stated in the previous paragraph, appropriate samples were selected from the community for the research. Selecting a subsection or a finite part otherwise known as the sample, of the larger population to be involved in research is a common phenomenon. This is important because it is impractical to study the whole population due to its enormous size, given time and financial constraints on the researcher (Saks and Allsop, 2007). Some authors have described various methods of sampling. The two major categories are probability and non-probability samples (Polit and Hungler, 1989). Probability sample involves the selection of subjects for the study through randomisation which is one of the key features of quantitative research. By this, every
member of the target population has an equal chance to be selected, therefore, the variables in the sample reflect those of the larger population from which they are drawn (Saks and Allsop, 2007). By that, findings from such quantitative studies are generalised on the larger population.

On the other hand, non-probability sample is preferred where the study is exploratory and the aim is not generalisability on the larger population. This sample is not based on chance, but rather on the discretion of the researcher to select participants with the required experience and information for the study (Denscombe, 2010). To achieve the objectives for this phase, the aim is not generalizability, therefore, purposive sampling is chosen in order to have understanding of how the researcher can work with members of the community and health care providers to facilitate the reduction of maternal mortality in this community. The purposive sampling method is designed to make possible analytical generalisations, they are applied to wider theory on the basis of how selected cases fit with general constructs (Sandelowski, 1995; Coyne, 1997 and Curtis et al, 2000). This generalisation is not statistical, in other words, they are not applied to wider populations on the basis of representative statistical samples (Curtis et al, 2000). The risk of randomisation if used in this situation is that of not selecting the right persons into the study.

The principle of analytical or theoretical generalisation requires the sample to be selected on theoretical grounds. This means that a case should be selected because of particular interest either in its own right or as an illustration of issues with wider significance such as relevance to the research questions, theoretical position analytical framework and the argument or explanation being developed. It should not be based on empirical representation (Creswell, 2003; Mason, 2007). So, the samples selected for this study, are based on their relevance to the prevention of maternal mortality. The general principle employed in this procedure was the selection of information-rich participants, this means selecting persons purposely who fit the aim of the study (Coyne, 1997). These participants were drawn from the population of those already described in the inclusion criteria. Qualitative methods is generally, and as applied in this action research, concerned about maximising the understanding of the ‘one’ in all its diversity, it is case oriented and not variable oriented (Ragin and Becker, 1989; Sandelowski, 1995).
5.5.3 Sample size and recruitment method

To achieve the objectives, qualitative methods were used in selecting the sample for this study because the study involves exploration of the perspectives of the participants. The sample size in qualitative method unlike quantitative study, is not decided a priori. This depends on what is to be known, the purpose of enquiry, what will be useful and what will have credibility (Patton, 1990). Sample size in qualitative research may refer to numbers of persons but also to numbers of interviews and observations conducted and also number of events sampled (Sandelowski, 1995). Sandelowski further asserted that numbers have a place in selecting a sample for qualitative research to ensure that the sample is fully adequate to support the particular type of qualitative study. Minimum sample sizes have been suggested for the different qualitative methods, for example, phenomenologies require about six participants, ethnographies and studies on grounded theory, about thirty to fifty interviews (Morse, 1994). On the whole, information redundancy or theoretical saturation determines the number of samples eventually required for the study (Lincoln and Guba, 1985, Strauss and Corbin, 1990).

A total of 30 individual interviews of women of child-bearing age were proposed by the action research group. This number was decided upon because in this study, qualitative data generation was the option, so its nature demands that a few participants be selected to generate in-depth data for a better understanding of the problem of maternal mortality. This decision implies that the aim of this study is not generalisation on the larger population. However, the actual number of individual interviews would eventually be determined by data saturation. Data saturation occurs when the same specific pattern of behaviour or opinion among the participants emerges or when the general picture reaffirms itself over and over so that no new data are generated (Fetterman, 1998, Lincoln and Guba, 1985). At such point, it is believed that enough data have been gathered to describe the phenomenon of interest convincingly (Fetterman, 1998).

To enhance rigour of this study, the process of data triangulation was involved to enable more data to be generated through Focus group discussions and observations (Rose and Webb, 1997). Eight focus group discussions consisting of about six to eight persons spreading across the various groups of persons as listed in the inclusion criteria already discussed. Some authors have suggested that a focus group should consist of about six to eight participants in order to allow adequate time for each participant to talk (Bowling and
Ebrahim, 2005; Flick, 2006). The eight focus groups in this study comprised of homogenous groups of husbands, chiefs, clergy, TBAs, doctors/midwives, menopausal women/mothers-in-law, older women of childbearing age (23-49 years old) and younger women of childbearing age (15-22 years old). Also, we proposed to observe the practices of five TBAs and two skilled birth attendants.

5.5.4 Development of the data-generation tools
The group mandated me to develop an interview schedule, observation guide and focus group discussion guide which were discussed and ratified collaboratively. I was asked to develop these instruments because the co-researchers said that I was more experienced in this area than they were. Also, members of the group who would have assisted me could not do so because of their busy schedules. Thus, a combination of various data-gathering techniques was utilised. The use of two or more methods of data gathering technique is known as methodological triangulation (Denzin, 1970; Bryman, 2010). This is to ensure that a much more rounded picture of the community’s perspectives about maternal mortality is obtained in that, the weakness in one method could be avoided by using a second method that is strong in the area that the first is weak (Livesey, 2010). As an example, the general weakness of interview is that we accept that the interviewee is telling us the truth on trust, we can then validate the interview data through observation of the everyday life of the people (Livesey, 2010). Once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced (Bryman, 2010; Webb et al, 1966). Some authors prefer to view triangulation differently. Rose and Webb (1997) see triangulation as a flexible way of approach to generating data about a problem which could turn out to be different from what was originally planned. As an example, in their study of carers of the terminally ill, they had planned to use both qualitative and quantitative approaches, but in the field, they ended up to use the standardised questionnaire qualitatively to suit the needs of the participants. They attested that this development in conjunction with the qualitative data that were originally generated greatly enhanced the overall data because it enabled them to have a deeper insight into the subject they studied.

Different types of triangulation in research have been identified in literature to include the following. First is data triangulation which involves data gathering through several
sampling strategies, thus making it possible to generate data from a variety of people at different times and at different social situations (Bryman, 2010). Second is investigator triangulation. This refers to the use of more than one researcher in the field to generate and interpret data. Thirdly, theoretical triangulation employs more than one theoretical position to interpret data (Bryman, 2010). Lastly, methodological triangulation involves the use of more than one method for data generation (Bryman, 2010). In this study, as has been already mentioned, methodological as well as investigator triangulation were employed. The latter is in conformity with the ethos of action research being a collaboration paradigm.

Consequently, the methods of data generation in this study are discussed here.

5.5.5 In-depth interviews
The objectives of the in-depths interviews are as follows:

i) To explore the perspectives of the women of childbearing age about the causes of maternal mortality.

ii) To explore their attitudes towards maternal mortality.

iii) To identify the maternal health practices among the women of childbearing age.

In-depth interview, also known as unstructured, open-ended, narrative or the long interview has gained popularity in health care research (Miczo, 2003, Silverman, 1998). This is because lay knowledge has been deemed essential to the development of health policy and practice and evidence-based and other clinical research (Boulton et al, 1996).

Unlike the structured interview approach of the positivist who set out with predetermined questions to test a hypothesis, an unstructured interview which emanates from the perspectives of the interpretivist or constructivist, aim at exploring the subjective perception of the individual, thus, acknowledging that the interviewee is a repository of knowledge. This idea is corroborated by the subjective theory which explains the fact that interviewees have a complex stock of knowledge about the topic under study and that such knowledge includes assumptions that are explicit and immediate which interviewees can express spontaneously in answering an open question. The assumptions can also be implicit and so, to articulate these, methodological aids such as different types of questions are required to help reconstruct the interviewee’s subjective theory about what is researched (Flick, 2006). The questions should be open ended and as non-directional as
possible. The interviewer says as little as possible while allowing the interviewees to tell their stories. The interview usually opens with a grand tour question, that is, a question that encourage the interviewee to begin speaking without directing the content or substance of the discourse (Mc Cracken, 1988). Subsequent questions are then based on what the interviewee says and prompts are used to solicit further information or clarification. Floating prompts such as eyebrow raises or repetition of a key word are used to maintain the flow of the responses (McCracken, 1988). Planned prompts or probes are used to elicit further explanation or when a deeper exploration is needed (Crabtree and Miller, 1991). Probes seeking recapitulation are used when the interviewee is asked to retell part of the response and by doing that, new details may be added (Sorrell and Redmond, 1995).

It is recommended that the interview should start with unstructured questions and move to increased structure later to avoid the interviewer imposing his frame of reference on the interviewee’s view point (Flick, 2006). Interview schedules should be used with flexibility and the interviewer should refrain from making early evaluation, also, non-direction style of conversation should be engaged in (Merton, Kendall, 1946, Flick, 2006). The interview should elicit the specific elements of the object of interest so that the interview does not remain at the general statements level (Flick, 2006). The questions here should not be handicapping to the interviewer, to aid this, such questions should use retrospective inspection. Utilising the criterion of range aims to ensure that all aspects relevant to the research question are mentioned during the interview, this is assured by introducing new topics or next question on the interview guide (Flick, 2006). In-depth interview is of particular importance to this action research because it gives opportunity to explore the perspectives of the subjective experiences of the participants and also give voice to the ‘lay’ people in the determination to change their unpleasant circumstances (Low, 2003).

5.5.6 Individual interviews
The philosophy of action research demands that its activities should be a collaborative process, hence data should be collaboratively collected. However, the co-researchers were of the view that this initial data collection would be best carried out by me because they were relatively inexperienced in research, besides, the work schedule of some of them competed with time which would have been allowed for the interviews (Hope, 2000).
Overall, the co-researchers assisted in purposive sample selection of the interviewees based on the inclusion criteria used for selection of the co-researchers discussed previously.

Ethical procedures were observed before each interview. Consent was obtained from the community leader from the outset, being the gate-keeper of that community. It is important to gain access to the research setting by seeking the approval of ‘gatekeepers’ (Creswell, 2003). The gatekeepers are those in the position of authority to permit the research within their areas of domain. In this study, permission was obtained formally from the Ethics Committee of the School of Nursing, Midwifery and Social Work in the University of Manchester, the Cross River State Ministry of Health, the Bakassi Local Government Council as well as the officer in charge of health facility in the LGA. Approval was given by the head of the community. At the individual level, verbal consent was obtained from the participants and this process involved verbal translation of the letter of consent and the participant information sheet into the local dialect for those who do not understand English and could neither read nor write. This information included explanation of the nature of the research to be carried out, how this would involve their time and effort, the impending benefits of the study to the people and that part of data collection procedures would be tape-recorded. Verbal consent, through the approval of the participants, was tape recorded. Written consent was obtained from those who were literate. See the Appendix 9 for copies of the letter and participant information sheet.

The interview schedule reflects the objectives of the study; these focus on exploration of the knowledge, attitude and practice of the people on the causes and prevention of maternal mortality specifically:

i) What are the perspectives of the women of childbearing age about the causes of maternal deaths?

ii) What are their attitudes towards maternal deaths?

iii) What are the maternal health practices among the women of childbearing age?

Most of the interviews were conducted by me as decided by the action research group because they were busy. Each interview was conducted in privacy and tape recorded following the participant’s consent. The interviews took place in the participants’ homes, each lasting for at least one hour and were conducted in the local dialect. I am conversant with the local dialect. The interviews were typically characterised by asking initial non-directional trigger questions which were later extended to ensure that the subject of the
research was covered. Thus, the course of the interview was developed by using prompts (repeating the last words spoken by the interviewee), probes (asking for clarification) and checks, that is summarising what has been said (Hamersley and Atkinson, 1983). Therefore, the interview was quite flexible. However, I anticipated some difficulties, for example, the woman may not ‘open up’. I minimised this by approaching the interview in a non-confrontational, receptive and cordial manner, so that the woman would feel relaxed (Denscombe, 2010). In addition, I dressed simply and conventionally, besides I ensured that I sat at an angle of 90 degrees to the interviewee to avoid sitting directly opposite her which could have a confrontational effect. This sitting arrangement allows for eye contact with the interviewee without the feeling of being intimidated (Denscombe, 2010).

5.5.7 Focus Group Discussion
The objectives of the focus group discussions were as follows:

i) To explore the shared views and attitudes of members of the community on their perspectives about the causes and prevention of maternal mortality. 

ii) To identify the maternal health practices among the people of this community.

Focus group discussion as opposed to individual interviews, is recommended when studying opinions and attitudes about a subject (Flick, 2006). The reasons for the preference are as follows. Individual interviews, though a good source of generating qualitative data, is more time-consuming than focus group discussions (Bowling and Ebrahim, 2005, Flick, 2006). Focus group discussion involves ‘explicit use of group interaction to generate data and insights that would be less accessible without interaction found in the group’ (Morgan, 1988: 12). Small groups of six to eight people are brought together to discuss collectively the issue at stake, probing into it as they meet one another’s disagreement (Bowling and Ebrahim, 2005; Flick, 2006). Denscombe (2010) is of the opinion that as many as six to nine people or as small as three to four people in a focus group can effectively discuss a range of opinion about the subject in focus. This number allows for manageability of the group. Focus group has the advantage of generating rich data from a small group of participants at the same time.

Eight focus group discussions were proposed collaboratively by the action research group. This number was aimed at allowing for the spreading of the focus groups to accommodate the various categories of participants as already explained under the inclusion criteria. For ease in data collection, the groups were based on gender and cultural groupings in the
community. For example, the women’s group were separate from the men, also the younger women of childbearing age, about 15 to 22 years were put in a different group from the older ones. This was expected to facilitate ease of expression without much feeling of intimidation by other group members. Although heterogeneity generates a range of views within each group, homogeneity was preferred in this study because shared experiences can provide a more supportive environment for discussing difficult or sensitive issues (Saks and Allsop, 2007).

The disadvantages of the homogeneous group, like any group interview include emerging group culture which can interfere with individual expression; domination of the group by one person and ‘groupthink’ (Denzin and Lincoln, 2000). These were minimised by the moderator’s skill of encouraging every member of the group to participate by expressing h/Her views and also making sure that no one was abused or intimidated within the group (Denscombe, 2010).

In this study, the issue at stake is maternal mortality and its prevention in the study setting. Practically, based on the reasons given by the co-researchers concerning why I should do the interviews, I moderated most of the focus group discussions by formally controlling the agenda of the speakers, fixing the beginning, course and the end of the discussion. This means discussion was based on the study objectives; steering the discussion towards deepening and extending the specific topics including the involvement of all the participants. However, while stimulating discussions, I made sure I allowed the group freedom to discuss items of interest to them about the topics and not to have a total control over the group discussion. As Flick, (2006: 193) stated, ‘the group should find its dynamic level and in general, the moderator should not disturb the participants’ own initiative but create an open space in which the discussion keeps going’. The proceedings of the discussion will be documented as field notes and also tape recorded through the permission of the participants.

Focus group discussion, though appropriate for this study, has some disadvantages. First, the supposed economics of collecting data from a group of people within a short time is reduced by the high organisational effort needed to make an appointment for a meeting time that is favourable to all members of the group. To overcome this, through the consent of the participants, focus group discussions were not scheduled on market days or other busy days in the communities. Secondly, consideration was given to cultural issues which could have made some of the focus group discussions more difficult, for example, gender
issues. To minimise these issues, male research assistants were trained to facilitate the men’s group, where culturally, a male facilitator would be preferred to a female. The stance on gender was drawn from the recommendation of Denscombe (2010) based on his observation that sex of the interviewer can impact negatively on the response of the participants. To ensure the quality of data from the male facilitator, adherence to the focus group guide drawn for this study as well as the need to be neutral were encouraged. Besides, I did the recording and this gave me the opportunity to make suggestions to the moderator when necessary, with regard to developing the course of the discussion.

From the foregoing objectives, the following research questions were derived.

i) What do members of the community hold as knowledge about the causes of maternal mortality and its prevention?

ii) What are the attitudes of the members of the community towards maternal mortality?

iii) What are the maternal health practices in the community?

For more detail, see focus group discussion guide in Appendix 14

5.5.8 Participant Observation

The objective of the observation were:

i) To obtain direct data of the practices of the midwives, other health workers and TBAs with regard to maternal health.

ii) To obtain direct information about the health facilities rendering maternal health care.

Participant observation is an essential aspect of some research projects (Saks and Allsop, 2007) and it is suggested to be used to complement or supplement the study (Hammersley and Atkinson, 1990). As defined by Denzin (1989), participant observation is a field strategy that simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation and introspection. This entails the researcher immersing himself or herself in the research setting so that such can experience first-hand range of dimensions of the study setting (Mason, 2007). In other words, the researcher watches what happens, listens to what is said and asks questions. This provides direct information about the behaviour of the people in the community and allows the
understanding of the real situation in the study area (Hammersly and Atkinson, 1990; Denscombe, 2003).

Participant observation should be viewed as a process in two respects. First, the researcher should increasingly become a participant through gaining access to the field and to persons. Secondly, the observation should also progress through the process of becoming increasingly concrete and concentrated in the area of the research questions (Flick, 2006). Consequent on this, Spradley (1980) identified three phases of participant observation thus

- Descriptive observation which serves at the beginning to provide the researcher with an orientation of the field under study
- Focused observation narrows the perspectives of the researcher on those processes and problems that are most essential for the research questions.
- Selective observation towards the end, is aimed at finding further evidence and examples for the types of practices identified through focused observation in the previous phase.

The first two phases were reflected in the Observation Guide for this study and the third phase, that is, selective observation occurred later in the field while trying to find out more about certain practices, for example, obtaining the evidence of herbal remedies used by the TBAs.

Observation is an everyday skill that allows not only visual perception, but also those based on hearing, feeling and smelling (Adler and Adler, 1998). Although observation grants the researcher the opportunity of first-hand information about the people’s behaviour, the information may be distorted by the problem of reactivity in which the participants adjust their behaviour due to the presence of the researcher (Spradley, 1980). In an ethnographic study carried out in Nigeria by Mboho (2009), the problem of reactivity was minimised as the people became accustomed to her presence in the field because she assumed the role of participant as an observer. Participant as an observer means that the observer becomes increasingly involved in the daily life of the people in order to gain access to the people and to the field (Flick, 2006). The process of being a participant as an observer affords the researcher the opportunity to gain as far as possible an internal perspective on the studied field, thus becomes familiar and gains insight into the field.
under study. The goal of the research is not limited to only being familiar with the field but also involves systematic observation. In this study, reactivity was minimised through my long period of immersion in the study area which made the people accustomed to my presence.

Another problem of observation is the observer’s limited observational perspective because naturally, not all aspects of a situation can be noted at the same time. This implies that since the human memory has a limited capacity to remember and reproduce every detail of the observed events (Flick, 2006; Denscombe, 2010), it is advisable to establish a situation when field notes can be written in private during the fieldwork or soon afterwards (Denscombe, 2010).

In this study, to complement data from the individual interviews and focus group discussions, participant observation was done with focus on maternal health practices which include activities of the birth attendants/their facilities and the actual birthing practices. These factors influence maternal mortality (Bolatito, 2007; United Nations Children’s Fund, 2008). Observed practices were recorded as field notes. Participant observation has been observed to enhance the quality of data in the study when combined with other methods of data collection (DeWalt et al, 1998).

Practically, the places of practice of TBAs, midwives and community health extension workers were observed. The number of hours for each observation was proposed to be about six hours each time. This was to allow for sufficient time to observe the activities in each setting. The action research group saw the observations of the practice of these ones as very crucial because the TBAs in particular attend to most of the deliveries in the community.

As decided by the action research group, I did most of the observations though each time in the company of a co-researcher who volunteered to work with me. Working with a co-researcher did not present any problem, rather, I found that it enhanced my access and acceptance by the TBAs. Also, in an earlier explanation, through the decision of the action research group, I developed the observation guide. The guide was based on the guidelines given by Spradley (1980) which advocates that the following areas be included in the observation checklist:
- Space: the physical place or places (contemporary and traditional health facilities).
- Actors: the people involved (Midwife, Community Health Extension Worker and Traditional Birth Attendants).
- Activity: a set of related act people do (antenatal, intra-partum and postnatal care).
- Objects: the physical things that are present (delivery objects).
- Act: single actions that people do (examination of the pregnant women).
- Event: a set of related activities that people carry out (herbal remedies).
- time: the sequencing that takes place over time (antenatal care to delivery).
- goal: the things that people are trying to accomplish (childbirth)
- feeling: the emotion felt and expressed (enthusiasm about their job).

The problem of over-intimacy has been warned by Gold (1958) to influence both researcher and the researched adversely by causing a breakdown of formal roles. I guarded against this through the fusion of my conflicting roles, first, as a ‘participant observer’ which granted me access and familiarity in the study area; secondly, as an ‘observer as participant’ which enabled me to adhere to the objectives and purpose of the study, thus maintaining my role as the ‘professional stranger’ (Flick,2006).

Field notes were written and developed following the observation episode as soon after I left the field. Photographs of some objects in the places of delivery were also taken but with permission from the participants (Appendices 16-30).

5.5.9 Field Notes
This is the classic method of documenting data in qualitative research and it is often employed in action research. It provides for detailed documentation of interviews with regard to proceedings about the interview and the interviewee’s responses (Flick, 2006). The rule is that the recording should be made immediately to avoid distortion (Lofland and Lofland, 1984). This rule is a problem in action research because the researchers are involved both in the processes of interview, observation as well as in the documentation. Therefore, an alternative for action researchers is to note impressions after ending the field contact (Flick, 2006). Field notes can also be used in recording observation during the action research process. Field notes of the observations were made and developed later.
5.6 The role of the town crier
Before we commenced data collection, the action research group members had suggested we engage the services of the town crier to disseminate information about the research and encourage the members of the community to cooperate with the researcher and co-researchers. The town crier also informed the people that the researcher or co-researchers might be visiting some homes to collect data.
A town crier or bellman makes public announcements in the streets. In almost all rural communities, town criers and their activities are noticeable through using wooden or metal gongs or drums to produce sounds by which they stir up the attention of the people and deliver their messages. This is particularly useful in illiterate rural populations (Etebu, 2009). The activity of the town crier practically enhanced the acceptance of the action research group by the generality of the members of the community to the extent that more people than anticipated for the study expressed their desire to either be interviewed or be involved with the focus group discussion. I had to explain that we only needed a few persons but promised to involve them when the need would arise. Later in the course of the study, during the action phase, many of them who were willing were invited to participate in the community education.

5.7 Data Management
Audio tapes of the interviews and focus group discussions were transcribed by the secretary (Halcomb and Davidson, 2006). Since the interviews and Focus Group Discussions were conducted in the local dialect (Efik), the translation and transcription were done by somebody who understands both the local dialect (Efik) and English very well. The translator’s (secretary) credential and experience play a major role in preserving the original meaning of the data because poorly translated phrases would affect the coding and what themes that will emerge during the process of data analysis (Twinn, 1997; Smith, Chen, and Liu, 2008; Esposito, 2001; Squires, 2009). In this study, the secretary holds a University degree, has a good command of the English language and had been previously involved in such data translation and transcription. The transcribed interviews and Focus Group Discussions from the audio tapes (written in English) were read through by another person and translated back to Efik (as was used for the interviews and FGD). These were compared with the recorded interviews and FGDs in the audio tapes, to ensure that the transcription was correct. The back translation by an independent investigator is
recommended for credibility and confirmability of data (Esposito, 2001; Squires, 2009). This procedure ensures technical and conceptual accuracy of the data, thus enhances the rigour of the study (Esposito, 2001; Squires, 2009). In recognition that the ‘Efik’ language used for the study like most other languages, does not have adequate vocabulary to match the health care language (Twinn, 1997; Fredrickson, Rivas, and Whetsell, 2005), a health professional with midwifery background was engaged to do the back translation.

Field notes on observation were edited and typed. The audiotapes were handed to a secretary for translation and transcription with a definite instruction to type verbatim without being judgmental or attempting to correct what she thought was wrong. Instruction was also given to leave space at any point that the spoken word was not clear. This was to prevent distortion of the data (Halcomb and Davidson, 2006).

Another important point in this stage of the study was that of ensuring anonymity of the participants. This was achieved by replacing the names of the participants with identity codes. The purpose of this was to promote confidentiality of the participants which could easily be compromised in a qualitative study (Murphy et al. 1998).

Following the transcription of the data, they were fed into the NVivo8 software for faster organisation into codes and categories.

5.7.1 Data analysis
The aim of data analysis in action research is threefold, to provide insight into what changes can be made in future; data interpretation helps to make the findings generalisable and lastly, data can be used to provide a baseline to explore what learning has taken place (Waterman, 2007, Winter and Munn-Giddings, 2001). In action research, the concern of data analysis is not about comprehensive interpretation of all the data which have been generated, rather it is to think about the data in ways that reveal or stimulate new possibilities for action (Winter and Munn-Giddings, 2001). Thus, the main focus of data analysis from this perspective is learning and implementing change. Whereas, the focus of other forms of research is on description or constructing an interpretation (Winter and Munn-Giddings, 2001). Therefore, the cyclical nature of action research demands caution in adapting procedures for data analysis as contained in the
general literature because these could be misleading or impractical when applied within the action research process (Winter and Munn-Giddings, 2001). Data analysis in action research involves a process of learning through critical reflection on the data and is collaboratively done with the co-researchers. An example of this is demonstrated in the action research study undertaken in Kenya by Waterman et al, which focused on the reduction of stigma against people with HIV/AIDS. Emphasis in that study was on stigma and how to prevent it.

Due to the cyclical nature of action research, data from one phase has to be analysed and the results or findings fed into the subsequent phase. In action research, there is need to strike a balance between the need to exhaust analytical categories and the imperative to take action (Hope, 2001). Another important point in action research data analysis is to ensure that as many co-researchers as possible collaborate in the process. Thus where a few members of the group are involved in the analysis, the data interpretation is fed back to other members for their contribution and amendment to ensure a firm base for the consequent action (Winter and Munn-Giddings, 2001).

The three methods of data generation, in this study as already discussed were individual interviews, focus group discussions and observation. These generated qualitative data which were analysed thematically following the transcription of the verbal data as previously analysed. The process of analysis involved coding of the key concepts into categories and themes. Below is the systematic way the data were analysed:

1. One transcribed interview was chosen and read through once
2. Reading was repeated and the following were noted
   • Repetitive words or phrases
   • Repetitive ideas, beliefs or values
   • Similarities and differences

These were noted as categories.

3. The identified categories were reviewed and named and a short description of the category written.

4. Where the descriptions were long and contained ideas found to be at odds, smaller categories were created as sub-themes (for example, causes of women’s death
during the process of childbearing had sub-themes which included medical reasons, superstition beliefs and social factors).

5. The descriptions were reviewed to identify themes across the categories

6. Similar categories were grouped to form themes

This analysis process was applied to all the sets of data and was modified where necessary to reflect the patterns in all the data set (Special Topics CRN 13736, 2010).

5.8 Results

Twenty-nine in-depth individual interviews were conducted with women of childbearing age. This number was reached through data saturation. Open ended questions were formulated to elicit the perspectives of the participants on three main areas comprising knowledge, attitude and practice with regard to maternal mortality. The participants were all mothers and so their practical experience in childbirth was an added advantage to this study. It would be recalled that the selection of these participants was done purposively and guided by their characteristic of being information-rich and so, relevant to the study.

The objectives of the in-depths interviews were:

i) To explore the perspectives of the women of childbearing age about the causes of maternal mortality.

ii) To explore their attitudes towards maternal mortality.

iii) To identify the maternal health practices among the women of childbearing age.

Also eight focus group discussions were carried out with varied number of group membership as outlined in Table 5.1.
Table 5.1: Focus Groups

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiefs</td>
<td>6</td>
</tr>
<tr>
<td>Husbands</td>
<td>8</td>
</tr>
<tr>
<td>Mothers-in-law</td>
<td>9</td>
</tr>
<tr>
<td>Clergymen</td>
<td>6</td>
</tr>
<tr>
<td>Skilled birth attendants (doctor and midwives)</td>
<td>8</td>
</tr>
<tr>
<td>Traditional birth attendants</td>
<td>6</td>
</tr>
<tr>
<td>Younger women of childbearing age (15-22 years)</td>
<td>6</td>
</tr>
<tr>
<td>Older women of childbearing age (23-49 years)</td>
<td>8</td>
</tr>
</tbody>
</table>

The aim of the focus group discussions was to explore the views of significant members of the community on maternal mortality with emphasis on the causes, prevention, childbirth practices and identify gaps which would require intervention.

Participant observation was also carried out on five out of seven TBAs, one midwife and one community health extension worker involved in midwifery care. The purpose of this was to identify childbirth practices and note any gap for intervention. Data were generated through an observation guide to ensure that no important area of practice was left out, however, every incident was noted.

The overall aim of this phase was to explore what the people know about maternal mortality, their attitude towards this situation, what their child birthing practices are and identify the factors which could be changed in order to probably reduce maternal mortality rate in the community.

Following the coding of data from the individual interviews, focus group discussions and observation into categories, major themes emerged depicting the factual information the participants hold about maternal mortality, their attitude towards maternal deaths and their
childbirth practices. From the data, factors that could be amenable to change were identified. The following themes arose from the categories.

- Causes of women’s death during the process of childbearing
- Birthing practices
- Health facilities issues
- Attitude towards maternal deaths
- Prevention perspectives

These themes will be discussed sequentially. Reference will be made to the information as given by the participants in the data. For ethical reasons, the groups and individuals were assigned numerical and letter coding for the purpose of anonymity. For example, the focus groups were numbered from FG1 to FG8 (Table 5.2), the interviewees were numbered thus, Int. 1 and so on and the TBAs were also assigned numbers. Also the midwife at the referral hospital was identified as MW Ref.hospital, while the community health extension worker at the study setting was coded as CHW.

### Table 5.2: Focus groups and codes

<table>
<thead>
<tr>
<th>Focus Groups</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husbands</td>
<td>H.FG 1</td>
</tr>
<tr>
<td>Older women of childbearing age (23-49years)</td>
<td>OW.FG 2</td>
</tr>
<tr>
<td>Younger women of childbearing age (15-22)</td>
<td>YW.FG 3</td>
</tr>
<tr>
<td>Clergy</td>
<td>C.FG 4</td>
</tr>
<tr>
<td>Community leaders</td>
<td>CL.FG 5</td>
</tr>
<tr>
<td>Traditional birth attendants (TBAs)</td>
<td>T.FG 6</td>
</tr>
<tr>
<td>Mothers-in-law/menopausal women</td>
<td>MLMW.FG 7</td>
</tr>
<tr>
<td>Doctors, midwives and other health workers</td>
<td>DMW.FG 8</td>
</tr>
</tbody>
</table>
5.8.1 Causes of death due to pregnancy and childbirth
The participants mentioned many reasons as the causes of maternal deaths. These included maternal health problems, superstitious beliefs, health facilities issues, ignorance and poverty.

5.8.1.1 Maternal health problems
A few of the participants mentioned factors related directly to pregnancy such as bleeding and lack of blood (anaemia) as causes of maternal deaths.

‘Bleeding can lead to the death of a woman when she is pregnant or when she is putting to birth’ (int.4).

‘heavy bleeding during or after delivery causes some confusion in the birth attendant about what remedy to use immediately and in that process, the woman dies’ (OW.FG3.04).

Similarly, a few other participants associated bleeding with certain factors such as abortion and retained placenta as causes of maternal deaths.

‘Loss of blood when there is an abortion or bleeding which could also happen during delivery, can lead to death’ (int. 5).

‘Heavy bleeding after delivery without hospital intervention as well as retained placenta can cause the death of the woman’ (MLMW.FG7.04).

A skilled birth attendant in the referral hospital remarked that anaemia and haemorrhage were common causes of maternal mortality in this community. In addition to that, such women were not usually brought early enough for intervention to save their lives.

‘Anaemia and haemorrhage due to retained placenta are common causes of maternal deaths in this locality. The women are usually brought in a very poor state when little or nothing could be done to revive them’ (DMW.FG8.01).

Some members of the community also corroborated part of what the skilled birth attendant observed about the causes of maternal deaths.

‘Sometimes when a woman dies during childbirth, the common cause is said to be reduced blood and bleeding after delivery’ (C.FG4.05).

‘Many times we hear that what killed the woman after delivery was either a placenta that could not be delivered or that she bled after delivery’ (CL.FG5.01).
The participants identified retained placenta as a cause of maternal deaths and that expertise of professionals is required to cope with such complication.

‘the umbilical cord could snap and so the placenta is not delivered; in the attempt by the TBA to deliver such placenta, she may apply undue force on the cord. This might result to extreme weakness of the mother and death could ensue. Whereas, if this happens in the hospital, midwife or doctor may give injection to the woman or they would use their special skill to deliver that placenta without the death of the mother’ (MLMW.FG7.06).

‘If the placenta is retained, the woman can die from it’ (H.FG1.02).

Although bleeding was widely acknowledged as a cause of women’s death during the process of childbirth, some community members attributed the bleeding to certain eating foods as well as ‘internal heat’.

‘some women would suddenly start bleeding after delivery of the baby. I usually attribute this to the kind of food the woman eats while pregnant. For example, if she was fond of taking chocolate drinks as well as some medicines, this might be excessive and result in bleeding after delivery because the chocolate drinks causes big babies’ (T.FG.02).

‘yes, chocolate drinks as well as eating biscuits in pregnancy can lead to haemorrhage after delivery. Internal heat also results in haemorrhage’ (T.FG.06).

Another specific or direct cause of maternal deaths mentioned by some participants is convulsion which occurs in the later part of pregnancy, during labour or after delivery. This is most likely to be eclampsia.

‘Maternal death can also be caused by convulsion which can occur during delivery. If this occurs in the hospital, the midwife or doctor would know what treatment to administer to help the woman’ (MLMW.FG7.06).

‘convulsions can occur after delivery and this can result to death’ (OW.FG3.03).

There is also an opinion that such fits occur due to non-attendance of the hospital for antenatal care.

‘some women have convulsion after delivery, although I have not experienced this in my practice. My mother is also a TBA, she has not also experienced such. The
convulsion looks like epileptic fit and I think it happens because these women have not had any antenatal examination done in the hospital. I always advise my clients to attend both the hospital and also come to me. Death usually results from the convulsion’ (T.FG6.04).

A skilled birth attendant remarked that some women from this community were usually brought to the hospital during an eclamptic fit and that one of such women has died recently.

‘some of the pregnant women in the community under study are rushed down to our hospital when they are having eclamptic fit. One has died in this hospital recently’ (DMW.FG8.01).

This remark was supported by DMW.FG8.02.

Many community members as well as the skilled birth attendants in the referral hospital mentioned unsafe abortion as a common cause of maternal deaths, particularly among teenagers. In addition, such abortions are influenced by peers.

‘Another cause of death among our teenage mothers is that some of them, through the influence of their friends, unknown to their parents, attempt abortion. This can result in profuse bleeding and death before any help could be given’ (MLMW.FG7.07).

A participant claimed that an unsuccessful abortion can result in difficult labour eventually.

‘the effect of unsuccessful unsafe abortion can linger and result in difficult or prolonged labour which might eventually result in death during or after delivery. This scenario is common with young and unmarried girls who probably are still in school and try to commit abortion without the knowledge of their parents’ (T.FG6.02).

Another dimension to unsafe abortion is that it could be undertaken through traditional means by using herbal drinks or enema as well as by injections from quacks.

‘unsafe abortion particularly by young unmarried girls who are trying to avoid their parents from knowing that they were pregnant. They do this by having some form of injections from quacks by taking herbal enemas or drinks. Sometimes they are
not successful and the pregnancy develops to full term. Such girls may likely die during delivery’ (OW.FG3.05).

Furthermore, some of these abortions could be self-induced by the young girl by using some drugs. Also, quacks are said to be involved in evacuating the womb with crude instruments in some cases.

‘unsafe abortion can lead to death; the abortion could be self-induced with some medicines purchased from Patent Medicine Shops in the community. The medicines commonly used include ‘White Quinine and Postignor. If these fail, traditional herbs can be used’ (YW.FG2.05).

‘some of the abortions are procured by quacks through the use of crude instruments to evacuate the womb’ (YW.FG2.05).

‘another problem that kills our young girls is abortion carried out by quacks’ (H.FG1.01).

On the contrary, the skilled birth attendants said that only very few girls with complications of unsafe abortion are seen in the hospital. This could suggest that some may have died without the opportunity of seeking help in the hospital.

‘we only see few of the patients with complications of unsafe abortion, and these are mainly secondary school girls. It appears that many of them would rather have the babies than abort them, this probably explains why we see more of teenage pregnancies’ (DMW.FG8.01).

The other members of the group of skilled birth attendants supported this observation.

Another cause of maternal deaths discussed but by only very few participants is sepsis. This cause was mentioned by mainly the health professionals and a few community members.

‘we do not see much of the sepsis because not all of those with complications come to the hospital’ (DMW.FG8.04).

The places of delivery used by some TBAs are dirty and so, are potential sources of infection to the women. This was remarked by some community members and
corroborated by the finding of my observation. Some TBAs deliver the women of their babies in an open space behind their houses (Appendix 11…).

‘dirt from unclean place of delivery as seen in some TBAs’ places can result in death of the woman following childbirth. The state of hygiene is very poor in some TBAs’ area of delivery; some of them conduct delivery in the open space behind their houses making the woman to be delivered to lie on a piece of plank which is usually not properly cleaned in-between clients’ (MLMW.FG7.07).

Apart from the TBAs’ places of delivery, some women have had their babies in unplanned places such as in the farm located in the bush and outside the house.

‘infection kills so many of our women because of the poor hygiene in the places of the TBAs. Some women deliver in unprepared places, for example, in the farm where they have gone to work, labour may commence and within a short time the baby is delivered on the ground and the mother uses a farm implement like machete to cut the umbilical cord. By this, the mother and baby get infected. Also, some TBAs do not use disinfectant to clean their floors, rather, they fix the floor of their places of delivery with earth or clay. This can be a source of infection leading to the death of our women’ (C.FG4.04).

Only the skilled birth attendants mentioned obstructed labour as cause of maternal death. This probably could be because obstructed labour is a technical term. However, the members of the community pointed out that women also die as a result of unduly prolonged labour.

‘another possible cause of maternal death is obstructed labour. Even recently, two women with obstructed labour from the community under study were brought to this hospital. Caesarean section operation was performed on them in this hospital and they survived.’ (DMW.FG8.01).

The husbands and the clergy mentioned prolonged labour as a cause of some maternal deaths.

‘when the woman labours for too long, she becomes very weak and cannot cope again with the stress of labour; naturally, death follows such a situation’ (H.FG1.02).

‘foetus presenting by the buttocks makes the labour to be prolonged with resultant exhaustion of the mother and she may likely die from that’ (C.FG4.05).
Summary

Members of the community demonstrated knowledge about the five preventable causes of maternal deaths otherwise referred to as direct or obstetric causes in contemporary literature. These are haemorrhage, sepsis, unsafe abortion, eclampsia and obstructed labour. Although they did not mention obstructed labour, probably due to the technicality of the term, they mentioned prolonged labour which is a sign of obstructed labour. Following this, I now present another set of medical causes as discussed by the participants. These are not obstetric causes and are referred to as indirect causes.

The participants mentioned factors that indirectly lead to maternal deaths. These are ‘lack of blood’ (anaemia), poor nutrition, malaria, HIV, hypertension, typhoid fever and tuberculosis.

‘many of the pregnant women who attend this hospital are anaemic, they look very pale. From their history, one could see that they are not feeding well’ (DMW.FG8.02).

Another participant had this to say about a common behaviour of the people in the study area which is thought to predispose malnutrition with resultant anaemia.

‘the people in this locality have identical behaviour and although some of them are fishermen, farmers and traders, they would prefer to sell their protein-rich foods rather than consume them. This is contributory to their anaemia’ (DMW.FG8.05).

In their own terms, members of the community expressed that ‘lack of blood’ leads to death of women in the process of childbirth and that this results from poor nutrition.

‘Some of the pregnant women do not have enough blood. Signs are that the woman’s body and her palms are whitish. Even on the day of delivery I hear people say that the woman died because she did not have sufficient blood’ (H.FG1.03).

‘I think that the main cause of maternal deaths in our community is lack of blood because many of our pregnant women do not eat nourishing foods such as eggs, meat, milk, most of them do not even take blood tonics. These result from poverty because many of the women cannot afford to buy such expensive food items’ (CL.FG5.03).

‘A pregnant woman needs to eat good food to be in good health, otherwise, she may die’ (OW.FG3.05).
Another participant gave an example of what constitutes good food.

‘Pregnant women should eat vegetables, biscuit bones, beans, sea foods like periwinkle and shrimps. These will build up her blood so that even if she does not have money to buy blood tonic (haematinic), she will be alright. Not eating well predisposes her to maternal death’ (OW.FG3.02).

Very young and ignorant boy who is responsible for an equally young girl’s pregnancy is also said to predispose to poor nutrition of the pregnant girl due to their lack of financial independence. Thus, they cannot cope with the demands of pregnancy in terms of good nutrition and healthcare bills.

‘Lack of blood during pregnancy can lead to death of the woman after delivery. A girl who is too young for childbearing could be put in the family way by an equally young boy who does not have a means of livelihood. These two are ignorant about adequate diet and can neither afford hospital care nor blood-building medicines, the girl becomes very pale and as such could easily die during delivery ’ (OW.FG3.05).

A TBA’s opinion is that a pregnant woman who lacks sufficient blood faces the danger of death during delivery.

‘The pregnant women would not want to take blood tablets. In such situation, when labour starts, it will be so painful because they do not have sufficient blood. This causes severe weakness, then if you are not an experienced TBA, the woman can die in labour’ (T.FG6.01).

Other medical problems identified by the participants include feverish conditions, HIV/AIDS and hypertension.

‘another problem that kills some of our women here is constant fever which can occur during pregnancy or after delivery. Some major illness may occur because as we know, the human body does not lack ill-health’ (int. 2).

‘other things that can kill women during childbirth in this locality are untreated malaria, hypertension and HIV. This is so because our women rarely attend the hospital when they have a health challenge’ (int. 26).
‘I believe that diseases like malaria, typhoid fever and tuberculosis, which kill other people can also kill a pregnant woman’ (CL.FG5.01).

As presented, members of the community also have an idea of health problems other than obstetric problems that are capable of causing death of the woman due to pregnancy and childbirth. Subsequently, I now present other factors from the perspective of the community which can lead to maternal mortality.

5.8.1.2 Ignorance about causes
Some of the participants expressed ignorance and helplessness about the cause of maternal deaths, for example, maternal death is seen as a dilemma.

‘I do not know what can lead to death of women during childbirth since some people would prefer hospital to TBA delivery because it is said to be safer, yet women still die in the hospital. It is a dilemma in this community and we would like to be enlightened on the causes of such deaths and how they can be prevented’ (MLMW.FG7.04).

‘we do not know why some of these deaths happen because some women could be attended by TBAs or in the hospital by experts and they still die. We would like some form of education or enlightenment on why women die because we probably may not have all the answers’ (OW.FG3.06).

‘it appears there is so much ignorance in our community about the factors that can cause the death of women in childbirth. We have reached our wits end and we do not know what to do to stop this problem. We would urge the Government to organise enlightenment programme to give us a good understanding of this problem’ (CL.FG5.02).

A participant believes that many of the women as well as the TBAs are ignorant about the health needs of the pregnant woman and this state could lead to maternal death.

‘ignorance of the expectant mothers about the nourishing foods to eat while pregnant, also ignorance about where to receive good antenatal care as well as ignorance of the TBA about the nature of care required by the woman during pregnancy and delivery. Some pregnant women are also ignorant about the complications that may arise. They assume that childbirth is very natural and that they would give birth easily’ (C.FG4.02).

Medical or health-related causes of maternal deaths from the perspectives of the participants had been presented as well as the expression of ignorance by some participants
about what could actually cause maternal deaths. Ignorance had been viewed by the people from two dimensions. First, is that they claim that no place of care and delivery guarantees total safety for the women during childbirth. The second dimension of ignorance is that some of the pregnant women and the TBAs lack adequate knowledge about what constitutes good care for the childbearing women. Following this, I now present the cultural dimension of the causes of maternal deaths as discussed by the people.

5.8.1.3 Sociocultural causes
Some participants expressed certain sociocultural beliefs as causes of maternal mortality. These were categorised as superstitious and religious beliefs.

Superstitious beliefs
Several superstitious beliefs were mentioned as underlying causes of the medical or health problems that result to maternal deaths. These include curses, marital infidelity and evil forces.

‘evil pronouncements on the expectant mother, for example, in anger a parent or another person may curse the pregnant woman by saying that she would not have the baby safely. This could be fulfilled and the woman dies in the process of childbirth’ (YW.FG.2.02).

The popular belief of marital infidelity as a cause of maternal deaths was shared by many of the participants. Although some said that it is the belief of the Ibibio and Annang ethnic groups of that community. This stance holds that a spirit kills the unfaithful wife during childbirth unless she confesses her infidelity. A sign of this problem, according to the participants, is manifested in prolonged and difficult labour.

‘marital infidelity in my tribe (Ibibio) can lead to maternal mortality. This problem is called ekpo nkaowo. Even if the woman goes to the hospital for delivery, she would still die…this problem results in unduly long labour…the spirit also twists the woman’s hands and legs before she dies’ (MLMW.FG7.06).

‘in our culture, the woman should confess marital infidelity to her husband and where she fails to do that, she would die during childbirth’ (MLMW.FG7.03).
On the other hand, a participant claims that the husband might actually permit the wife to sleep with another man, in which case, he takes the responsibility to appease the spirit that would have punished and eventually kill his wife.

‘Another side to marital infidelity is that, if the man consents to the wife sleeping out to bear children for him (because he is impotent), when the ekpo nkawo spirit attacks the woman, the husband will pour libation (this means, pouring out a strong alcoholic drink and simultaneously speaking to the unseen spirit to ward off the problem’ (MLMW.FG7.07).

It is widely believed that confession of marital infidelity is the only solution to rescue the woman from death. If after confession the problem persists, it is concluded that the woman was not truthful in her confessions and apparently would be allowed to die.

‘If the woman had slept with another man or other men, she has to confess this to the TBA and if her problem in labour still persists, it is likely that she has not mentioned all the men she had been involved with. In such situation, the TBA advises the woman to pack a handful of sand and scatter in the air and declare that the men she slept with are innumerable. After this she would be expected to deliver the baby. Some of the women die because they refuse to confess their infidelity’ (T.FG6.06).

A participant narrated her experience as a witness concerning the death of another woman suspected of marital infidelity.

‘I get frightened and feel sad…if the woman has been accused of infidelity. I can remember one woman who died a few years ago. We were in labour at the same time at the TBA’s place. She had a difficult labour and was persuaded for a long time by the TBA to make a confession about the men she had slept with during pregnancy, she mentioned six but refused to mention the seventh one who was her husband’s brother. Her condition became very bad that she was taken to the hospital, she had the baby but died eventually’ (Int.11).

It is also believed that evil pronouncement on the pregnant woman has the effect of causing maternal death. For example,

‘Maternal death, even though I do not have any experience, could be caused by marital infidelity and somebody would say you can never deliver. You have to pray hard for her to deliver in peace. At times the problem could be that since they could not get the mother, they could kill the baby. Like the one I had, the baby died in the
womb but God was by my side I removed the dead child, but the mother lived’ (T.FG6.03).

All the participants believed that there are evil or spiritual powers and most of them believed that these forces were responsible for the complications and death of women during pregnancy and delivery. The following are examples of what the participants said.

‘Witches and other evil forces are responsible for the death of women and not TBAs. This is because the TBAs are very experienced and they know the remedies to give when there is any problem’ (MLMW.FG7.06).

‘… it is due to evil forces, these are witches and the spirit that attacks women who have been involved in marital infidelity (ekpo nkawo)’ (Int.5).

‘This death could come from evil forces. The evil forces are from a bad family’ (Int.20).

‘Another thing that could kill women when they are pregnant or during delivery is evil force or witches, these evil forces cause the complications to happen’ (Int.8).

‘Maternal death is the handiwork of the evil one (wicked person) through magical charms or spells…the influence of this evil one starts manifesting as convulsion, loss of blood or any other complication and eventually, death ensues’ (int. 9).

The evil spiritual attack is believed to target women during pregnancy because that is when they are thought to be more easily accessed.

‘Attack by witches also kill women. A woman may not be attacked when she is not pregnant. But once she is expecting a baby, that is when she could be attacked because a pregnant woman is more vulnerable to evil forces than other people. So if the government can prevent that area equally, I think it should reduce maternal deaths’ (H.FG1.06).

A participant narrated a strange phenomenon which he saw and attributed this to the handiwork of evil forces.

‘maternal death can occur as a result of spiritual attack on the pregnant woman. Recently I saw an evidence of this in a woman who gave birth to a baby wrapped in a cellophane material. In another instance, the baby was born wrapped with thread. When evil powers are at work, contemporary medical and even traditional remedies fail. These forces are very powerful and only prayers can ward them off’ (C.FG4.02).
What sounds like a puzzle to contemporary health science was expressed by one of the participants who claimed that some people have actually confessed to have been responsible for the death of women in childbirth through diabolical means.

‘I believe that about 40% of maternal deaths in our community are due to spiritual wickedness. This is true because some of the perpetrators confess that they were responsible for some of such deaths through the use of diabolical means. This may sound strange because medical science does not believe this’ (C.FG4.04).

The woman’s parents in some situations are also believed to be responsible for her death if their traditional rights are not fulfilled. For example:

‘Maternal death can be caused by none fulfilment of the traditional obligation of payment of bride’s price by the husband to the woman’s parents. After about three successful deliveries, the woman’s parents in anger would kill her diabolically during the next delivery’ (H.FG1.06).

This view was also shared by H.FG1.01.

In summary, the influence of superstitious beliefs on maternal mortality has been presented. These beliefs hold that the complications that occur in pregnancy and childbirth are caused by various forms of evil spirits and that some of these evil spirits are manipulated by wicked persons. Claims have been made by some of the participants as having witnessed some of the manifestations of the evil forces. Religion which is another facet of the people’s beliefs is subsequently presented as shown in the data.

**Religious beliefs**

The participants also expressed the influence exerted on the gravity of maternal mortality by some religious practices. Some Churches discourage women from hospital delivery, which means that those women are deprived of the care of skilled birth attendants. This discouragement is backed up by prophecies and special ‘assignments’ for the women as a mark of security for safe delivery.

‘Some Churches out-rightly discourage women from delivering in the hospitals where they can have expert care. They do this by instructing the women to be delivered in the Church, whereas, the Pastors and the members do not have the
capacity to attend to such a responsibility. They convince the women through false prophesies that they would die if they deliver in the hospital. Secondly, they give a false sense of security to the women by giving them what they call assignment. This entails bathing the woman with what they call holy water into which some drops of olive oil and cassava and pineapple leaves infusion has been added. The bath is given by the Pastor at 12 midnight and with a special soap. This is believed to ward off evil attack from the pregnant woman. I am a Clergyman but I see this as a very wrong doctrine and quite misleading’ (C.FG.4.04).

‘Some Church leaders instruct the pregnant women against attending the hospital for ante natal care and delivery. They also discourage the women from taking medicines, whereas, God is the giver of the knowledge used in manufacturing medicines. The women do not even have faith strong enough to stay off medication without developing health problems. In such situations, the pregnant women would prefer to live in the Church and have their babies there. Government should stop such Church leaders from encouraging the women to have their babies in the Church’ (CL.FG5.02).

Furthermore, some Churches have been blamed for subjecting the pregnant women to stay off food through fasting, thus the women are deprived of essential nutrients.

‘Some Churches are to blame for a percentage of maternal deaths because they impose from seven to fourteen days fasting on pregnant women on the guise of providing safety for the women. How do we expect such pregnant women to be healthy enough to go through delivery safely? It is not possible and some of these women die during delivery’ (C.FG4.05).

During observation, a TBA confirmed that she also works for a Church which practices fasting for pregnant women.

‘In the Church where I work, the prayer group and I pray and fast with the pregnant women every Thursday to ward off evil spirits’ (TBA 2).

‘certainly, it (fasting) is a very bad practice to involve pregnant women in fasting’ (C.FG4.06).

A participant said that some women opt to undergo fasting as imposed by the Church because they are ignorant of the implication of such practice.

‘Through ignorance, a woman would opt to undergo dry fasting from 6am to 6pm imposed by the Church instead of going to the hospital. At the end of the fasting period, she becomes very weak’ (H.FG1.02).
On the contrary, a participant upheld that only the Church has solution to maternal deaths. ‘My opinion about maternal death is that, women should go to Church and pray to God for help. This will prevent maternal death. Hospital does not have the solution. The pregnant woman should be in Church always’ (MLMW.FG7.02).

Another female participant also said that maternal deaths can be prevented through prayers.

‘I think if we pray, we can stop maternal deaths’ (OW.FG3.01).

A skilled birth attendant expresses awareness about the superstitious beliefs in the community and that these give leverage to some Churches to work with some TBAs against the hospital.

‘The community belief in witchcraft attacking pregnant women is a big problem. As a result of this, some TBAs work with some Churches to give false prophecies and discourage women from accepting caesarean section. They inject fear into the women that they would certainly die if they undergo surgery for childbirth’ (DMW.FG8.05).

A TBA who works for a Church expressed that she depends on prophecies for her job.

‘I do not carry out any examination in the antenatal period but I depend on what is prophesied, for example, giving the woman olive oil to drink to induce some purgative effect to cleanse them of impurity. A woman may have this for about three times throughout pregnancy and some may not be given anything’ (TBA 2).

A range of religious beliefs and practices as they impact on maternal mortality from the perspectives of the participants has been presented. I now turn to highlight certain social factors which also influence maternal deaths in this community.

5.8.1.4 Other social factors related to maternal deaths
The participants mentioned several social factors as contributory to maternal deaths. These include negative peer group influence, seeking marital harmony through many children, poor parent/daughter relationship and nutritional taboos.
Negative peer group influence

Peers have been indicted by the participants as a strong influence which encourage particularly the teenagers to abort pregnancies without the knowledge of their parents. This practice as claimed by the participants, could lead to death of the teenage girl.

‘One of the commonest causes of death among young pregnant girls is abortion. The girl may get pregnant while still in school. This is a very devastating experience because she tries to hide this away from her parents and fellow students. Some of her close friends may advise her on abortion which is usually done by unqualified persons. Unfortunately, the girl may die in the process’ (YW.FG2.06).

‘Another cause of death among our teenage mothers is that some of them, through the influence of their friends, unknown to their parents, attempt abortion. This can result in profuse bleeding and death before any help could be given’ (MLMW.FG7.06).

Further to peer pressure which leads to unsafe abortion among teenagers, the older women also are said to be under a different kind of pressure to keep their marriages. This in turn makes the latter group to subject themselves to many pregnancies which is quite risky and could be a predisposing factor to maternal death.

Seeking marital security by having many children

One of the sources of pressure that the woman faces in marriage is the quest for a child with a particular sex.

‘Seeking a particular sex, especially male, the woman in the attempt to secure her marriage, may end up having more than five children not knowing that too many pregnancies weaken the womb and cause complications for the woman…some husbands demand that the wives bear many children’ (MLMW.FG7.07).

Another problem that was highlighted was competition among co-wives trying to have more children than others. This meant many pregnancies.

‘… Problem is not all the time from the husbands preferring male children, in polygamous homes, the wives may want to be competitive about the number of children each has and so a woman may end up having up to 14 or 15 children. When the pregnancies are so many, the chances of death due to childbirth are
increased. Women should be educated on what can cause death during childbirth’ (MLMW.FG7.07).

Having many children appeared to be fashionable in the community because children are seen as gift from God.

‘Some women have too many children. I have seen a woman who had twenty-two children. Our people do not believe in birth control methods because children are seen as gift from God’ (C.FG4.04).

This perspective was corroborated by some other participants who claimed that women had many children because the birth of each child attracts a present from the husband.

‘...due to ignorance, some women give birth to many children because they are looking for a child of a particular sex and also because they desire new clothes (wrappers) from their husbands’ (C.FG4.05).

This view was also shared by participant C.FG4.06.

Having many children and also a child with a particular sex, preferably a son, has been identified as a social issue that could cause maternal death in this community. In addition to that, poor relationship between daughters and their parents in the event of teenage pregnancy, was also identified as a potential cause of maternal death as presented in the next section.

**Poor parent/daughter relationship**

It appears to be a common practice for parents to eject their pregnant unmarried daughter from their home due to anger about the pregnancy.

‘The practice of some parents ejecting their pregnant teenage daughter from home is counter-productive because this exposes the girl to people who may want to help her out through unsafe abortion. In this process the girl may lose her life’ (YW.FG2.05).

In addition to other socio-cultural factors, nutritional taboos were also discussed as leading to maternal deaths.

### 5.8.1.5 Nutritional taboos

A skilled birth attendant highlighted that nutritional taboo as a problem among pregnant women.
‘The type of food they have to eat also matters...like vegetables... if they can eat those it will help them. Also they do not eat some of the foods that are widely available because they are forbidden, for example white snail, we see these crawling freely around but the women do not eat them...they rather prefer crayfish, fish and other animal protein foods and these are very expensive...they cannot afford these because they complain of poverty’ (DMW.FG8.04).

It does appear that TBAs also perpetuate food taboos as a result of superstitious belief, as an example, the comment below illustrates that.

‘Heavy loss of blood after delivery could be caused by what the pregnant woman eats. Things like Bournvita (a brand of chocolate drink) and milk...if things like that are too much it can make the child too big. I advise pregnant women to avoid these’ (T.FG6.02).

Similarly, during observation, another TBA said that she advises the pregnant women not to drink milk.

‘I discourage pregnant women from drinking milk … so they would not have big babies’ (TBA3).

Some other foods forbidden during pregnancy were discussed by some participants.

‘There are some foods that when eaten by a pregnant woman, will make the baby too big, for example ogi (corn porridge) and Bournvita (a brand of chocolate) and beans, these are forbidden in pregnancy’ (OW.FG3.01).

‘… beans, Bournvita can cause a baby to be too big’ (OW.FG3.01).

The perspectives of the participants about socio-cultural issues that could predispose to maternal deaths have been presented. These include negative peer group influence, having children in the attempt to secure one’s marriage and ejection of pregnant daughter from home.

5.8.1.6 Poverty

Poverty was a common complaint among the people as an underlying factor to maternal deaths. This was expressed as lack of money.

Lack of money

The participants also expressed lack of money as a related factor to maternal deaths. As a result of this, they claim inability to afford hospital care.
‘Many of our women are poor and so cannot afford hospital care which is better than care provided by TBAs’ (C.FG4.03).

‘I appreciate that hospital care is better for our women but we lack money for that. For example, the Referral Hospital charges about N5,000 to N6,000 (£21 to £25) excluding cost of medication’ (H.FG1.05).

The participants claimed that the TBAs services were more affordable with a flexible payment plan.

‘More women prefer the TBAs because their fees are flexible. If the TBA is an acquaintance, the fee may be as low as about N500 (£2) with a piece of soap and a few other items like a bottle of olive oil, four litres of Kerosene or less and a bottle of local gin which costs about N300 (£1.25). In all, one may not spend more than N2,000 (£8)’ (CL.FG5.02).

To the contrary, some of the husbands argue that some TBAs are becoming expensive.

‘The trend now is that some TBAs charge higher fees for a male child, about N7,000 to N10,000 (£28 to £40), than for a female child, about N6,000 (£24)’ (H.FG1.02).

The contemporary health practitioners (skilled birth attendants) also corroborated that lack of money is a contributory factor to maternal mortality.

‘The major problems we observe in this locality include poverty and ignorance. These are depriving the women of skilled birth attendance. Some of the women are single mothers, also mostly teenagers and school drop-outs, they do not have a means of livelihood and so cannot feed well during pregnancy. They cannot afford the hospital bills which ironically, is lower than what some TBAs charge them. The cost of antenatal care in this Hospital is N1,500 (£6) and the bill for delivery including bed fees is N2,000 (£8). This is lower than the TBAs’ fees, yet most of them are attended by the TBAs and are only brought here when they are almost dying’ (DMW.FG8.05).

This notion was shared by all the participants in the group.

Having presented data on the causes of maternal mortality from the perspectives of the participants, I now follow up with the next theme which consists of results on the birthing practices.
5.9.1.7 Birthing practices

The categories here include age at first pregnancy, attendance at pregnancy and delivery, care of normal bloody vaginal bleeding, help-seeking in emergencies and depraving control of pregnancy and delivery.

Age at first pregnancy

The participants’ perspectives on age at first pregnancy showed varied opinions which range from a very young age of 12 years to the mid-twenties.

‘In my opinion, at age 13 years, a girl is matured enough to get pregnant. After all I was 13 years old when I had my first pregnancy’ (Int. 8).

‘I became pregnant when I was 12 years old and I had the baby, so I feel that at age 12, a girl is old enough to start having babies. Children are gifts from God and He gives these to people at any age’ (Int. 17).

There were contrary opinions as some participants argued that a girl needed to be 15 years or more before getting pregnant for the first time.

‘A girl should be 15 years old before she gets pregnant for the first time. If she is younger than that, there could be a problem because it is not yet time by nature for her to start having babies. She may not be able to deliver normally because her waist is not large enough’ (Int. 3).

‘I think that at times when women die due to child birth, it’s because they were too young. They were not supposed to start having babies at that age, unfortunately for them, they get pregnant and die during delivery. I think that a girl of 18 to 20 years is old enough to start having children. In this community, it is common to see a girl of 13 to 14 years being pregnant; she is too small to get pregnant. She may not deliver her baby successfully’ (H.FG1.03).

There were contrary opinions about age at first pregnancy. The women mostly hold that a girl could get pregnant from the age of 12 years, while the men’s opinion was that the right age for first pregnancy should be from 15 years.
Attendance in pregnancy and delivery
The participants attend a variety of places for care during pregnancy and delivery. These include both the traditional and contemporary health facilities. Most of the women interviewed, 18 out of 29, were attended by TBAs.

‘I had all my seven children at the TBAs’ (Int.3).

The view of the skilled birth attendants is that the members of the community do not attach importance to hospital delivery.

‘The women do not attach importance to attending health facilities like Health Centres and Hospitals where there are skilled birth attendants. They are mostly attended to by TBAs. Some of the few women who come to the hospital for delivery, prefer to lie on the floor to have their babies and they feel very uncomfortable when midwives persuade them to be delivered on the couch’ (DMW.FG8.02).

Data from observation showed that delivering on the floor or ground is a common practice by the TBAs (Appendices 24 and 27).

‘My delivery room is temporary because I have plans to make it better. Meanwhile, I use this lobby for delivery. Occasionally, when the weather is dry, I take delivery in the bathroom at the back of the house. In either of the places, I spread a waterproof material on the floor for the women to lie to have their babies. In some cases, I place a flat sheet of wood in a slanting position for the women to be in a semi sitting-up position for delivery’ (TBA 1).

‘When the weather is dry, I prefer to deliver the women in the open space behind my house. I spread a water proof mat on the ground for that purpose but in the wet season, I do it in one of the rooms in my house’ (TBA 4).

‘I spread waterproof material on the floor of my living room to conduct delivery’ (TBA 2)

The women are said to only attend the hospital for other reason except for delivery.

‘Some of the pregnant women only attend antenatal clinics to receive immunisation, they go to the TBAs for delivery’ (DMW.FG8.06).
The TBAs appear to perpetrate the practice of the women going to the hospital for immunisation only to come back to the TBAs for delivery.

‘I strongly advise them to register in the hospital so they could be given the routine immunisation for pregnant women after which they should come back to me for enema’ (TBA 4).

‘I instruct my clients… also to attend the hospital for immunisation’ (TBA3).

During observation, another midwife narrated the problems they experience with some of the women who attend the ANC at the referral hospital.

‘…not all of them return to the hospital to deliver. There was a typical one who had the diagnosis of twin pregnancy, and went to TBA for delivery. She was brought back to the hospital with a retained second twin after 24 hours of delivering the first twin. She refused blood transfusion and the relations took her home against medical advice. Later, news of her death got to the hospital’ (MW, Ref. Hospital).

On the contrary, the community members expressed lack of doctors and midwives working in their community as reason to patronise the TBAs.

‘A contributory cause of maternal death in our community is that our women prefer to be attended by TBAs because we do not have doctors and midwives in our Health Centre. The TBAs are easily accessible though limited in their knowledge’ (CL.FG5.02).

Another reason for preference of TBA is that the women are said to have confidence in the TBAs to the extent that they relocate from their homes to live with the TBAs until they have their babies.

‘Some women prefer going to live with the traditional birth attendant towards the end of pregnancy until it is time for delivery. Nobody can stop them because they have so much confidence in the TBAs’ (H.FG1.02).

One of the women narrated how she narrowly escaped death from the hands of unskilled birth attendants and that experience has informed her subsequent decision on where to have her babies.

‘The doctor had told me that I have a narrow pelvis and so would not be able to have a vaginal delivery. I was scared of having a caesarean section, so I had to go
to the Health Centre, where I was assured by the Health worker that vaginal delivery was possible for me. When labour commenced, I quickly went to the Health Centre and was there for a long time without progress. I almost died but for the grace of God. I was rushed the Hospital where I had a caesarean section. Following that emergency, I usually have my babies in the hospital’ (Int. 13).

A participant expressed that she gives birth to her babies in the Church.  

‘I usually have my babies in the Church attended to by the Pastor’s wife’ (Int.3).

Quacks, that is, unqualified persons who were neither midwives nor TBAs were said to have intruded into the services of childbirth.

‘Quacks have started attending to women during delivery in this community. Just before this project started, a young girl who is a Patent medicine dealer experimented on delivering a teenager friend of hers without the knowledge and consent of the girl’s relations. The placenta was trapped and before any help could come, the teenager had died’ (CL.FG4.04).

The places of delivery of women in this community included mainly the TBAs’ and the Church. The hospital is not a popular choice by the people and lately, another category of persons has been found to be involved in attending to the woman in childbirth.

Observation showed that herbal enemas characterise the antenatal care by TBAs. These are said to serve as preventive measures against heavy bleeding following delivery (postpartum haemorrhage) and also ward off the attacks by evil spirits (Appendix 25).

‘Routinely, I give the women certain herbs for enema during pregnancy to prevent haemorrhage after delivery. Also in labour, I administer a special enema made of a concoction of herbs and ‘ndom’ (type of clay) to the woman to prevent heavy bleeding after delivery’ (TBA 3).

‘Two types of enema are given, the first (mbit mbit ukebe) is given to last for five days every two weeks to prevent abortion or heavy bleeding after delivery, then, from the seventh month of pregnancy, the second type (ukebe mkpokobi) is given to protect the woman from evil powers. These are all herbal enemas’ (TBA 4).

It was also found during observation, that the TBAs do not readily refer women with complications to the hospital. Though some of them claim that they do not have need to
refer the women, one also stated that she first of all tries out her remedies and only refers when such remedies fail.

‘I have never had need to refer any woman to the hospital except for once when another TBA referred a woman who had been in labour for two days to me. I tried everything I could but failed, so I referred her to the hospital but did not go with her for fear that the hospital staff would ask me to pay her bill’ (TBA 3).

‘I rarely have need to refer women to the hospital. I once encountered a woman who bled late in pregnancy, I gave her a special enema and the bleeding did not cease so I asked her husband to take her to the hospital’ (TBA 3).

A TBA claimed that he does not refer any woman to the hospital, instead women with complications from the hospital come to him. He claimed that he had delivered women who had previous caesarean section as well as those with multiple pregnancies and warns his clients not to attend the hospital.

‘I combine prayers with herbal treatment and delivery practice and because of these, no woman has died in my practice. I do not refer any woman to the hospital, instead of that, women with complications from the hospital come to me for treatment and they recover. Problems in pregnancy and childbirth are caused by evil spirits and this why I emphasise prayers. Helping women in pregnancy and childbirth is a special gift to me from God … I have delivered women with twins and triplets and even women who have had previous caesarean sections for up to four times. However, I encourage my clients to be definite about their choice, for example, if they decide on hospital care, they should not come to me and if they want my attention, they should not go to the hospital’ (TBA 5).

**Care of normal vaginal bleeding post delivery**

The women of childbearing age commented on their practice regarding the post-delivery vaginal bleeding. Many of them are still using the traditional pieces of old cloths while a few use sanitary or perineal pads.

‘I use pieces of old cloths as pad; sometimes I also use sanitary pads when I can afford it. When I use pieces of cloth, I wash with soap and dry them in the line behind the house so that I can reuse them’ (Int. 1).

‘When I was having my babies, I used pieces of cloth as perineal pads because I did not know anything about sanitary pads sold in the shops. I took care of the pieces by washing and drying them close to my bed in the room or outside at the back of the house or on the roof top’ (Int.2).
Relatively fewer women use the proper sanitary pad.

**Help-seeking in emergencies**

The following describe the actions taken by the participants in the event of sudden health problems in pregnancy and delivery. All the 29 women of childbearing age interviewed opted for the hospital in emergencies.

‘In emergency, the woman should go to the hospital so that a doctor can examine her to know the position of the baby in the womb’ (Int. 20).

Alternative plan were also discussed where it is thought that the woman might not afford the bills of hospital care. Other places to attend included the TBAs’ as well the Patent medicine dealer’s.

‘A woman who has problems in pregnancy should go to the hospital for help. If there is need for a test, this would be done and treatment given to her. Those who are not financially capable should go to the TBA. Alternatively, they could consult a Patent medicine dealer in the community who would prescribe and sell some medicine to them’ (Int. 3).

On the other hand, the observation of the skilled birth attendants is that their services are only sought when the women have complications.

‘Most of the expectant mothers only attend the hospital when complications occur’ (DMW.FG8.01).

Generally, the practice of the childbearing women is to seek help from the skilled birth attendants only when they experience complications. Even at that, availability of funds was said to be the deciding factor as those who lack money would still go to the TBA for help and some would patronise the local patent medicine dealer.

**Domineering control of childbirth**

Women exclusively are the ones who get pregnant but in the study setting, most of them do not participate in decision-making concerning their care. Significant members of the family take decisions that are binding on the women. Below are responses from some of the women about such decisions.
‘My husband decides where I should have my babies. He tells me to go to the TBA’ (Int. 1).

‘My husband decides where I have my babies’ (Int. 13).

‘My sister’s husband told me to go to the TBA although my husband was did not support the idea. However, I had to obey my sister’s husband by going to the TBA for care’ (Int.5).

In a rare occasion, the decision about place of health care was decided by both the husband and wife.

‘It is always an agreement between my husband and I that I should go to the TBA. My husband does not like the hospital’ (Int. 2).

The clergy in some Churches make the decision for the woman as to where to have her baby as stated below.

‘The pastor of my Church decides that I have my babies in the Church. The Pastor’s wife attends to me during delivery’ (Int.3)

Mothers are also involved in the process such decision-making for their pregnant daughter though married.

‘I have my babies with the TBAs as decided by my mother’ (Int. 7).

‘My mother and husband usually decide where I should have my babies’ (Int. 10).

In spite of the control by others in the majority of cases, a few women expressed that they take decision by themselves about where to have their babies.

‘I take the decision about where to be delivered of my babies. It is either in the Church or at the TBAs though my husband prefers the Hospital’ (Int. 12).

‘Nobody tells me where to have my babies. I go alone to the TBA whenever labour starts’ (Int. 8).

Most pregnant women are not involved in decision-making concerning their health care. Such decisions are imposed on them by their husbands and others.
5.8.1.8 Physical environmental factors

Some factors in the physical environment were found to be contributory to maternal deaths in the study setting. These are lack of adequate means of transportation and issues with both contemporary and traditional health care facilities.

Inadequate transportation system

The participants expressed concern about the poor state of their transportation system and how this has contributed to maternal death in the past.

‘A woman in this community died while trying to get a means to transport her to the hospital. She was delivered by a TBA and thereafter became very weak, the family spent about two hours looking for a means to transport her to the hospital for help, she died in the process and could not be taken to the hospital. Government should please come to our aid’ (MLMW.FG7.09).

The transportation problem is said to be worse at night because vehicles become more scarce, which makes transportation difficult in emergencies.

‘We lack the means of transporting pregnant women to the health facility especially in emergency. The situation is worse at night. In this community, from about 8:00 pm, there is scarcely any public transport plying our roads. Some of our women have died in the process of waiting for a vehicle to transport them to the hospital for help’ (C.FG4.01).

These statements from the participants suggest that some maternal deaths could probably have been averted if there were adequate means of transportation.

Health facilities issues

As part of the discussion on maternal mortality, some health facilities issues were identified. These included the state of the health facilities and staff problems.

Contemporary health facilities

The participants raised several issues about the contemporary health facility in the community. These included dissatisfaction about its location, non-functionality, unhelpful protocols and poor attitudes of the staff.
‘The location of the Health Centre in this community discourages its use. It is too far from the people and located on a lonely road’ (C.FG4.05 and C.FG4.06).

Unavailability of health staff at the Health Centre for twenty four hours a day, has made the members of the community to lose confidence in the facility.

‘The residential quarters for the midwives and other health staff at the Health Centre are so dilapidated and have been abandoned for many years. The members of staff commute from long distances to work and are only available in the morning shift (8:00am - 4:00pm), thus making their services unavailable when needed in the evenings and nights. The community has lost confidence in the Health Centre because of persistent unavailability of staff’ (C.FG4.05).

‘Since members of staff of the Health Centre are not resident in the community and are only available during the day, there is no one to attend to our pregnant women in emergencies after close of work’ (H.FG1.02).

The people also complained about the state of disrepair of the Health Centre and its non-functionality. The only activity that takes place there, is immunisation of children.

‘This Health Centre has not been operational for over five years now because of its state of disrepair. The only activity that staff is involved with is immunisation’ (H.FG1.05).

‘The Health Centre had been in a bad state of repair, the Government renovated it but has not repaired the staff quarters’ (CL.FG5.01).

Another problem presented about the Health Centre is that, even when staff is available, there are no medicines to be given to the patients. A list of medicines is rather given for the medicines to be bought from outside the Health Centre.

‘The Health Centre lacks medicines. Prescriptions are written for the women to buy medicines from outside. Medicines that are not available in the local patent medicine shops are bought from the nearest city which is about 40 minutes’ drive away’ (C.FG4.05).

The participants also complained about the repulsive attitude of the health staff as a contributory factor to the non-attendance of the Health Centre.
‘The health staff lack empathy, women complain that they shout at them and this also discourages the women from attending the health Centre. Sometimes the staff embark on strike action and so are not available’ (C.FG4.02).

‘What I want to say is that the way most nurses (midwives) approach women, especially during labour is not good. Emm there is a way you talk to the woman and because of the embarrassment, she would say ‘I would prefer to deliver at the TBAs’. The women would not be encouraged to go to the Health Centre. There should be an orientation for nurses (midwives) to approach the women in a manner that would encourage them to use the Health Centre’ (HFG1.06).

In addition to the complaints by the community members, the Community health extension worker at the health centre expressed her frustrations about the health facility. This is supported by the images in Appendices 17, 18 and 19).

‘Residential quarters for the staff of this Health Centre are terribly dilapidated with broken windows and leaking roof and so, no staff can live there. The Health Centre as you can see, is well built but is surrounded by thick bush and far away from where the people live. One has to come through a lonely bushy road to get to this place.

There are no equipment for delivery in case any woman comes in labour. We do not even have furniture except these three badly made benches for the patients. I feel very frustrated working here. I have been here for about three years and no pregnant woman has come to this clinic. Several appeals to the authorities to equip the Centre have failed so I got a few personal forceps to use in case there would be need. There is no sterilizer. If there is need, instruments are boiled using a borrowed sauce pan and stove. We have no fixed clinic days for antenatal care but we appeal to the women to come at will, yet they do not come here. The last time a woman was delivered here was in 1995. This health centre is grossly under-utilised. We are more involved with immunisation of children 0-5years old. This, we do by going from house to house on scheduled immunisation days’ (CHW).

Certain protocols in the hospital, particularly at the referral hospital are seen as not helpful by the people, for example, the insistence on buying of card and payment of some deposit before one is attended to by the health professionals.

‘If you go to the hospital, you will first be asked to buy card and after that there might be no money to buy the prescribed medicines...hospital procedures like buying cards before you could be seen and paying for medicines discourages the people because they are poor’ (CL.FG5.02).

‘The protocols in the referral hospital are too many and not helpful. The hospital insists on payment of some deposit before attention is given to the woman; while waiting for all these to be done, the woman’s condition gets worse. Sometimes, relations have to get back home to source for money either through borrowing or
some other means and probably, before the deposit is raised, the woman probably dies’ (C.FG4.04).

Another participant corroborated the gravity of the issue of insistence on payment before service in the contemporary health facilities.

‘If you attend the hospital when you do not have money, you will surely die because no one will attend to you without payment of the required fees’ (C.FG4.02).

It was confirmed during observation at the referral hospital that the pregnant woman has to make some payment for her registration for antenatal care. This is the hospital policy.

‘Women sent to the Hospital Account section to make payment of N1,500.00 (£6.00) which covers both ANC (N500.00 (£2.00)) and Laboratory tests (N1,000.00 (£4.00))…subsequently, during each visit to the antenatal clinic, the woman pays N100.00 (4pence)’ (MW, Ref. hospital).

The issues that discourage the utilisation of the contemporary health facilities were presented from the perspectives of the participants. These included poor location, unavailability of staff and services, repulsive attitude of staff as well as unhelpful protocols even at the referral hospital. Subsequently, I now discuss issues about the traditional health facilities.

**Traditional health facilities**

Similarly, as for the contemporary health facilities, some concerns were raised about the traditional health facilities, although these are seen as more readily accessible to them. The major issue against the TBAs is poor hygiene. Some of the TBAs are said to attend to the women under very insanitary conditions, thus exposing them to the risk of infection.

‘I visited a member of my Church after delivery at a TBA’s place, I was shocked at the poor state of hygiene and no doubt it was not surprising that the baby died of tetanus few days later’ (C.FG4.03).

‘Another thing is infection that kills both mother and babies especially when they go to the TBAs... In the area of hygiene, they are very poor for example...Another
thing is the place where delivery is conducted is very dirty…Izal (a brand of disinfectant) is a taboo. They cannot also smoothen the floor with disinfectants…things like that can bring infection to either the child or the mother and in the process they may die’ (C.FG4.04).

‘Dirty delivery environment of some TBAs can expose the women to germs…they should be trained on what to do to make their practice safe’ (MLMW.FG7.07).

On the other hand, some positive aspects of the TBAs were acknowledged by the people. For example, they are always available and their fees are flexible.

‘The TBAs are always available and very helpful to our women during…Eh, it’s all because they (TBAs) are available to assist in conducting deliveries now… So what I think is…let them be given special training and be monitored from time to time so that they will know what they are doing’ (CL.FG4.01).

Observation data showed that the TBAs were readily available to the women.

‘I do not have specific clinic days but attend to the pregnant women as they come’ (TBA 1).

‘My house is always open for pregnant women and those in labour. Sometimes I am also called to deliver women in their houses’ (TBA 2).

Some of the TBAs attend to the women at specific times every day.

‘I attend to the women every day from 6:00am to 9:00am’ (TBA 3).

‘I attend to pregnant women every Monday and Tuesday between 6 and 8:00am’ (TBA 4).

The services of the TBAs are thought to be cheaper and the mode of payment is flexible.

‘What I know is that some of the TBAs could be somebody that knows the pregnant woman and could collect about N500 (£2) including soap and other things. She will then gather herbs that she feels will be good for the woman, she won’t collect more (money) than that’ (CL.FG4.02).

‘I am not fussy about fees, my clients pay about N1,000 (£4.20) or what they can afford but they have to bring a bar of soap for washing and kerosene for lighting’ (TBA 1).

Similarly, the TBA who works for a Church also confirmed low fees although there is an additional request for the client’s husband to provide drinks for some members of the Church.
‘My fees are usually decided through prophesy, it ranges between N300 to N400 (£1.25 to £1.67) but the husbands can also provide some drinks to the prayer group of about twenty members in the church’.

On the contrary, some TBAs are quite definite about getting their fee both in cash and kind.

‘My fee is N2,000 (£8.40) with other items like Kerosene and soap or N3,500 (£14.60) which includes all other items they would have bought’ (TBA 3).

‘My fee is N3,500 (£14.60) but most times the clients do not have that amount to pay, they may pay less and also give me some items like soap, kerosene and a bottle of local gin (ufofop or kai kai)’ (TBA 4).

A TBA said that he does not charge fees but rather gets a freewill offering from the women.

‘I do not charge fees but accept freewill offering from my clients’ (TBA 5).

Although the TBAs’ places of delivery were generally dirty, they were found to be available to attend to the maternity needs of the women.

There was no midwife deployed to work at the Health Centre but later in the course of the study, one was sent, and by October, 2010, four more were sent and they could not assume duties until I left the community at the end of April, 2010, due to lack of accommodation. From the observation, the TBAs were still functional while the maternal health service at the Health Centre had ceased for several years. Even when staff at the Health Centre commented that she had appealed to the women in the past to start attending the facility for care, there was no response. It is incredible that the women preferred to be attended in the shanty structures of the TBA to a relatively modern structure of the Health Centre. Following the presentation of data about the health facilities, the finding about attitude of the people toward maternal death is discussed subsequently.

5.8.1.9 Attitude towards maternal deaths

The participants react in various ways towards maternal death. To some, it is a situation of deepening helplessness and intense fear, while to others, it is nemesis or deserved punishment.
‘Maternal mortality is a very big problem that is always throwing us into a state of sadness and helplessness because it is beyond our ability as a community to solve this problem. We do not know what to do because our women cannot stop getting pregnant. The government may need to upgrade our Health Centre to a full-fledged hospital so that better services could be rendered to our women. We strongly desire a solution’ (CL.FG5.01).

The participants mostly would like maternal mortality to be prevented.

‘We acknowledge that maternal death is a very serious problem and we are quite willing to help prevent it through prayers and financial assistance’ (C.FG4.01).

‘As professionals, we acknowledge the magnitude of this problem and are willing to contribute to its solution. We strongly desire a solution’ (DMW.FG8.01).

‘I am afraid of the high rate of maternal deaths and I desire that it should prevented from happening’ (MLMW.FG7.06).

To the husbands, losing a wife is a nightmare and so desires that women should be prevented from death due to childbirth.

‘Losing a wife to childbirth is a nightmare and by all means, this should be prevented’ (all the participants).

To the women of childbearing age, the death of a woman due to childbirth is very scary.

‘The news of a woman’s death due to childbirth makes me scared of desiring to be pregnant’ (Int. 4).

‘I get very scared and wonder why a woman should die in childbirth when babies are gifts from God’ (Int. 20).

Maternal death is an event that rouses suspicion and pointing accusing fingers at who may have killed the woman through diabolical means.

‘Generally, people are very sad and may blame the death on a relation of the deceased or an alleged evil person in the neighbourhood for killing the woman through a diabolical means’ (Int. 19).

While most people would be in sympathy, some other people would have a contrary opinion.
‘Some people see the situation of maternal death as nemesis catching up with the woman because of her marital infidelity and so they are not in sympathy of the situation’ (Int. 11).

‘Though it is a frightening situation, this may be judgement for a disrespectful or promiscuous woman’ (Int. 2).

Generally, the death of a woman due to childbirth is a frightening situation to most people in the community and they desire that it should be prevented. Contrarily, some people believe that such death is a well-deserved judgment.

5.8.2 Community perspectives on the prevention of maternal deaths
Since this is an action research, we asked the participants for their views on what could be done about maternal mortality. Some ideas were presented by the participants as preventive measures for maternal deaths. These included prayers, moral instruction to the teenagers, attitudinal change by the staff of the Health Centre, community education, TBA training, functional Health Centre and free health care.

A participant suggested that the government should convert the existing Health Centre to a hospital. This implies adding extra functions to the Health Centre.

‘Eh, this problem is a very big one, it is even bigger than us…how we can solve this problem is for the government to convert the Health Centre into a hospital… so that anytime a woman has complications, the health facility could be reached fast’ (CL.FG4.01).

Suggestions were also made that the government should either reduce the cost of health care or provide free health care particularly for the women.

‘But if the government can reduce the money in such a way that even the poor can afford it will be better. Or better still, if treatments could be given free to pregnant women, I don’t think they will like to go to the traditional birth attendants to buy hot drinks for them’ (CL.FG4.02).

‘…eh, in this country, there should be free medical care, in fact there should be free medical care. As they are thinking about free education in some parts of the Nation, they should think about free medical treatment so that drugs could be free… Before you talk about free medical treatments the hospitals should be well equipped’ (C.FG4.04).

The government is also called upon to make the Health Centre functional.
‘...government should make the Health Centre functional by equipping it with both human and material resources’ (H.FG1.02)

‘government should equip the Health Centre with doctors, midwives and medicines’ (MLMW.FG7.07).

To encourage the women to utilise the Health Centre so they could benefit from the care of skilled birth attendants, the participants called for the midwife and other health workers to change their negative attitude towards the pregnant women.

‘an orientation should be given to the health workers in the Health Centre to stop being harsh to the women’ (H.FG1.06).

A participant’s opinion is that maternal deaths should be prevented by taking the woman with complication to any of these three places: Church hospital or the patent medicine shop.

‘If a woman has problem that could lead to her death, she has to be taken to the church, hospital or a chemist shop (Patent medicine shop) … Since we do not have sufficient money, we receive treatment at home from the traditional birth attendants or do self-medication by buying and swallowing medicines from the local Chemist shops’ (Int.1).

Some participants opined that prayers can prevent maternal mortality.

‘the woman should attend the Church regularly to pray to have her baby…’ (MLMW.FG7.01).

‘…prayer should be made to God to protect pregnant women from every evil’ (Int. 29).

TBA training was also suggested as a means of preventing maternal mortality.

‘s since the use of TBAs is necessary, due to the non-functional Health Centre, government should train them … to make them more helpful’ (H.FG1.05).

‘government should train the TBAs…monitor them and any that does not comply with timely referrals …should have her kit and certificate ceased and be also be barred from practice’ (CL.FG5.02).

Furthermore, suggestions were made to create an interactive forum for the TBAs and midwife.
‘it will be helpful to create an interactive relationship between the midwife and the TBAs, this will facilitate learning by the TBAs’ (CL.FG5.04).

‘midwives should be visiting the TBAs to monitor their practice and encourage them to make referrals’ (H.FG1.05).

Another participant called for collaboration among the clergy, midwives, doctors and the TBAs.

‘TBAs, doctors, midwives and the clergy should work in collaboration to prevent our women from dying in childbirth’ (C.FG4.03).

In addition to the suggested preventive measures against maternal deaths, some participants also called for community education on maternal deaths.

‘awareness should be created in the community on the causes and prevention of death due to childbearing’ (C.FG4.06).

‘we should be educated on the causes and prevention of maternal deaths, especially the causes of bleeding and convulsion’ (YW.FG2.02).

The suggestion was concurred by YW.FG2.05.

‘…education should be given to mothers and daughters…husbands and young boys about what can kill women in childbirth so that precaution can be taken’ (OW.FG3.05).

This view was supported by other participants in the group.

Many of the participants advocated for moral instruction for the teenagers to prevent teenage pregnancy, for example:

‘…our young girls should be taught good morals and to obey the word of God in order to prevent teenage pregnancy’ (MLMW.FG7.05).

Also, a participant suggested that the government should empower women financially so that they can cope with the demands of pregnancy.

‘government should empower women of childbearing age financially through skills acquisition and loans for trading. This will enable the women to cope financially the needs of pregnancy, for example buying food and paying health care bills’ (YW.FG2.05).

Summary of the findings indicate that the members of the community had idea of some of the complications of pregnancy and childbirth that could result in death but the problem was that they attributed these complications and death to evil powers. This strong
superstitious belief has been observed to influence their birthing practices and help-seeking in emergency situations. Both contemporary and traditional health facilities’ issues were also identified as having a negative influence on maternal health. Generally, the attitude of members of the community towards maternal death was expressed as intense fear and helplessness with a strong desire for solution, although a few persons consider maternal death as well deserved judgment for disrespectful women and unfaithful wives.

These findings were organised and fed back to the action research group for deliberation on what the subsequent action would be.

5.9 The action research group
The action research group still remained intact throughout Phase 1, this was made possible through regular monthly and sometimes fortnightly meetings scheduled collaboratively to appraise the activities of the group. Information for meetings were usually disseminated by the women leader and days of meetings were flexible. Minutes of meetings were routinely and voluntarily taken by the Clergyman or the representative of the Director of Nursing and Midwifery services in the State who were members of the group. Minutes of the previous meeting were usually reviewed at the beginning of a subsequent meeting. This process allowed for input by every action research group member. This approach as opposed to typing and circulating the minutes before the day of meeting was adopted by the group because of relatively more ease in logistics. Besides, our option also ensured that the action research group members who were not literate could have understanding when the minutes were read and discussed.

5.10 Conclusion
This chapter has outlined Phase 1 of the action research cycle of this study. Fact-finding was carried out through the processes of individual interviews, Focus Group Discussion and participant observation with subsequent analysis of the data generated. Following the selection of the action research group members through purposive and snowball sample techniques, the general participants were also selected purposively. Twenty-nine in-depth individual interviews were conducted with the women of childbearing age, eight Focus Group interviews were carried out with various groups of people in the community and participant observations were carried out on five TBAs and two skilled birth attendants.
The participants demonstrated knowledge of some potential causes of maternal mortality though these were attributed to the influence of evil spirits or powers which invariably determined where they seek help in the event of complications. Issues were also raised about the health facilities which pose a threat to maternal health as well as expressing their state of helplessness and strong desire for intervention that might bring a change to the status quo.

Conventionally, it is expected that the next stage of this project would involve a discussion of the identified themes with reference made to literature. Conversely, the next phase would involve the response of the action research group to the interim findings while discussion is deferred to a later stage. This, in the nature of action research facilitates logical presentation of events in their real time and sequence.
CHAPTER SIX
6.1 Introduction

Following the fact-finding phase, I now discuss the second phase of planning and action of the action research process. For ease of presentation, evaluation will be discussed in the next chapter. These phases are based on the response of the action research group to the findings from the individual interviews, focus group discussions and participant observation undertaken in the first phase and the action taken to bring about possible change.

At the conclusion of data generation of the first phase of this project, meetings were held fortnightly by the action research group to discuss the data analysis and the results. The overall aim of this phase was to reach a consensus about the analysed data, plan and implement appropriate actions in response to the data which in turn would empower members of the community to take action to prevent maternal mortality. This strategy is based on the philosophy that action research composes a spiral of cycles of interaction of research, action and evaluation (Carr and Kemmis, 1986; Hart and Bond, 1995).

Data in each category were discussed with the aim of identifying gaps which would require action to bring about a change to prevent maternal mortality. Various actions were proposed, deliberated upon and consensus reached as to which ones are feasible, for example, community education. Also decision was made about who should be involved and when such actions should take place.

The objectives, therefore, of this phase were as follows.

1. To educate the members of the community on maternal mortality including the causes (direct and indirect) based on scientific evidence as well as its prevention.
2. To motivate members of the community through the education programme to re-interpret the meanings they had about some aspects of maternal mortality due to superstitious beliefs.
3. To hold advocacy discussions with relevant stakeholders with the hope to attract assistance for the improvement of health and social infrastructures in the community to prevent maternal mortality.
4. To educate TBAs on danger signs during pregnancy and delivery; reinforce need for referral and educate on hygiene in their practice.
5. To create a common forum between TBAs and midwife/community health extension workers in the community.

6. To carry out career counselling of secondary school leavers with regard to training as midwives to work in future in the community.

These objectives were drawn up to address the gaps identified in the previous chapter by the action research group with regard to the perspectives of the community members about the causes of maternal deaths. Other aspects include their birthing practices as well as the physical environmental factors that contribute to maternal mortality. The action research group unanimously agreed that the under-listed actions should be carried out in the attempt to prevent maternal mortality (Table 6.1).

**Table 6.1: Actions to prevent maternal mortality**

<table>
<thead>
<tr>
<th>Actions</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community education on maternal Mortality</td>
<td>About 50 adult members of the community listed in the inclusion criteria</td>
</tr>
<tr>
<td>Training of TBAs on danger signals in pregnancy and delivery, need for referrals and maintenance of hygiene to prevent infection.</td>
<td>TBAs</td>
</tr>
<tr>
<td>Creating a common forum between TBAs, skilled birth attendants/ others</td>
<td>TBAs, Midwife, other health workers and other interested members of the community</td>
</tr>
<tr>
<td>Career counselling of youths to train as midwives</td>
<td>Secondary school students and young school leavers</td>
</tr>
<tr>
<td>Advocacy discussions</td>
<td>i) Commissioner for Health in the State</td>
</tr>
<tr>
<td></td>
<td>ii) Commissioner for Social Welfare in the State</td>
</tr>
<tr>
<td></td>
<td>iii) Chairman of the Local Government Council</td>
</tr>
<tr>
<td></td>
<td>iv) Council of Chiefs in the Community</td>
</tr>
</tbody>
</table>
6.2 Community education on maternal mortality
A community education programme on maternal mortality (Table 5.1) was seen as an appropriate action to address the superstitious beliefs and ignorance of members of the community as well as acquaint them with the scientific causes and prevention of maternal deaths. Furthermore, the findings of this study on the perspectives of the members of the community on the causes and prevention of maternal mortality, suggest the need for the people to acquire knowledge on the real causes of maternal death so as to develop the right attitude towards its prevention. Literature has shown that such education affords people the opportunity to acquire knowledge and understanding of their situation which leads to the inculcation of positive attitudes (Dyson, 1997). Furthermore, community education or learning has been described as an enabling factor which sensitises and raises the awareness of people, thus making them better able to make informed decisions about their actions and also own the project (Waterman et al, 2007; Pacham, 2008). We were mindful not to criticise their beliefs but presented scientific evidence with demonstrations using models where appropriate to aid understanding (Kurtenbach, 2000). To enhance acceptability of the education programme, we reinforced their cultural beliefs and practices which were not harmful to health, for example, prayers and collaborated with the community members to reinterpret some traditional beliefs such as marital infidelity held as cause of prolonged or obstructed labour resulting to death; attributing obstetric complications including haemorrhages to witchcraft. Others were food taboos and fasting. We also encouraged seeking help from skilled birth attendants (Van Dyk, 2000). This strategy allowed for sustained interactive sessions with the community.

The education programme was carried out in a series of six interactive sessions which took place for six days, each session lasting for about three hours. This arrangement was to ensure adequate coverage of both the subject and the various groups in the community. For ease of the intervention and optimal output, the action research group agreed that the women of childbearing age, husbands and mothers-in-law or menopausal women should belong to the same group since they represent the typical family unit in that community. Husbands and the mothers-in-law/menopausal women have been shown in this study to dominate decision-making concerning maternal health care, therefore, this plan serves as a common forum for co-learning about maternal deaths with the hope that they will make informed decisions subsequently. This group had their educational programme for the first two days. The third and fourth days were for the chiefs and the clergy respectively while
that of the TBAs was accommodated in their training programme. The action research group concurred that those of us in the group who were health professionals, that is, the midwife, doctor and I should facilitate the educational programme and work in collaboration with the Women Leader and the Clergyman.

The objectives of the community education programme were

- To sensitise the community in the process to enable them to own the project of prevention of maternal mortality.

- To give an overview of maternal mortality and discuss its scientific (direct and indirect) causes as well as the preventive measures.

- To encourage members of the community to reinterpret their traditional/cultural beliefs that can affect maternal mortality.

- To discuss danger signals in pregnancy, delivery and puerperium.

- To emphasise the need for seeking prompt intervention from skilled birth attendants whenever there is a health problem in relation to childbirth.

- To discuss high risk mothers who should be attended to by skilled birth attendants.

- To discuss nutrition in pregnancy.

The content of the education programme was informed by literature and experiences of the action research group members especially the midwife, doctor and me in the course of our immersion in the community. In the philosophy of collaboration in action research, we pooled our resources generated from literature, personal experiences and helpful information from other action research group members to generate the composite material to guide the education programme (Hope, 2001; Waterman, Harker, MacDonald, McLaughlan and Waterman, 2005).

The areas discussed included an overview of maternal mortality with emphasis that 80% of these deaths is preventable; simple presentation of statistics to show the gravity of the condition; causes; associated factors and prevention (WHO, 2005; UN 2007). Details are contained in the community education guide document (Appendix 32). This guide was not by any means intended to be a compulsory directive for members of the community and
we stressed that we were expressing a view developed from the best available evidence (Hope, 2001).

Visual aids like charts and models of the female pelvis, baby and cross section of the female pelvis were used to illustrate some points during the discussions, thus, enhance understanding of the topics.

**Invitation to attend the programme**

Invitation to attend the education programme was disseminated by a Chief and Women leader (Waterman, 2007) through the Town Crier to women of child-bearing age, husbands and mothers-in-law or menopausal women. Emphasis was laid on members of the mentioned category who were interviewed and those who took part in the focus group discussions. However, the invitation was also thrown open to other adult community members who wished to attend. The rationale for inviting those who have been involved in the study through interviews or FGD was to create an avenue for the participants to compare their original ideas with available evidence (Hope, 2001). We were hopeful and expectant that this scenario designed to respect their culture as previously discussed, would influence the people to challenge their opinions, ideas and superstitious beliefs concerning maternal deaths (Van Dyk, 2000).

Formal letters of invitation to participate in the education programme were sent to the Chiefs and the clergy. Convenient dates for their programme were negotiated with the action research group. We were careful to avoid any feeling of pressure being exerted on the participants to attend the education programme because any form of coercion would be running against the spirit of the intervention (Hope, 2001). Also, we had desired that any change that would ensue should be through the individual’s intrinsic motivation due to understanding and internalisation of the discussions which have been interactive and non-condemning. With this approach, the participants should see themselves as part of the originators of the change (Tilbury and Wortman, 2008). Most of the participants who were invited, attended the education programme.
6.3 Career counselling of youths to train as midwives
Owing to dearth of skilled birth attendants at the Health Centre and the Local Government
Commission as well as the recent accommodation issues at the Health Centre, as a long-
term measure to solve this problem of lack of manpower, the action research group decided
on career counselling of secondary school students and young school leavers (Table 5.1).
The focus was to counsel these on the possibility of making a career in Midwifery. This, in
the later years would boost the population of skilled birth attendants and they might opt to
serve in their community without viewing accommodation issue as a hindering factor.
About six months to my withdrawal from the field, four midwives were posted to work in
the community Health Centre in the Midwives Service Scheme sponsored by the Nigerian
government, to prevent maternal mortality. Unfortunately, they could not assume duty
because of lack of accommodation. This is discussed further in a later part of this text.

The content of the counselling was based on how one could become a midwife. This
included the secondary school subjects that should be passed at credit level, admission into
School of Midwifery/University, duration of the school programme and career prospects.
The session was very interactive and without coercion. In the philosophy of counselling,
individual decisions should be without coercion, so the youths were allowed to make up
their minds on this issue.

6.4 Training of TBAs on danger signals in pregnancy and delivery, need for
referrals and maintenance of hygiene to prevent infection
Following data generation in phase 1, the individual interviews and the focus group
discussions showed that most of the women in the community were delivered by TBAs.
Also, from the observation data, the action research group identified some gaps in the
practices of the TBAs and decided that they should have some training (Table 5.1). This
also was a response to requests by some members of the community. The training was
planned to take place for two days. Development of the training protocols as for the
previous ones, was assigned to the health professionals including me. However, the women
leader was also involved in this process to make input from the cultural perspectives which
were adopted into the protocol, for example traditional terminologies to make
communication easier during the discussion. We drew information from literature, our
experiences and experiences of another group which had worked with TBAs in the neighbouring state (Hope, 2001). The areas covered as shown in Box 1, served to highlight normal pregnancy, labour and puerperium, deviation from normal as reflected in danger signals, prompt referral and prevention of infection (Udoma et al, 2005; Henderson and Macdonald, 2004).

The objectives of the training were

- To discuss normal pregnancy and labour
- To discuss danger signals in pregnancy
- To discuss danger signal in labour
- To discuss high risk pregnancies
- To emphasise prompt referral
- To discuss infection control/ care of the delivery field

Areas included in the training protocol are presented in Box 6.1

**Box 6.1 Summary of areas of TBAs’ training**

- Overview of maternal mortality
- Antenatal care / identification of high-risk mothers/ referral
- Normal labour / duration of each stage
- Care of the delivery field (antisepsis, protective covering for TBA and delivery mat)
- Normal puerperium
- Complications of pregnancy
- Complications of labour
- Complications of puerperum
- Referral

*All activities were interactive*

The training sessions were held for two days in the afternoons as agreed by the TBAs so as to allow them time to attend to their other activities. These featured highly interactive
discussions and demonstrations enhanced by the use of models of the female pelvis and doll (Appendix 31). As for the community education, we were careful not to criticise the inputs of the TBAs, but where certain practices were harmful, for example, referring women with complications to fellow TBAs, delay of referral or non-referrals due to suspicion of marital infidelity, we tactfully presented an alternative based on evidence such as referral to health facilities with skilled birth attendants. Such alternatives were not imposed on them but were interactively discussed so that they could appreciate the need for such change in their practice.

Only four out of the six TBAs that were expected, attended the programme. One of those who did not turn up, claimed that he was very knowledgeable and had been helping other TBAs out when they encountered difficulties with their clients. The sixth did not give any reason for not attending. At the end of the training, each of the TBAs was given a mini delivery kit as sample of what they should be using during delivery to motivate them to practise good standard of hygiene. It is recommended that good TBA training should make provision for post training logistical support, for example, provision of delivery kit, as well as supervision (UNFPA, 1996). The plan for their supervision is discussed later in the text. They were urged to replenish the content of the kits when used up (Appendix 32). During one of our action research group planning meetings, the health professionals raised a case against issuing certificates to the TBAs because this, from previous experience had given the TBAs a false sense of mastery and thus, militate against referral of the women with complications to experts.

6.5 Common forum between TBAs, the midwife and other health workers in the community.

Another intervention decided by the action research group was the creation of a common forum for interaction for the TBAs, the Midwife and the Community Health Extension Workers (Table 5.1). The aim of this was to promote rapport between the TBAs and the skilled birth attendants with the hope of facilitating the monitoring of TBAs as well as referrals from the TBAs to prevent maternal mortality. Similar interventions have suggested that teamwork between TBAs and midwives could prevent maternal mortality (Fortney et al, 1999; Jokhio, 2005). A systematic review had showed that TBA training alone does not improve pregnancy outcomes (Sibley et al, 2008). Therefore, where they are
still relevant, the TBAs need to be part of the health care delivery by being integrated and communicating properly with midwives.

Following a consensus with the relevant parties, information about the date, time and venue for the inaugural meeting was disseminated by the women’s leader to the TBAs, the Midwife and the Community Health Extension Workers.

The objectives of the common forum were
- To suggest the establishment of a work relationship between the TBAs and Midwife/Community Health Extension workers.
- To encourage interchange of visits to places of practice among TBAs and midwife/community health extension workers to foster learning and improve practice.
- To emphasise the need for prompt referrals from the TBAs.
- To create an avenue for common discussion and action to prevent maternal deaths by the two groups

The agenda of the first meeting were suggested by the action research group and included the following
- the purpose of the meeting
- discussion of possibility of common forum
- working out the mode of collaboration between the two groups

The forum was held at the Health Centre in the afternoon of the date previously chosen by the TBAs and staff of the Health Centre. It was moderated by me and five other action research group members were in attendance as well as four TBAs, a midwife and a Community Health Extension Worker. I introduced the purpose of the meeting which was a suggestion to create a common forum between the TBAs and the Midwife as well as the Community Health Extension Workers in that locality. The overall aim of the forum was to create a rapport between the Health Centre staff and the TBAs to facilitate referrals from the TBAs.

Subsequently, an interactive session ensued and the two major parties discussed freely, they welcomed the idea and decided to be meeting once every month. The TBAs confessed
that they were usually scared of taking their clients to the Health Centre and the Hospital because they were often rebuked strongly for the occurrence of complications. They urged the Health Centre staff to work closely with them and feel free to visit their places of practice and make input for improvement. The midwife in turn expressed her appreciation for this development and was optimistic about its sustainability. Both groups decided to be meeting regularly at a monthly interval.

6.6 Advocacy discussions

A consensus was also reached by the action research group that advocacy discussions based on our findings should be held with certain persons because of the influencing roles they could play in their areas of domain to prevent maternal mortality (Table 5.1). The persons included the Chairman of the Local Government Council, the Council of Chiefs, the Commissioner for Health and the Commissioner for Social Welfare. This intervention was decided with the hope to influence policy

Advocacy by an individual or by a group normally aims to influence public-policy and resource allocation decisions (Asbridge, 2004). Some authors are of the view that advocacy is a legal terminology and would prefer the use of the term ‘lobbying’ in situations outside the legal parlance (NP Action, 2010). However, Asbridge (2004) used both terms interchangeably in his study. In this context, for convenience, I would adopt position of Asbridge. Lobbying is a form of advocacy where a direct approach is made to legislators on an issue with the view to influence policy, therefore, successful outcome of lobbying/advocacy requires that the key individuals or stakeholders targeted should be accessed (White and Mazur, 1994; Parvin, 2007).

Findings of this study revealed gaps in the contemporary health facilities which have been identified as contributory factors to maternal deaths by members of the community. Thus, the action research group embarked on advocacy meetings with already mentioned policy-makers with the aim of changing the status quo in Health Centre.

6.6.1 Objectives of the advocacy/lobbying

- To sensitise both traditional and contemporary policy-makers on the maternal healthcare situation in the community.
• To request that the women as well as the Health Centre be given adequate attention with regard to equipment, staffing and provision of staff accommodation.

Appointments were booked and approval obtained for the action research group members to meet with the mentioned officials to discuss the issues at stake with regard to prevention of maternal mortality.

6.6.2 Chairman of the Local Government Council
It was very difficult to access the Local Government Chairman despite several efforts. Eventually, we decided to meet the Vice Chairman instead and discussed our interim findings. We emphasised the need for equipment of the Health Centre and renovation of the staff quarters. This would help restore the functioning of the centre because the midwives would be resident close to their place of work and might be available to help the women. With these in place, it was thought that confidence in the health facility could be restored and pregnant women could resume the use of the centre as they did, before 1995. The Vice Chairman asked us to submit a written report on our discussion and promised he would discuss the issues raised with the Chairman of the Local Government Council.

6.6.3 Commissioner for Health in the State
The interim findings of this study, particularly, the problems of lack of equipment and adequate staff as well as dilapidated staff residential quarters were presented to the Commissioner. He appreciated the enormity of the problem of maternal mortality and said that they were not peculiar to my study setting. He further expressed that he could not solve the problem immediately due to a bureaucratic constraint. However, he reassured that he was working out modalities to empower the State Government to be able to intervene in health matters involving health centres and the rural communities. This would mainly involve the formation of a Primary Health Care Agency in the State which would have to be approved by the Legislature. This is because by government policy, only the Federal Government of Nigeria has authority over the Health Centres. If his plan is successful, the Federal government should be able to delegate part of its authority to the State government to enable the state take charge of affairs in the Primary Health Care institutions which include the Health Centres and rural health matters. That was going to be a long term issue. Apparently, there was no immediate help from that quarter.
6.6.3 Commissioner for Social Welfare

The interim findings were also discussed with the Commissioner of Social Welfare with the hope that her Ministry could donate some equipment to Health Centre and also that funding a sustained community education on the prevention of maternal mortality would be approved. At this forum, we were informed of a recent policy of the State government, courtesy of the Ministry of Social Welfare, to provide free health services to all pregnant women and children aged 0-5 years in the State. Although the donation of equipment might not be possible, hope was given to us that the information from this research would influence the subsequent year’s budget to assist to some extent with the community education to prevent maternal mortality.

6.6.5 Council of Chiefs

The council of Chiefs in the community were also approached and as with the other stakeholders, the findings of the study were the basis of our discussion. The following areas were deliberated upon.

1. Assistance with the provision of accommodation in the community for the four midwives newly transferred to the community to ensure the availability of skilled birth attendants in the Health Centre. These midwives had not been able to assume duty for up to about six months after their posting because of lack of accommodation. The chiefs promised to search for a suitable accommodation for them. However, they said that they were not happy generally with the health workers including nurses and midwives sent previously to work in the community because most of these health personnel have always preferred to commute from an urban area which is about 30 minutes away by car. As a result of this, the Health centre operated only during the day and at night there was no staff to attend to emergencies. They further said that because of this, they lost confidence in the Health Centre. However, they promised to get private accommodation for the newly posted midwives if that would improve the staffing situation of the Centre, but emphasised that because they were generally poor in the community, the midwives would have to pay for the accommodation.
2. Another area we asked for help for the women was on transportation during emergencies to referral hospital because this would reduce delay in seeking expert attention to prevent maternal mortality. This was particularly necessary at night when the general public transports were scarce or no more available. The chiefs promised to solicit the help of all the commercial and private transport owners in the community to be on the alert and oblige their services to avert maternal death.

3. Furthermore, we also deliberated on the possibility of pooling community effort to provide some basic furniture like benches in the Health Centre and also repair its access road. These would give a facelift to the centre, provide some comfort for women who may wish to attend the facility and probably enhance its usage. The chiefs readily decided to gather the youths someday to work on the road so that it would be easily accessible. Concerning the benches and other equipment in the facility, they lamented that they require government assistance, because they think that their community had been neglected by the government.

Concluding, the community leaders lamented that women were dying due to childbirth and welcomed our approach which involves sensitising the members of the community on the causes of maternal deaths. They were not happy that the Health Centre was not adequately equipped. They confessed that they lacked knowledge about medical equipment and requested the Health workers to always tell them of the needs in the Health Centre so that they could make informed request from the government and also help where they can. At this point, they called for a closer relationship between the health workers and members of the community.

6.7 Conclusion
In this Chapter, I have discussed the actions undertaken by the action research group in response to the data generated in Phase 1. These include community education on maternal mortality and its prevention as well as training of TBAs. Other interventions given were the creating a common forum between TBAs, the midwife and other health workers; career counselling of youths with regard to Midwifery and also, some stake-holders within and outside the community were lobbied concerning attraction of attention to the community to improve the healthcare infrastructure. It is expected that these actions will enable members of the community to develop new knowledge that will empower them to take action to
prevent maternal deaths. In addition, the government agencies contacted during this project, are also expected to assist the community by fulfilling their statutory obligation towards the community, for example, equipment of the Health Centre.

Following the interventions, I now turn to the evaluation of these interventions and the action research project in the next chapter.
CHAPTER SEVEN
CHAPTER SEVEN
EVALUATION OF ACTIONS (PHASE THREE)

7.1 Introduction
In this chapter, evaluation of the actions undertaken in the previous chapter will be discussed as is conventional with action research. This will involve a discourse of the evaluation approach, data management as well as the findings.

7.2 Evaluation approach
Participatory evaluation was adopted as opposed to the conventional evaluation method. The conventional evaluation method is positivist in approach, done by experts and does not consider the autonomy of members of the community as intelligent individuals because they are not involved (Greenwood and Levin, 2007). Conventional evaluation aims to make neutral and objective judgment about the project from the professional’s perspectives (Scriven, 1995). It reduces the participants to mere informants in passive relationship with the researcher thus emphasising power relationship. This overlooks the needs of the members of the community.
Participatory evaluation, on the contrary, engages stakeholders, for example, community members in the processes of making sense about their own situations in activities they have participated in. This approach focuses on evaluation of things that matter to members of the community (Greenwood and Levin, 2007). It, therefore, has parallels with action research and will be preferable as an evaluation method.

7.3 The objectives of the evaluation
i) To carry out a participatory evaluation with members of the community on the actions undertaken in the planning and action phase of this project.
ii) To identify the influence of the actions on the knowledge, attitudes and practice of the members of the community with regard to maternal deaths.

Being representatives of the community, the action research group held a meeting held after the interventions and deliberated on the ability of the interventions to meet the aims and objectives of preventing maternal mortality which include empowerment of the people to take action to prevent maternal deaths. Secondly, this group also decided that data on
evaluation should be generated through individual and focus group interviews. Qualitative evaluation would have provided contextual and subjective views on any changes and would have been useful but unfortunately, I was bereaved of my mother. This prevented me from organising and carrying out the observations.

Thirdly, the action research group members collaboratively decided to evaluate the interventions through individual interviews of the action research group members, as well as through the various focus groups that were used in the fact-finding phase. The focus groups in this study and the number of participants during the evaluation phase are shown in Table 7.1.

**Table 7.1: Focus groups in the evaluation phases**

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Focus Groups</th>
<th>No. in evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Husbands</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Older women of child-bearing age (23-49 years)</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Younger women of childbearing age (15-22)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Clergy</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Community leaders</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Traditional birth attendants (TBAs)</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Mothers-in-law/ menopausal women</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Doctors, midwives and other health workers</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

There were eight focus groups for the evaluation. These corresponded with the focus groups during the fact-finding phase, to ensure that the various groups in the community were involved. It is to be noted that the number of participants in the various groups decreased during the evaluation. This was because the evaluation took place at the beginning of the planting season and most of the community members had to attend to
their farms. Although the group took cognisance of that and arranged most evaluation meetings in the evening, despite the flexible schedule, some who would have participated come back tired from their farms and so could not honour our invitation. However, with the group number ranging from three to six, we were still able to have meaningful discussions (Denscombe, 2010). As indicated in Table 7.1, thirty-four participants spread across the eight focus groups took part in providing data for the evaluation. These were the same participants who took part in the first round of focus group discussions in the fact-finding phase.

Eight out of twelve individual interviews comprising action research group members were also conducted for this purpose (Table 7.2). Only this number was available due to the reason previously given.

Table 7.2: Data generation for evaluation

<table>
<thead>
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<th>Method</th>
<th>No.</th>
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<tr>
<td>Individual interviews (action research group members)</td>
<td>8</td>
</tr>
<tr>
<td>Focus Group Discussion</td>
<td>8 groups</td>
</tr>
</tbody>
</table>

The procedures for the focus group discussions and the individual interviews were followed as already described in Chapter 5. Verbal consent was obtained from each group and in the case of interviews, from the individuals before tape-recording the discussions. As the moderator, I facilitated inclusivity and equity in response by encouraging every participant to make contribution to the discussion. This ensured that nobody was passive. The audio tape recorder was moved around easily by the recorder.

To sustain the discussions, the action research group had developed a discussion guide. This also ensured that all required areas were covered, ranging from how the programme had impacted on them through stimulating discussion on what they have gained or learned from the programme; the value added to their lives and changes to their practice since their
training. Also included in the guide was, what areas would require further intervention, for example, what they would expect others to do differently to prevent death of women due to childbearing.

The questions for both the interviews and focus group discussions involved asking the participants to express their experience based on the interventions that involved them directly, for example, the community education programme, the TBA training, and the common forum between the TBAs and the health practitioners.

7.3 Data Management
Focus group interviews and individual interviews were transcribed and translated into English language with a back translation into vernacular as was done in Phase 1, to ensure that meaning was not lost through translation. All other procedures for data analysis were followed as in Phase 1. An issue was raised about the risk of compromising ethical procedures of anonymity and confidentiality as regards individual interviews of the coresearchers. This was discussed by the group and a consensus was reached that I should remove every identifying feature before presenting the data to the available members of the group for further analysis. I reviewed the process of qualitative data analysis again with the co-researchers to refresh their memory on this aspect of the study so that they could work with me in this regard. Data were fed into the NVivo8 software for organisation into codes and categories. These were eventually grouped under themes as in Phase 1.

7.4 Findings from the focus groups and one to one interviews
For ethical reasons, as was obtained in the fact-finding phase, the groups and individuals were assigned numerical and letter coding for the purpose of anonymity. Please refer to Table 5.2 for the details.

The findings from the evaluation of each action, were presented based on the themes which reflect the group discussions and individual interviews thus:

- New knowledge
- Value added to their lives
- New practice
- Informed request
• Continuity and sustainability of the project.

Findings from the interventions are discussed below.

7.4.1 Community education

i) New knowledge

Generally, findings from the interviews and the focus group discussions suggested that members of the community have acquired some new knowledge from the education programme as planned in the previous phase of this project. Some comments indicated that they were beginning to question the rationale of certain traditional beliefs they held about causes of maternal deaths as identified in the fact-finding phase, for example, the attribution of causes of maternal deaths to evil forces which usually would determine the type of intervention that would be sought for the woman.

‘I have learnt a lot of things from this project because before now, it was a common belief to associate the cause of unduly long labour to evil spirits which have locked the womb and the traditional remedy would be sought from witch doctors to unlock the womb. Unfortunately, the woman would die. But now, we have learnt that an unusually long labour could be caused by wrong position of the baby in the womb, …narrow ‘waist’ of the mother so that the baby cannot pass through… heavy blood loss also ascribed to witches are not so. I have learnt from the explanation given to us about how these problems happen and that if the womb does not grossly reduce in size and get firm, bleeding can occur after delivery’ (C.FG4.01).

Other comments on how the traditional beliefs are now viewed include

‘The myth of ekpo nkawo (evil spirit that kills women during childbirth due to marital infidelity) was dispelled when the bone of the female ‘waist’ (pelvis) and a doll were used to illustrate what could lead to prolonged labour or even block the baby from being born’ (H.FG1.01).

‘the idea of ekpo nkawo does not sound real again to me since I now have an idea of what can prolong labour. The best idea now is to seek hospital care for the woman to save her life’ (H.FG1.02).

Culturally, ekpo nkawo was seen as taking effect when labour is prolonged probably due to an obstruction. If the woman fails to confess infidelity, she is allowed die as it were, for her sin. Although some participants expressed that the new knowledge acquired from the
community education programme has dispelled the belief in evil spirits being responsible for complications and deaths due to childbirth, a participant commented that though evil forces exist, ignorance and carelessness were the main causes of deaths.

‘Mm, personally I learnt that a lot people have been dying in silence because complications of pregnancy and delivery are ascribed to the witches and wizards and other diabolical means. Though these evil forces exist, the main causes of their problem are ignorance and carelessness’ (Int.01).

Another participant also maintained the existence of evil forces and that not all the problems should be attributed to witches but to ignorance of the right intervention by the people when complications occur.

‘It is not always that these problems are caused by witches. Sometimes, we also are responsible for the problems …the problem had been due to our ignorance. If we had known that once there is a complication, we should rush the woman to the hospital, through that, some women would have been saved ...we are responsible for the problems if we do not take the woman with complication to the hospital’ (OW.FG3.04).

In addition to the new position against the belief on evil spirits causing deaths, another participant expressed how she has been enlightened on what could cause tetanus infection as opposed to the hitherto superstitious belief.

‘I have learnt a lot of things from this programme. For example, in our culture, we believe that oron (tetanus) is caused to the woman and her baby through the visit of another woman who had lost her baby within the first week of life when the umbilical cord had not yet dropped off. It is a taboo for such women to visit any woman who has put to birth within the first week of delivery, unless the oron stigma has been traditionally washed off her. But I have been enlightened through this programme that dirty delivery conditions cause this’ (YW.FG2.04).

Like the superstitious beliefs, the religious practice of fasting by pregnant women was also faulted. The essence of imposing fasting on pregnant women was also questioned.

‘The idea of subjecting a pregnant woman to fast and sometimes for up to seven days, God has made us to understand that is not good. It is not a nice thing to impose fasting on the pregnant woman’ (C.FG4.04).

Following the discussion on demystifying certain superstitious beliefs as well as querying the essence of the religious practice of fasting in pregnancy, another view emerged as regards the enlightenment the community education has given towards teenage pregnancy
as a high risk pregnancy.

‘the community education has been very enlightening, I have gained a lot from it. First of all, our young girls now know that teenage pregnancy is very risky; things could get worse, if they attempt an abortion. This is commonly discussed in the community now and I hope it will go a long way to help us’ (H.FG1.01).

Having identified teenage pregnancy as being highly risky, the marriage to a teen female was also condemned as an unwholesome practice.

‘marrying a young teenager is not a good practice because it leads to problems in pregnancy and delivery’ (C.FG4.05).

As a continuation of the discussion on evaluation, generally, there was a consensus by the people that they have now acquired new knowledge about the actual causes of maternal deaths and not tying them to evil forces or other superstitious beliefs.

‘I have learnt a lot, especially, the causes of death of a woman during childbirth, for example, the causes of excessive bleeding. I am no more superstitious. This programme has greatly enlightened me’ (Int.04).

‘I have learnt a lot from the community education, especially the things that can cause bleeding, for example, wrong position of the placenta can make the woman to start bleeding before she goes into labour’ (MLMW.FG7.01).

Bleeding was mentioned as a cause of maternal death and a woman who presents with such problem should be taken to the hospital for treatment.

‘I learnt that heavy bleeding before and after delivery are dangerous and any woman with such bleedings should be taken to the hospital’ (OW.FG3.03).

A participant was able to recall a cause of bleeding before delivery. On the whole, bleeding, before or after childbirth was noted as a danger sign which required hospital intervention. Another participant mentioned that prolonged labour as a result of ‘narrow waist’ (contracted pelvis) can also be a problem.

‘I thank God very much because I have also learnt a lot from the education programme on the issue of prolonged labour. This problem can be caused by a ‘narrow waist’ of the woman. I am very happy because I jotted down a lot of information on my notebook during the education programme’ (C.FG4.03).

More actual causes of deaths mentioned by the people included trapped placenta in the womb following delivery, convulsions and swollen legs. Trapped placenta following birth
of the baby was particularly noted and would require urgent transfer to the hospital for intervention.

‘I have really learnt a lot from this programme. I now know what can actually lead to death of a woman during the process of putting to birth, for example, the placenta that cannot be delivered’ (Int.05).

‘I have also learnt that if the placenta fails to be delivered, it is a very serious problem that requires urgent transfer of the woman from the TBA to the hospital’ (Int.07).

‘Atuak-tuak (convulsion which could mean eclampsia) can also kill the woman’ (MLMW.FG7.04).

Knowledge was also acquired about the need for expert to examine any pregnant woman with swollen legs which was taken for granted before now; because this could be a sign of an underlying pathology.

‘I have received a lot from this programme, especially the issue of how a pregnant woman can take care of herself. So if we see such signs like swollen legs for example, we now know that it is no more the work of the TBAs, they should send the women to the Health Centre. So I have knowledge of all those things’ (Int.02).

‘Before now, I have always taken it for granted if a pregnant woman has swollen legs. I used to see it as a normal occurrence in pregnancy. From the education we had, I now see that it could be a dangerous sign and that such women need to be examined by expert’ (MLMW.FG7.03).

Evaluation of knowledge of the actual as well as potential causes of death of women during the process of childbirth as acquired from the education programme included bleeding, trapped placenta, small waist (pelvis), convulsions and swollen legs. Following the identification of health problems, some of the community members also expressed that they have learnt the importance of helping the pregnant women to seek attention of experts in the hospital. This could be inferred from the resumed attendance at the community Health Centre. Details of this is presented later in the text.

‘I learnt that if a woman convulses during pregnancy or delivery, she should be rushed to the hospital for treatment’ (OW.FG3.02).

‘I have also learnt that if the placenta fails to be delivered, it is a very serious problem that requires urgent transfer of the woman from the TBA to the hospital. The TBA should not keep the woman or even send for help from another TBA as has been the common practice here. The woman must be sent to the hospital in good time to save her life’ (Int.07).
As indicated by the last comment, previously, the TBA would consult other TBAs rather than refer a woman with complication promptly to the hospital. The decision by the participants in favour of the hospital suggests an attitudinal and practice change from their former practice of going through various TBAs and probably opting for the hospital as a last resort. They have been able to appreciate the limits of the TBAs by choosing the hospital when complications occur. This idea was further corroborated by more members of the community thus:

‘...the best idea now is to seek hospital care for the woman to save her life’ (H.FG1.02).

‘I learnt that heavy bleeding before and after delivery are dangerous and any woman with such bleedings should be taken to the hospital’ (OW.FG3.03).

Another impact of the community education as expressed by the people, particularly, the husbands who are the major decision-makers in the family, showed the need for pregnant women to be attended by experts even when there is no imminent health problem.

‘I have learnt the importance of our pregnant mothers being attended by experts in the hospital. They need to register in the hospital, get immunisation and should be going for check-ups. Most of our women believe that God gave them the pregnancy and that they will also deliver safely without special help when the time comes’ (H.FG1.01).

‘since pregnancy is a gift from God, I have always believed that the woman does not need any special care and will deliver at the appointed time. From this education, I have seen that there could be complications and the woman needs to have the attention of doctors and midwives. The pregnant woman should be attended to in the hospital’ (H.FG1.02).

As discussed previously, the belief that pregnancy is a gift from God and that they could also have the babies easily without much help, might have influenced the people’s negative attitude towards seeking the care of skilled birth attendants. However, as a consequence of the community education, positive decisions are made about seeking the attention of skilled birth attendants which is here expressed as ‘hospital’.

‘Formerly, I used to go to the TBAs whenever I am pregnant... Following the education, I have decided to attend the hospital in my subsequent pregnancy’. (OW.FG3.03).

Some participants attested that they were now able to identify the limitations of the TBAs thus reinforcing the need for seeking the attention of skilled birth attendants.
‘Our thinking has changed concerning pregnancy and childbirth. Before now, I used to think that having baby in the hospital is very expensive and because of that we preferred the TBAs since they are relatively cheaper. This programme has enlightened us and I can now appreciate the limitations of the TBAs. For example, if labour is prolonged, the TBA would accuse the woman of adultery and insists that she should confess this before delivery could be achieved’ (YW.FG2.04).…also the TBAs insist that the women must deliver through the natural means because the mothers of the women delivered naturally, so the women must also deliver naturally’ (YW.FG2.04).

‘I have also learnt that though the TBAs are still helping our women, they should send the ones they cannot manage to the hospital on time’ (H.FG1.03).

Although in the education programme, we did not overtly condemn the TBAs or even campaign for the hospital or skilled birth attendants, the people on their own volition subsequently opted for the skilled attendants as opposed to the TBAs.

Though the people were now speaking in favour of the need for pregnant women to be attended by experts (skilled birth attendants) in the hospital as well as the TBAs to refer clients with health problems promptly, poverty was expressed as a deterrent to utilising the services of the experts.

‘…in some situations, the woman’s husband may not have money to transport the wife during emergency (to the hospital). If this is made available, many women can be helped’ (H.FG4.01).

‘There is so much poverty in this community. I think that most of the problem that women have during childbirth is caused by poverty. Lack of transport money may cause a woman not to go to a bigger hospital when she is referred’ (C.FG4.06).

Further evaluation revealed that nutritional taboos like some superstitious beliefs and practices, were also being repudiated. They now expressed the need for pregnant women to eat adequately (‘balanced diet’). Some vegetables and protein sources were forbidden because of purported adverse effect on the baby.

‘Formerly… there were some foods I avoided, like okro (a type of vegetable) and pork for fear that the baby would drool saliva and have rashes on the body respectively. Following the education… I have understanding now that these foods are nutritious, although I have to eat less of fatty foods’ (OW.FG3.03).
Some plant proteins were also forbidden in pregnancy as attested by some participants.

‘I have also learnt that forbidding the pregnant woman from eating beans which is a protein source, is not right. We had believed that eating beans by the pregnant woman makes the baby too fat for her to be able to deliver’ (C.FG4.02).

It would be recalled that as shown in the fact-finding phase, TBAs were among those who perpetuated food taboos. During the evaluation, no comment was made about their reaction to this issue. This may suggest that they are still holding on to their stance. However, more participants continued to manifest a different idea from what they had believed previously.

‘...the pregnant woman should eat balanced diet...balanced diet contains all the classes of food’ (YW.FG2.02).

‘I have a better knowledge now about what pregnant women should eat and no more food taboos’ (YW.FG2.04).

‘I have gained much from this programme. I now know the importance of good food during pregnancy...the food should contain vegetable, meat or fish and any starchy food like ‘fufu’. I am glad to know that milk and beans can be eaten freely without fear that these could make the baby too fat’ (Int.07).

Having discussed the change concerning food taboos as presented by the people, I now turn to their perspectives on factors which contribute to the death of women during childbirth. Apart from being enlightened on the actual and potential causes of maternal deaths from the community education programme, the people were now able to identify several other issues which include ignorance, carelessness and certain practices as contributory factors to maternal deaths in that community.

‘... a lot of people have been dying in silence because of complications of pregnancy and delivery, …the main causes of their problem are ignorance and carelessness’ (Int.01).

The practice of self-medication was now seen as a problem. It was a common practice for members of the community, including pregnant women to buy and consume medicines which were not prescribed by professionals. The medicines were bought from the patent
medicine shop in the community. (description of the patent medicine shop is given in Chapter 1).

‘I have seen that self-medication which is a common practice in our community, is dangerous and pregnant women should avoid it’ (MLMW.FG7.02).

Lack of money by the women was raised as a limiting factor towards adequate diet. Also, if the woman develops an emergency health problem at a time that her husband lacks money, it could stall the effort of referral.

‘they (the women) lack money to buy good food and cannot afford medical care. In other words, I have learnt that a pregnant woman should eat balanced diet (adequate diet)’ (YW.FG2.02).

‘…in some situations, the woman’s husband may not have money to transport the wife during emergency. If this is made available, many women can be helped’ (C.FG4.01).

‘There is so much poverty in this community. I think that most of the problem that women have during childbirth is caused by poverty. Lack of transport money may cause a woman not to go to a bigger hospital when she is referred’ (C.FG4.06).

‘What we see here is poverty…’ (DMW.FG8.03).

Following the discussions of the participants on their new perspectives about maternal mortality as a result of impact of the education programme, I now discuss what they said they would now do differently to prevent maternal deaths. These are summed up in the theme expressed as ‘new practice’. The proposed activities included preference for skilled birth attendants. This is expressed as hospital by the people because for now, skilled birth attendants do not conduct home births in Nigeria. Other decisions included changing idea about nutritional taboos, helping pregnant women in various ways such as provision of means of transportation to the hospital during emergencies and monitoring the activities of TBAs.
(ii) New practice
This theme describes the new way of behaviour which the participants have planned to adopt.

‘... I used to go to the TBAs whenever I am pregnant… following the education, I have decided to attend the hospital in my subsequent pregnancy’ (OW.FG3.03).

‘I will be having my babies in the hospital …’ (YW.FG2.04).

Some participants said that they would also be encouraging other women on activities that would promote maternal health, for example, advice against abortion and promotion of hospital attendance.

‘this programme has equipped me with knowledge which I can now use to advise fellow young girls against abortion (unsafe abortion)’ (YW.FG2.05).

‘Because I believe that women are responsible for some of the problems, I will make sure that I tell pregnant women to go to the hospital especially if they have health problems’ (OW.FG2.04).

The ‘campaign’ for improved maternal health situation did not end within the members of the community, the elders now also saw the need to get involved by soliciting for help from outside through bringing pressure on the government.

‘We will mount pressure on the government to equip the Health Centre for us’ (CL.FG5.02).

A participant who has adopted a new stand of attending the hospital and encouraging other women to attend, also stated that she would still be attending the Church for fasting as well, though with a reduced number of hours.

‘I will register and be attending the hospital whenever I am pregnant and I will be encouraging other women to do that. This will help a lot. I can also still go to Church for prayers and do my fasting from 6am to 12noon’ (OW.FG3.01).

Conversely, another participant expressed her disapproval for the practice of fasting because in her view, this amounted to starvation and that Pastors could pray for the pregnant women without the women fasting.
‘All that is needed is good food and fruits, there is no need to starve by way of fasting, because this is not a good practice for pregnant women. Pastors should pray for the pregnant women and the women should eat adequately because fasting affects the health of the woman and the baby in her womb negatively’ (OW.FG3.02).

Further comments on what would be done differently included the promise of making provision for transportation of pregnant women when needed.

‘I appreciate this project and we are seeing the good effects. I believe our problem in the area of maternal deaths is being solved. Concerning transportation, I have promised to make my motorcycle available to take a pregnant woman who has problem to the hospital. If it is not available, I will provide money for the transportation so that we can save the lives of these women’ (CL.FG5.02).

As a follow-up to the previous participant, another person in that group reinforced that they would help the women through rendering help that would save their lives.

‘Yes, that is true. In this community, we love helping people who have problems. We will all work together to render any help that we can to save the women’ (CL.FG5.01).

Another group of influential persons in the community also stated that they would encourage positive behaviours and discourage negative ones with regard to preventing deaths due to childbearing, for example, the following were said.

‘we have to encourage husbands to support their wives by providing sufficient food to ensure that their wives eat well (adequately) during pregnancy so that both mother and baby will be healthy’ (C.FG4.02).

‘having learnt that early teenage marriage and subsequent pregnancy makes the young girl prone to complications in pregnancy and delivery, I will now start discouraging people from that practice’ (C.FG4.05).

‘I also think that as a body of Clergymen, we can be meeting from time to time to discuss this issue as well as other problems, and how to help our women, this problem will be ripped off and our women can live in total freedom’ (C.FG4.03).

As revealed in Phase 1, the husbands and mothers-in-law were influential on decision about the place of delivery and most of them advised the pregnant women to seek care
from the TBAs. Apparently, these are now saying that they would encourage the pregnant women to seek care from the hospital, although a participant said that he will advise hospital care in a combination with Church attendance for prayers.

‘formerly, I used to advise my wife during pregnancy, to go for fasting in the Church and also go to the TBA, but now, whenever she gets pregnant, I will ask her to attend the hospital and also go to Church for prayers’ (H.FG1.01).

‘I now advise pregnant women who have health problems to attend the hospital so that they could be treated properly. Recently, I advised a pregnant woman who had swollen legs to go to the hospital and not resort to self-medication’ (MLMW.FG7.03).

‘I have made up my mind to advise my children when they are pregnant, to attend the hospital’ (MLMW.FG7.01).

‘the hospital is definitely better than the TBA’s, so I will encourage my daughters to attend the hospital for care when they are pregnant’ (MLMW.FG7.02).

‘I now advise the younger women on how to take care of themselves during pregnancy, for example, by attending the hospital instead of depending on herbal enemas from TBAs and also by the avoidance of self-medication’ (MLMW.FG7.04).

Many participants also expressed their commitment to spread the knowledge acquired from the community education and also advice others based on it.

‘This programme has equipped me with knowledge which I can now use to advise fellow young girls against unsafe abortion. Recently, I was able to encourage a girl not to commit an (unsafe) abortion, by letting her know the implications which include death. She was under so much pressure from her friends to terminate the pregnancy because her father was very angry about the pregnancy and sent her away from the house’ (YW.FG2.05).

‘…I will also discuss what I have learnt from the community education with my friends so they can be enlightened as well’ (YW.FG2.04).

‘…the little I gathered from this project would help me tell TBAs to refer their patients to the hospital whenever there is a problem’ (Int.02).

‘…I have taken it up as part of my additional job in this particular clergy work...in my ministry, my calling. I have adopted this vision. In fact, even in counselling, I
will be keeping periods of counselling for pregnant women...how to take care of pregnancy and even during delivery where and when they should go while I am doing my own part by praying for them. Then allow the hospital to take its proper course because they (doctors and midwives) are trained for that purpose. Even in the days of the Hebrew women, they were sent to the hospital, so the midwives can properly handle the case, it is part of my teaching now’ (Int.01).

Although there was commitment to spread the message from the community education, some went further to include that they would monitor the services of TBAs which are seen as inevitable, as well as advise women to ensure that pregnant women with problems are referred to the hospital.

‘I would like to monitor the activities of the TBAs. That meeting between the TBAs and midwives is very good. Those of us in the action research group should belong to it so that we can be aware of what the TBAs are doing’ (Int.07).

‘...we should be observant and know the young women that are pregnant and see how we can help them’ (Int.03).

‘I have decided that I will now be advising pregnant women to be attending the hospital so that they can have proper examination and not only go to the TBA. Also, they should be delivered in the hospital. They could go to the TBA if the labour starts at night and there is no means of transportation to the hospital. I will make sure that I keep reminding the TBAs that they should not keep any woman who has laboured for up to twelve hours without delivery. Such women should be referred to the hospital. I will also advise the pregnant women that if they have experienced labour pain for twelve hours and no delivery, even if the TBA does not refer them, they should ask their husbands or any other relation to take them to the hospital’ (Int.04).

‘... for the pregnant women, like the one that came to me, her legs were swollen… I told her to go to the hospital though I have not seen her since then. We need to go and talk to these pregnant women and encourage them to go to the hospital. They should go and register in the hospital and should not only go to the TBAs in case they have prolonged labour. That is what I can tell them, we should not abandon them (Int.03).

Generally, hospital or professional care for the pregnant women was now preferred to the TBAs’ care, based on experiential analogies derived from past sad events and the recent education.

‘As a chief in the community, if an expectant mother develops problem, I would advise that she should be taken immediately to the hospital…it had also happened to my late wife. She was to deliver twins, one came out but the other did not. I did
not have the idea that they were twins. She left in labour to the Church in the morning and this problem happened there. They kept her for a long time, up to 6pm. She had the baby but the placenta could not be delivered...she became very weak due to the long labour...she died. If I had known what I know now, she would not have died because I would have taken her to the hospital’ (Int.02).

‘I am now more concerned about the wellbeing of pregnant women. I will encourage women to get proper care in pregnancy and labour. I would prefer that they go to the hospital’ (Int.05).

Individual interests were stirred up to organise further education on this issue for some segments of the community.

‘My personal decision is that, anywhere I am sent to work now, I will organise seminars on maternal mortality... for the clergy, Primary and Secondary Schools teachers. I want to start implementing that in this community. It is a great thing and the people are eager to come because by enlightening them, it will minimise or reduce drastically, the issue of maternal death and it will be a thing of the past’ (Int.01).

Having discussed what individuals said they would now do differently which included having babies in the hospital, encouraging others to do the same, encouraging referrals by TBAs, spreading the message got from the community education as well as doing away with food taboos, I now turn to another category which emerged in the course of evaluation.

The people also desired the government and others to confront certain issues differently to prevent maternal deaths. These included the improvement of relevant infrastructures.

(iii) Informed request

This involves roles that would be desired to be played differently by others following the new knowledge acquired from the community education in order to prevent maternal deaths. For example, members of the community would be expected to help out with means of transportation when needed and government should make the Health Centre functional.

‘If labour starts at night or if a pregnant woman develops a health problem at night, neighbours with cars or motorcycles should assist to take her to the hospital. Lack of a timely means of transportation can lead to the woman’s death. If there is no such help, the woman can die at any time’ (OW.FG3.03).
The government should also assist us in providing means of transportation in the community to help women during emergencies. The government should also make our Health Centre to become functional’ (OW.FG3.04).

The government should provide a means of mobility in this community to assist the transportation of women to a bigger hospital when there is complication. This is important because in some situations, the woman’s husband may not have money to transport the wife during emergency. If this is made available, many women can be helped’ (C.FG4.01).

Having been enlightened through the community education on the advantage of having skilled birth attendants and the consequent expression of preference for hospital delivery to TBAs’ delivery; the members of the community requested improvement on the poor state of their Health Centre.

‘…the government should help us equip our health centre’ (H.FG1.03).

‘Government should improve the Health Centre especially here in this community where these women can go because the state of the Health Centre is not good enough... We are told that there are no equipment, so the midwives cannot do much’ (Int.03)

‘the only hospital (Health Centre) we have, does not have equipment, nothing to use for the delivery of women and no drugs. The staffing is also poor. We thank the government for renovating the place but it has not been equipped. There are no beds. Government should equip the place with materials and staff’ (CL.FG5.01).

‘Government should improve the standard of our Health Centre by equipping it so that our emergencies, especially in pregnancy and delivery can be attended to promptly’ (Int.05).

‘The Local Government Council should also help in the equipment of the Health Centre’ (DMW.FG8.04).

Another dimension was mentioned regarding the state of lack of equipment in the Health Centre. Fear of disillusion was expressed if the enthusiasm created by the community education is not matched by readiness of the Health Centre to cope with the needs of the childbearing women.
‘Government should equip our Health Centre, without which, this education would not amount to much. Our Health Centre should be functional…’ (H.FG1. 01).

As a result of the awareness created, especially about the need for early detection of signs of complications and prompt referral, the people also request experienced staff to be sent to work in their Health Centre. This is in addition to the provision of equipment which raises the issue of the action research group to revisit the chiefs to stir up the need for their advocacy meeting with the relevant government agency as regards making the Health centre functional.

‘Our Health Centre should be equipped by the government. Doctors and nurses should be sent to work at the Health Centre. We have to revisit the Chiefs so that they can follow-up the Ministry of Health to get equipment delivered to the Health Centre’ (Int.04).

‘Government should also send experienced hands to our Health Centre so that they can easily identify problems and refer the women without delay’ (C.FG4.06).

‘Government should take care of our Health Centre and send competent nurses (midwives) who can take care of pregnant women to work there’ (YW.FG2.04)

‘If a farmer does not have implements, he cannot cultivate his farmland. We are appealing to the government and individuals to equip our health centre… because we are also tax-payers. They should also send doctors and trained nurses to work in our health centre’ (H.FG1.02).

Another idea was also presented by some participants who would desire that the Government should build a big hospital in the community to solve the problem of travelling to a big hospital in another Local Government Area.

‘The government should build a bigger hospital for us send doctors and nurses to work there so that they can attend to our health problems, particularly, those of the pregnant women. This will also help us, so that during emergencies, we do not have to go to the hospital located in another Local Government Area, e.g. IE hospital’ (MLMW.FG7.03).

‘Government or an NGO should build and equip a General hospital for us so that our women can easily access it when there is complication’ (H.FG4.06).

‘We need a bigger hospital where we can also have doctors because the Health Centre does not have doctors (H.FG1.02).
Most of the participants have been of the opinion that all their help should come from the government. On the other hand, a few have suggested that the community could also be involved in making the Health Centre functional by helping in their own little way. For example,

‘Since there are no equipment (at the Health Centre), we should encourage the community to do it themselves because it is our hospital...it is something the community can do to save lives’ (Int.02).

‘...although the health centre is the responsibility of the government, the health workers have the duty of telling us what to do to help…the health workers have the right to ask the community to help out. Without asking, we may not know what is lacking in the in the health centre. We can help in our little way if we are informed about the needs, for example by making benches. By helping the health centre, we are also helping ourselves’ (H.FG1. 01).

‘… we can make benches for the Health Centre if these are requested for, this will show that things are going on in the health centre’ (H.FG.01).

This suggests hope for a more easily accessible help for improving the poor state of the Health Centre and is likely to bypass the unnecessarily long bureaucratic procedures of the government which was commented on by a staff of the health facility thus:

‘I have been writing to the Local Government Council about the lack of equipment in the Health Centre for some years now and all I get in response is a promise to equip the place. I am tired of writing because I am discouraged’ (Int. 9).

A participant remarked on the remote location of the Health Centre and suggested that security guards should be provided.

‘I feel the health workers should be provided with security guards because the Health Centre is remotely located and close to a thick bush. This is very important because these workers are all females’ (H.FG.01).

There were comments on the need for midwives and health workers in the health centre to change their attitude towards the pregnant women and also be available. These comments are indicators that if the midwives and health workers are not friendly, the Health Centre
may still be underutilised even after it had been equipped.

‘… this issue of scolding the pregnant women by the midwives should stop. Drugs should also be made available to the women (Int.03).

‘our women are shy and so the ‘nurses’ should be more friendly to encourage them. As the health workers are fond of shouting at these women, this makes the women to withdraw and subsequently, will not want to attend the Health Centre again’ (CL.FG5.03)

The nurses (midwives) should change their repulsive attitude and be more receptive to people, especially the pregnant women. Their poor attitude has contributed to non-attendance of the Health Centre’ (YW.FG2.04).

‘The health workers should always be available’ (H.FG1.04).

On the contrary, a participant at the referral hospital tried to defend why midwives and doctors shout at the TBAs and by extension, their clients. The main reason given was delayed seeking of help from the skilled birth attendants. The women with complications are brought when little or nothing could be done to save them. From the professional stance, it is unethical to shout at the TBAs and the women irrespective of their supposed offence or mistake. As shown in the fact-finding phase of this study, the people’s beliefs determine their health-seeking behaviour. Given the circumstance just presented, I expected that the skilled birth attendants would have demonstrated a better understanding of the circumstances of the people and so, act professionally.

In defence, a skilled birth attendant made the comment stated below.

‘…sometimes the TBAs have the erroneous belief that doctors and midwives shout at them when they bring their clients. Sometimes, it is true because we are not happy about the state in which they bring the women. It is incredible that the TBA could keep a woman with retained placenta for about three to five days or even keep a woman who has bled heavily and only brings her to the hospital when she is gasping for breath or dying. These women are not even brought during the day but at night when it is difficult to arrange for blood transfusion. You should understand why we shout at the TBAs in such situations. What we mean is that, they should bring the women immediately the problem starts’ (DMW.FG8.04).
Further suggestions were made on how other people can use their office to prevent maternal deaths. For example,

‘We should also encourage our Pastors to preach about these things that we have learnt’ (C.FG4.06)

‘I believe that Pastors can also help preaching about what we have learnt in their Churches’ (H.FG1.04).

Still on what others should do differently, there were comments on the need to change certain social and cultural lifestyles for example,

‘Our boys should be discouraged from making the teenagers pregnant, they should focus on the importance of a good future and not the temporary pleasure that is destructive’ (C.FG4.06).

‘Instead of accusing the woman of adultery and leaving her to die, she should be taken to the hospital to save her life’ (H.FG1.02).

‘... those that have daughters, when they see them pregnant, they can ask them to register in a recognised or good hospital and health centres. That is what I will advise them to do’ (Int.01).

The comments on the state of the Health Centre as had been discussed, included the need for its equipment and expectations from the staff. Also discussed were expectations from other people in the community. The professionals at the referral hospital located in the neighbouring local government area also made inputs towards what people could do to prevent maternal mortality. Their emphasis included free healthcare for pregnant women because this was thought to encourage utilisation of the services of skilled birth attendants.

‘What we see here is poverty and I think that, if the government would offer free medical care for pregnant women, they will come to the hospital for delivery’ (DMW.FG8.03).

‘The free healthcare would really help. I take cue from the HIV programme, because it is free, the turn-out is always good. If other programmes are free, the people would always attend’ (DMW.FG8.01).

‘I think that about 80% of pregnant women would utilise our health services if given free. The people in this area like free programmes’ (DMW.FG8.04).
In addition to the free healthcare, one of the professionals suggested that the hospital should be flexible to accommodate the religious beliefs of the pregnant women as a means of encouraging them to attend the hospital.

‘Well, the hospital authority may have to be flexible and allow clergymen to come in to pray for their members who are in labour. Some hospitals now have Chapels where people can go in to pray without disrupting the hospital procedures’ (DMW.FG8.04).

Religious belief was not the only problem but certain cultural beliefs were also seen as hindrances which needed a change to prevent maternal mortality.

‘The people should change some of their beliefs, for example about witchcraft. I recall that there was a time that we were not having patients in this hospital because the people believed that the hospital has been sold to witchcraft. The situation changed when the present medical superintendent was posted to work here and now we are having patients again. The government should send the right people manage the health centres. By this, I mean people who are hardworking and committed’ (DMW.FG8.02).

The midwives were of the opinion that the calibre of staff in charge of the Health Centre was an important determinant of its utilisation.

‘The person in charge of the Health Centre should be committed to her work and be able to discipline errant workers. With this, the people should attend the health centre’ (DMW.FG8.01).

Apart from the sense of commitment expected from the staff in-charge of the Health Centre, adequate number of staff is also a necessity. Generally, that Health Centre has only one midwife who was only sent to work there a few months ago and before her posting, the Health Centre was manned by a Community Health Officer who had no midwifery background.

‘Government should employ more midwives and send sufficient number to the health centre so that they can cover the three shifts in a day, otherwise, if the centre is short staffed, at close of work, there will still be nobody to attend to the people after the morning shift’ (DMW.FG8.01).
‘Government should employ the midwives. Many of them are working in Private hospitals because government has not employed them. Also, the health facilities should be equipped by the government’ (DMW.FG8.04).

With reference to the dearth of adequate number of skilled birth attendants, the relevance of TBAs in that community is maintained. The people would want them to work in collaboration with the skilled birth attendants and also make prompt referrals, for example,

‘The TBAs should work with the health workers to prevent maternal mortality in this community’ (YW.FG2.04).

‘The TBAs should send the women in good time to the hospital if there is any problem’ (Int.07).

Following the health service-related issues, certain family and individual cautions were highlighted as problems which needed to be solved to prevent maternal mortality.

‘Parents should not send away their young daughters in anger because they have become pregnant either before marriage or because they are too young; our parents should be more tolerant’ (YW.FG2.03).

A participant also warned that having large families should avoided because this predisposes to poverty which makes some young girls in such families to trade sex for money and in the process could get pregnant and develop complications.

‘Parents should stop having large families which they are not able to care for. This situation affects some young girls in such families because they have been living in poverty and in the attempt to provide for their needs, they sleep around with men for money. In this process, some young girls have become pregnant and experienced complications leading to death’ (YW.FG2.01).

Similarly, female members of the community who were seen as not capable of bearing the consequence of heterogeneous sexual relationship were advised on abstinence.

‘my advice to the young and unmarried girls is to abstain from pre-marital sex so that they would be spared the trouble of getting pregnant too early in life, and probably dying’ (YW.FG2.04).

Having discussed what the participants would now do differently and what they desire
others to do differently as a result of their response to the community education, another area which evaluated positively, was the value the education programme has added to the lives of the members of the community. It was viewed as a development project which has emancipated the people from ‘darkness’.

‘This programme has brought light to us. We were in ‘darkness’ before, this education has brought development to us. Development is not only tied to erecting storey buildings and creating jobs but this knowledge that will save people’s lives is quite helpful’ (H.FG1.01).

The education programme was also seen as having effect on different aspects of the peoples’ lives including decision-making, enlightening the clergy and providing appropriate knowledge base for counselling other people.

‘...O yes! With the knowledge I have now, I can take a better decision about pregnancy and delivery for myself and also advise other women’ (Int.07).

‘this programme has equipped me with knowledge which I can now use to advise fellow young girls against abortion (unsafe abortion)’ (YW.FG2.05).

‘I am now more knowledgeable about pregnancy’ (Int.04).

‘... that is why I say it is God given vision because it has added value to me. Before now, we thought that preaching about health issues in the church was a taboo but now we have seen that it is high time we preach on all sections of life…and be fully involved in things that will not result to unwanted pregnancy which may lead to death’ (Int.01).

‘This programme has been very educative… I have benefitted from it because I now have an idea of how to advise pregnant women in my Church, especially when they have problems.’ (C.FG4.03).

Another value added from this programme, was the ability to identify the specific aspects in a previous behaviour that culminated to a mistake which resulted in the death of a wife during childbirth. For example, the elder who lost his wife as explained previously.

On the whole, the community education on maternal mortality impacted positively as inferred from the comments from the participants which have been discussed previously. This implies that awareness has been created about their situation which in turn influenced their comments. Generally, their responses suggested the acquisition of new knowledge for
example, not associating maternal deaths entirely with evil forces and claiming responsibility for some of the deaths because the women were not aided to get adequate intervention when it was necessary. As a result of the impact of the education, evidently, the people made several commitments about being engaged in behaviours and practices that would reduce maternal deaths, for example, attending the hospital and encouraging others to do so when pregnant as well as seeking the attention of skilled birth attendants whenever there was complication.

As a follow-up to their commitments, members of the community also commented on the expectations they have from other people towards the prevention of maternal deaths. These include, government to equip the health Centre to make it functional, timely referrals by TBAs and friendly attitude of health workers. I now turn to discuss the evaluation of the next intervention in this project, which is the training of TBAs.

7.7.2 Training of Traditional birth attendants

The evaluation of the training of the TBAs was also discussed based on the themes generated from their responses. These are:

- New ideas acquired from the training
- Value added to life
- Change to practice since training

New ideas acquired from the training

The TBAs generally attested that they have acquired new ideas from the training programme which now guide their practice, for example, having an idea of when they attain their limits while attending to a pregnant woman.

‘The training has given us a lot of ideas. Now, when a woman comes in labour, I look at the watch to note the time so that I do not keep her for too long’ (T.FG6.01).

Taking note of the duration of labour is an important development for the TBAs because this would serve as a baseline for prompt referral. Besides that, they also gained an idea of identifying women with potential problem through assessing the physical appearance. This
is a crude assessment to take precaution.

‘From the training we had, I was able to suspect that one of my client’s waist looked like that of a man… I asked her husband to take her immediately to the big hospital at IE’ (T.FG6.02).

In addition to assessing the physical appearance the TBA also said that,

‘a second thing I have learnt is that as a TBA, I should not deliver certain women. A woman in labour in her first pregnancy was brought to me, I asked her husband to take her to the hospital and she had her baby there… She was not operated on’ (T.FG6.02).

‘Last week, another woman in her seventh pregnancy was brought to me. She complained of abdominal pains as though in labour, but when I examined her, the baby was still very high up in the abdomen and the lower abdomen was empty. I asked her husband to take her to the hospital and he did that. I was later told that she was given an injection in the hospital and the pain subsided. I also advised her to have her baby in the hospital and she did that. Her problem was more than what I could bear’ (T.FG6.02).

These comments imply that the training has got some impact on the TBA, particularly, in the area of referral. These invariably could indicate that some value has been added to their practice. There was no apparent indication that the TBAs disregarded what was discussed during their training. Furthermore, some of them made the following comments:

‘The training has given us a lot of ideas’ (T.FG6.01).

‘the items you gave to us are very useful, they have greatly enhanced what I do during delivery’ (T.FG6.03).

As an indication of the influence of the training, the TBAs now attest to what they have already started doing differently.

**Changes to TBA practice since the training**

‘Last week, I referred a woman from my house to the hospital. The husband pleaded that I should allow her to have the baby in my house but I refused… I explained to him that I would not be able to cope with the delivery of twins and if the mother becomes weak, I would not be able to do anything to help. She was taken to the hospital and an operation was done to deliver the babies’ (T.FG6.01).

‘…she came in labour and I asked her husband to take her immediately to the big hospital at IE. He did not want to take her there because of lack of money. I told
him that it was necessary to go to the hospital. I went with them to the hospital’ (T.FG6.02).

The referrals done by the TBAs are signs that the training was worthwhile. Those women who ended up with surgery would have probably acquired a more severe morbidity or could have died in the process of late referral to the hospital as was common with the TBAs. In order to explore the sustainability of what the TBAs have gained and have started practising, the common forum between them and the Health Centre workers will in turn be evaluated. An anticipated financial problem regarding the sustainability of the common forum with the TBAs was highlighted by one of the participants.

‘Yea, common forum between TBAs and Midwives is a good idea but the problem is that … like we said earlier, our people here like free things. It might be difficult to sustain it if there are no financial gains for the TBAs, for example, they might need money for transportation’ (DMW.FG8.04).

To forestall that problem, he suggested that the government could be approached for financial assistance to sustain the meetings.

‘It would be a good idea to approach the government for funding to pay the TBAs transport to the meetings’ (DMW.FG8.04).

Having discussed the evaluation of the TBAs’ training, I now present the outcome of the career counselling.

**Career counselling**

Consideration was also given to how students responded to the career counselling which aimed at motivating them to consider Midwifery as a career, as a long-term plan of trying to solve the problem of appropriate staffing in the Health Centre; though this was thought to pay off in the future. Generally, this did not evaluate positively because the students were mostly arts students while midwifery training is science based.

It is important to note that no special interviews were done for this purpose during the evaluation because, naturally, we got the students’ responses during process of the action. The typical response is as shown below.

‘We are not taught science subjects in the schools here because there are no equipment. Our schools offer arts and commercial subjects, unfortunately this does not give us the foundation needed for Midwifery Training’ (student 1).
This response was supported by the other students.

However, a mother who had been involved with this project later discussed with me about the interest of her son in becoming a nurse and midwife. She had apparently discussed the issue with her son when he was later available. The boy attends a Secondary School in an urban area and he is a science student.

‘Following the programme that you had with the students, my youngest son who is in the senior secondary school has told me that he is interested to become a nurse and midwife. He is a science student’ (Int.05).

There is no Secondary School in the study area. This situation was a limiting factor for the students to consider any science based career, for example, Midwifery.

In summary, the evaluation of the actions in this project, which include community education, TBA training, common forum between TBAs and the midwife /health workers, indicate positive outcomes. For example, the people expressed that they have gained a lot from the programme which means that value has been added to their lives. They also talked about the actions they would take to prevent maternal deaths. Testifying that they have become more enlightened even to the extent of knowing and being concerned about what request to make for help to reduce or prevent maternal deaths. Overall, these constitute signs of empowerment which this study has set out to achieve.

Unlike the gains attested to at the level of individuals, no change was observed in the Health Centre in terms of improving its state of readiness to provide maternal health care. For example, there have been no new supplies of furniture and equipment like forceps to work with.

In spite of the deficit in the Health Centre, tangible changes are already being observed in the community by the people. These are said to be the results of the actions undertaken in this project. They include positive changes observed by the professionals, members of the community and the experiences shared by the people.
7.5 Changes already taking place in the community due to this project

(i) Observation by professionals

‘I have experienced an improved attendance at the Antenatal Clinic by women from Ekpri-Ikang. Before now, in one month, we might have about two to three women from that community attending the clinic but now it has increased to about ten to twelve. Their attendance has really improved’ (DMW.FG8.01).

It was also reported that there is an increase in the number of women from this community who have started attending the antenatal clinic for care during pregnancy. Strangely, a TBA had to take her clients who were not reported as having any complication, to register at the referral hospital.

‘Last month, a TBA from a Church in that community brought two women to register in the Antenatal Clinic of this hospital. She said that she always likes women to receive antenatal care in the hospital and they may choose to be delivered by her or in the hospital. She stayed through with the women until all the antenatal procedures were carried out. The TBA was so enlightened’ (DMW.FG8.01).

The findings from the members of the community corroborate the findings of the midwife at the referral hospital. This attests to the positive impact of the community education and TBA training.

(ii) Observation by members of the community

‘We have received a lot from this programme. When I went to the health centre, I saw that many of our pregnant women are now attending the health centre for care. Now things are changing and people are rushing to the hospital. If they do not have money, they call on friends to help with payment of hospital bills… Yes, after the education programme, things have started changing and people are seeing the need to attend the hospital’ (H.FG1.02).

‘I even overheard a TBA advising a pregnant woman to go to the hospital. That showed that what you have done here was very good and it has touched everybody’s life’ (H.FG1.02).

The clergy were also heard advising pregnant women to attend the hospital for care in spite of the labour room in their church.

‘this project has influenced the way some things are now done in the community. Some Pastors now preach about this in their Churches. You know most Churches
here conduct prayer and fasting for their members and also have labour rooms where women can deliver. I was happy to hear a Pastor preach about this and advising the pregnant women to attend the hospital for care in spite of the labour room in their Church’ (FG1.02).

Another participant confirmed that the clergy are now encouraging the women to utilise the hospital services.

‘I also heard this and I believe that other Pastors who attended this education programme are doing the same in their church. I believe that the TBAs are deeply touched by this programme’ (H.FG1.04).

The change beginning to happen appeared not to be limited only to the pregnant women, TBAs and the clergy. The cross section of the community has been involved in the process and this was evident in the experiences they shared with other people about the community education. Undoubtedly, these serve as multiplier effects for the interventions.

(iii) Sharing Experience

‘after the education session, on getting home, I discussed what I learnt with my wife and other family members. They were very excited about this’ (H.FG1 01).

‘I told my wife of everything I heard from this programme. Like that woman I told you about earlier, being a TBA, I asked her why she did not attend the training because majority of the things discussed would have helped her a lot. Not only to conduct deliveries for pregnant women but she would have learnt other things that would help her keep her delivery room clean… The little I gathered from this project would help me tell such TBAs to refer their clients to the hospital whenever there is a problem’ (Int.02).

‘When I went home to share the idea with my wife, she said eh, so you are now leaving pastoral to health job’ (Int.01).

A clergyman also spoke about how actively involved he is in the education that he has incorporated it into his church programmes.

‘...in fact I now incorporate this in the Sunday schools. I handle most of the teachings in Sunday school because it is interactive. I teach about the Christian home. Under this, I teach about the man, the woman and the children. This education has opened the eyes of the people’ (Int.01).

‘... during the women’s week (in the Church), the women actually scheduled a date for healthcare teaching. They invited nurses who taught them how to take care of themselves during pregnancy and after delivery as well as taking care of the child.
It added colour to the programme. Since it was church programme, both the married women and the young ones were there. I think I have decided that from time to time, I have to key in these teachings to help those who were not there (at the community education programme). It should be a yearly event if not quarterly event. That is at least three times a year if not four times a year’ (Int.01).

In addition to the changes observed by the participants, I also made the following remarks in my diary with regard to some phenomena which started emerging in the community as a result of this project. During one of our meetings, about four months into the study, the co-researchers drew my attention to a development which they were pleased about in the Health Centre which had not been functional for about fourteen years. A member of the action research group who was pregnant had started attending the Health Centre for antenatal care. I commented in my diary (September, 2009) thus:

‘It appears that the induction programme for the action research group coupled with the community education is beginning to challenge the childbirth practices of members of this community and revive some confidence in the Health Centre.’

In a further development, another member of the action research group who is a clergyman, organised Church programme for the women and invited health professionals to speak on ‘care during pregnancy and how to prevent maternal mortality’.

In September, again I noted:

‘the community has received a stimulus through the action research to begin to take independent action to prevent maternal deaths. This will extend the duty and vision of the action research group to a wider population than we initially envisaged because people from neighbouring communities attend the Church.’

Again, the woman who started attending the Health Centre for antenatal care scored another landmark by having her baby successfully in that facility in October, 2009. This was followed by another woman in the community who also started attending the facility for antenatal care. I commented again in my diary:

‘this recent practice of attending the contemporary health facility for care during pregnancy and delivery is a welcome development because it now gives women the opportunity to be attended by skilled birth attendants and I desire that this would be complemented by the government to try to equip the health facility. I am concerned about a possible feeling of disillusionment by the people, if their effort is not complemented by the effort of government’.

Following the positive attributes as discussed, accorded to the action programmes by the members of the community, there was a consensus that this project should continue so that they would get more enlightened.
7.6 Continuity /Sustainability

‘Generally, the people, including myself, want this programme to continue (Int. 07).

‘I will like this programme to continue because personally, I like to hear about new things. This would help in our teachings in the Church and the community at large. From this we can help women prevent problems in childbirth’ (C.FG4.05).

‘this programme has already started and we have seen that it is good, so I appeal that it should continue’ (H.FG1.01).

‘We would like the continuation of this education from time to time’ (H.FG4.06).

‘the programme should continue, about twice every month and it should involve the older and younger women’ (YW.FG2.01).

The TBAs would also like this programme to continue for example,

‘Yes, we want it to continue so that we can gain more knowledge’ (T.FG6.03).

A community leader expressed the role the community would play to facilitate the continuity of the project.

‘we want it to continue so that more people would participate in the education programme. We would like another round of the education. When it is time, we will ask the Town Crier to ring the bell and gather the people because not all the women took part in the programme. All of them should take part including the young girls. These things were hidden from us in the past…’ (CL.FG5.03).

An older woman (menopausal/mothers-in-law) would like this programme to continue and pledged full involvement in it.

‘This programme should continue because many of us have been enlightened through it. I also indicate that as it continues, we the older women would want to be fully part of it so that we can instruct the younger women on how to care for themselves to prevent death during pregnancy and delivery’ (MLMW.FG7.01).

A reason given for the request of continuity is that, this programme is seen as an eye opener and it is appreciated by the people.
‘Yes, it should continue. It is a project that has really opened the eyes of people’ (CL.FG5.03).

‘We need to have this programme all the time so that it will help our youths to see the need to avoid teenage pregnancy’ (C.FG4.06).

‘This programme should continue. It is a good programme that has brought enlightenment to us. I want to add that our people generally appreciate it’ (MLMW.FG7.04).

As part of the continuity, the TBAs were looking forward to their meetings with the contemporary health practitioners.

‘we are looking up to the meetings between us and the health workers. This is a welcome development. We have agreed that it should be a monthly meeting’ (T.FG6.02).

Continuity of the programme would enable the action research group members to become part of the common forum between the TBAs and health workers so that they could monitor the activities of the TBAs.

‘I feel that the programme should continue... we should join them (group for TBAs and midwife) so we can help remind them about all that we have discussed during the TBA training programme. I feel we should be part of that group to encourage the TBAs to make use of all the materials in the kits they were given. For example, they should make the women use proper sanitary pads and stop using toilet paper and old rags to absorb blood during the period after delivery. Those other things the women use, like toilet paper and pieces of old cloths can cause more diseases to the women (Int.03).

Continuity of the programme was seen as a necessary strategy to reinforce what the people have learnt and implicitly change their beliefs. This was compared to the strategy used in the prevention of HIV/AIDS.

‘Yes. It is necessary to continue this programme so that what the people have learnt would be reinforced. With time it might help to change some of their beliefs. This is like the strategy we are using to prevent HIV/AIDS. The people’s awareness is increasing because of sensitisation about HIV including the complications and the statistics. We are also involving the Leaders and the clergy’ (DMW.FG8.04).

As many people clamoured for the continuity of this project, an issue was raised as a
limitation to its sustainability. To this effect, some suggestions were made which included looking for help from both within and outside the community.

‘In as much as I would love this programme to continue, I would like to know how it would be sponsored. We have been told earlier that this project is not sponsored by the government but by Mrs EE. For this to continue, we need sponsorship. We should enlarge this programme by declaring publicly in the market place about what we have learnt by using a vehicle with loud speakers. We should even think of moving beyond our community to more communities, especially those that are more rural than ours. People from more interior villages, who come to our market would also benefit from this programme if we declare it in the market place because they have not heard about this issue. So, we need to use megaphones, somebody can provide petrol for the car that would be used and with this we can move as a team from one place to another, giving talks about deaths of pregnant women and how to prevent them’ (H.FG4.06).

‘We should not go back into a lukewarm attitude. Although this project started as an individual’s idea, it can become the entire community’s project. If this programme dies, our situation will get worse. Now that we have reached this level, there should be no going back. I advise Mrs EE that she should see how this project can be taken up by the Nigerian Government. NGOs can help us. Like the last speaker (FE) said, a body should be established. Let this be a continuous exercise so that we can fight this issue of women dying and reduce it to the barest minimum and if possible, stamp it out’ (C.FG4.03).

‘Well, to start something is one thing to sustain it is another thing which is very important. The beginning is not the main thing but the end. So I believe that if we can ask the government or any Health NGO, even World Health Organisation or UNICEF, you can reach out to them calling for assistance. We will be able to sustain this programme because I think it should be a yearly event... with money, this programme can come to stay’ (Int.01).

‘This programme should continue and I plead that government should finance it’ (YW.FG2.03).

To add to funding for sustainability, further suggestions were made to ensure the programme continues. These included forming a committee to oversee the activities of the action research group after I had disengaged and also acquiring an office as the base from which the action research group can operate. Unfortunately, an office could not be acquired until I left the field, because of lack of funds. However, I introduced an NGO to the community which could facilitate community education as scheduled by the
community. Members of the action research group did not see the need to appoint another committee because they saw themselves as a steering committee.

‘…the group (action research) should be funded to be able to work effectively. A committee should be formed in the community to oversee the work of the group working with you. Funds should be provided for them to carry out the education programme from time to time. Professionals should be invited assist in the education’ (H.FG1.01).

‘Also I believe we should even create an office, even though it is a rural area, we can make a small office...this people do not have a town hall, they could have given us an office where we could use as a contact point, so that we could be operating from there. We have to move on, reminding the members of the community about the education they received during the programme. Having an office will really make the people know that, oh! this thing actually has come to stay... we will also play the role of asking the government to supply the necessary equipment to health centre. I think that with money, we can sustain it, we can maintain an office, it should be continuous programme and it should not end. There is no need for a new committee because we are already like a committee’ (Int.01).

The people generally appreciated the interventions because the various groups have been enlightened by the programme. As a result of that, they desired that the project should continue. The issue of finance was raised as an important factor to sustain the continuity and in this regard, various suggestions were made including getting help in kind, for example, petrol, from volunteers in the community to facilitate fuelling a vehicle to use for dissemination of the education message. The exploration of other avenues like the government and non-governmental agencies were also suggested. Although most people appreciated the project, there were a few who appeared not to be interested in it, for example, the TBA who warns his clients not to attend the hospital as well as another female participant who said that the hospital does not have solution for maternal deaths. Comments from these were presented in the fact-finding phase.

7.7 Summary

In this chapter, evaluation of the actions was carried out. Participatory evaluation was utilised and this was to ensure that members of the community were engaged in making sense of the interventions and evaluating things that matter to them (Greenwood and Levin, 2007). To this effect, focus group and individual interviews were undertaken to elicit the
perspectives of the members of the community as well as professionals from the referral hospital. Analysis of the evaluation data showed positive outcomes for some of the actions for example, the community education.

The actions were described as enlightening. The data revealed that the people gained new ideas which have added value to their lives, for example, getting to identify the actual causes of why some women die during pregnancy or childbirth, thus, repudiating their myth of associating every maternal death with the handiwork of evil forces and marital infidelity. The ideas gained, has influenced certain practices related to childbearing. This was indicated in the people opting to do some things differently, for example, seeking the help of skilled birth attendants as opposed to TBAs and when inevitably the women are attended by TBAs, they should be referred promptly if complication occurs. Similarly, the religious practice of fasting, was said to be unnecessary for pregnant women. Nonetheless, there was an odd situation where a woman said she would still fast but with reduced number of hours.

The enlightenment has also stirred up the people to begin to consider what they can do as a community and also what help they can ask from the government and other agencies to improve the situation of relevant facilities in their environment as a means of prevention of maternal deaths.

Notably, some changes became apparent following the actions. These included increased uptake of contemporary health services for maternity care. Further changes were reported by the members of the community. For example, the TBAs have started identifying and referring women with problems which could be potential sources of complications, for example, 'small waist' (small pelvis) and multiple pregnancy. The clergy were also incorporating the ideas obtained from the community education in their teaching to the congregation.

Following the wide acceptability of the action programmes and comments on their enlightening nature, the community asked for its continuity and attempted to address the issue of sustainability which inevitably requires funding. Suggestions were made towards request of funding from the government, Non-Governmental and Multinational agencies.
In addition to the constraint in funds already discussed, other problems were also identified as potential obstacles to the overall success of this action research project. For example, the issues of human and material resources were not resolved. Only one midwife is available at the Health Centre and there are still no basic equipment for use during delivery. The question then arises about how the Health Centre can provide a service that matches the new status of members of the community who are now attesting that skilled birth attendance is preferable to TBA.

Having evaluated the interventions, I would now like to proceed to the next chapter to discuss the findings of the whole action research project.
CHAPTER EIGHT
CHAPTER EIGHT
DISCUSSION

8.1 Introduction

The findings of this study as placed in the context of other studies will be discussed in this chapter. Owing to the peculiar nature of action research which involves cycles of activities as previously discussed in Chapter three, these findings were obtained from both the fact-finding and evaluation phases of the project. Therefore, an overview of these will be presented prior to the discussion. The aim of the discussion is to compare the findings of this study with existing literature. This is to determine how this thesis corroborates with or differs from others. Furthermore, this will determine how this study has contributed to knowledge.

8.2 Overview of findings

8.2.1 Phase 1

The objective of Phase 1 was to explore the perspectives of the members of the community on maternal mortality. These included their knowledge, attitudes and practice towards this issue. The findings were categorised into the following themes: causes of women’s death during the process of childbearing, birth practices, issues with health facilities and systems, attitudes towards maternal deaths and prevention of maternal deaths.

Data revealed that the members of the community had an idea of the actual causes of maternal deaths, for example, bleeding, trapped (retained) placenta, ‘convulsions’ (eclampsia), infection and complications of abortion although none of them, except the group of health care professionals, mentioned obstructed labour as a cause of death. They however attributed these causes, to the handiwork of evil persons and evil spirits like witchcraft. Other superstitious beliefs included nutritional taboos and maternal death as punishment from the gods for marital infidelity. Certain religious practices like fasting, ‘false’ prophecies against hospital deliveries and other religious influences resulting in outright rejection of hospital care during pregnancy and delivery, were also mentioned as causes. Hospital delivery from the perspectives of the lay members of the community is synonymous with skilled birth attendance. Some birthing practices such as pregnancy of teens younger than sixteen years, traditional birth attendance and lack of decision-making
power by most pregnant women, were identified by the action research group as contributory factors. Other contributory factors included poor state of both the traditional and contemporary health facilities in the community. Generally, the attitude towards maternal deaths was that of sadness, fear and helplessness, although a few people would want to help if possible. On the contrary, some people saw such deaths as well deserved penalty for the stubborn woman or unfaithful wife.

From the perspective of the community, preventive measures included prayer, fasting, and moral instruction to avert teenage pregnancy. Others were free healthcare for pregnant women, attitudinal change by healthcare professionals, training of TBAs and community education. In addition to these, contemporary health service with well-equipped facility and staff was also mentioned.

Consequent on the fact-finding, critical reflection on the data was undertaken by the action research group, resulting in the decision to take action as an attempt to solve the problems identified in Phase 1. The actions as planned by the action research group, consisted of community education on maternal mortality; training of TBAs; creation of common forum for TBAs and Midwife/health workers; career counselling of students/youths to sensitise them about Midwifery and advocacy meetings with the Chairman of the Local Government Council, the Council of Chiefs in the community, the Commissioner for Health and the Commissioner for Social Welfare. The outcome of these actions was evaluated from the perspectives of the people, as explained in Chapter Six. An overview of the findings from the evaluation is hereby presented subsequently.

8.2.2 Findings from the evaluation following action in Phase 2
The evaluation aimed at determining qualitatively the impact of the actions undertaken on the people. This yielded positive results in most aspects as an indication of empowerment following the actions. Findings in this phase were discussed under themes as follows: new knowledge, new way of behaviour, expectation from others, value added to life and tangible changes. The people attested to the acquisition of new knowledge about maternal deaths and superstitious beliefs formerly held as causes of maternal deaths were being repudiated. Based on the new knowledge, there was manifestation of a change of some birthing practices, for example, more pregnant women were now seeking care from skilled
birth attendants. TBAs were reflecting the new learning in their practice through referring those with problems to the hospital.

Some other members of the community also manifested evidence of having been influenced by this project. For example, the clergy started incorporating ideas from the community education into their church programmes and some who have labour room in their church also encouraged hospital delivery. However, there were few people who, though appreciative of this project, still opted for slight modification of their previous behaviour, for example, continuing with fasting in pregnancy but with reduced hours from what it used to be previously. Also, a few more, from their religious point of view, expressed that skilled birth attendants and contemporary health service do not have solution to maternal deaths.

From helplessness and hopelessness concerning what to do to prevent maternal deaths as manifested in the Fact-finding Phase, the people now began to express commitment towards prevention of women from dying in the process of childbirth. This was obvious in the commitment to provide means of transportation by the Chiefs whenever there would be an obstetric emergency, to transport the woman to the hospital. Also, they promised to put pressure on the Government to equip the Health Centre as well as pool their effort to provide some equipment for the health facility within their ability. On the whole, the people reported that they would like this project to continue so that the new knowledge would be reinforced. They considered the project so important that other communities should have the benefit of similar projects. Continuity of the project, as acknowledged by them, would require funding which should be sourced from outside the community. Following the overview of my findings, I now turn to discuss literature as they relate with these results.

An action research model emerged from this study and is presented in the figure below. This demonstrates the status of the people about maternal mortality as reflected in their perceptions, environmental and financial situations in Phase 1. Following the actions in Phase 2, Phase 3 presents the new situation of the people.
Figure 8.1
Diagrammatic presentation of the findings of the study

FACT-FINDING PHASE

Causes of maternal deaths
Maternal health problems
Superstitious/religious beliefs and practices
Nutritional taboos
Other socio-cultural factors
   Attitudes
   Birth practices
Lack of money
Physical environmental factors
   Lack of transportation
Poor health care system and facilities

EVALUATION PHASE

Empowerment
   New knowledge
   New practice
   Positive attitude
   Value added to life
   Collaboration
   Informed requests for help
Emancipation
   More collaboration
   Helpers/advocates
   Continuity/diffusion of innovation
   Sustainability

ACTION PHASE

Community education
TBA training
Common forum (TBAs and Midwife/other health workers
Lobbying/advocacy
Career counselling

Collaboration
Informed requests for help
Emancipation
More collaboration
Helpers/advocates
Continuity/diffusion of innovation
Sustainability
The findings of the study as reflected in this model, based on the themes from the fact-finding and evaluation phases as well as the actions taken, will now be discussed with the view to how they relate with existing literature.

8.3 Causes of maternal deaths
From the perspectives of members of the community, several factors were identified as causes of women’s death during the process of childbearing. These are discussed sequentially.

8.3.1 Maternal health problems that result in death
The people identified some obstetric conditions as causes of maternal mortality. These were bleeding, retained placenta, convulsion (eclampsia), abortion, prolonged labour and infection. They also mentioned some medical conditions like malaria, HIV/AIDS, hypertension, typhoid fever and ‘lack of blood’ (anaemia). They did not mention obstructed labour, however, this was mentioned in the focus group of the health professionals. The implication of their knowledge of the causes of deaths mentioned is that, the people are aware of some health problems that can lead to maternal deaths. Similar studies carried out in rural parts of Nigeria to identify the perception of the people about causes of maternal deaths corroborate these findings (Kawuwa, Mairiga, and Usman, (2007); Igberase, Isah, and Igbekoyi (2009); Adegoke, Ogundeji, Lawoyin, Campbell and Thomson, 2010).

Contrary to the awareness exhibited by the people of some physiological conditions, was that they attributed the underlying causes of all the mentioned complications to superstitious beliefs that super human forces like witchcraft and other evil spirits were responsible. As explained by Harris and Johnson (2000), such beliefs are common because members of every society believe that invisible life forms also live within the visible tangible human bodies. Another of such belief is that invisible and extraordinary beings co-exist in the world with humans. In this context, these intangible beings are termed the evil spirits. Attribution of the health problems that result in maternal deaths to such spirits, creates doubts about the quality of knowledge that the people had exhibited earlier. It
implies that these superstitious beliefs are enshrined in the culture of the people. Traditional African belief in witchcraft and other evil spirits to afflict women in pregnancy and childbirth, have been widely discussed in literature (Izugbara, 2000; Chiwuzie and Okolocha, 2001; Umoiyoho, Abasiattai, Udoma and Etuk, 2005; Osobor et al, 2006; Mboho, 2009; Adegoke et al, 2010;). These superstitious beliefs will now be discussed under sociocultural factors.

8.3.2 Sociocultural factors
8.3.2.1 Superstitious beliefs
Having read through some of the literature, it becomes apparent that the reliance on superstitious beliefs is not consistent across Nigeria. One of the factors which influence these beliefs, is the level of education. It has been found that the lower the level of education, the less likely people are able to make accurate judgement about potential danger of symptoms (Egwu and Obot, 1987; WHO et al, 1999). Data showed that the members of the community believe that pregnancy is the period in a woman’s life when she is most vulnerable to attack from evil spirits through the manipulation of wicked persons. Pregnancy is also seen as a time for retributive justice for the unfaithful wife, insolent woman and also as a time to kill a wife as punitive measure on a husband who did not fulfil the traditional marital rites due the woman’s parents. Similar findings were obtained by Umoiyoho et al (2005) and Mboho, (2009). These superstitious beliefs appear to prevail over the knowledge which the people previously showed and therefore, highlights ignorance of the real causes of maternal deaths and the strength of these beliefs (Adegoke et al, 2010). This scenario has a major implication for the prevention of maternal deaths because superstitious belief influences the people’s decision on choice of type of birth attendant and place for care during delivery as well as type of treatment in the event of any complication (Osobor et al, 2006; Adegoke et al 2010).

In this study, most of the women interviewed were attended by TBAs and in the Church during pregnancy and delivery as decided mainly by their husbands/relatives and Pastors/Pastor’s wife respectively. As discussed in a previous chapter, the TBAs and church are said to have antidote against maternal complications and the power to ward off evil spirits respectively. In some situations, due to the belief in the supernatural as cause of the complication, some participants have been found to out-rightly reject contemporary health service because this is considered incapable of solving their health problems, thus,
they resort to TBAs, other traditional healers and religious rituals (Okafor and Rizzutto, 1994; Okolocha et al., 1998; Fatusi, 2004; Osubor, Fatusi and Chiwuzie, 2006). Whereas, evidence has shown that 80% of maternal deaths are preventable, given the right interventions which include skilled birth attendance and emergency obstetric care (van den Broek, 2007).

In this study, the people had ascribed labour that is unduly prolonged to either locking of the womb by evil spirits or punishment by the gods of marital infidelity, therefore, traditional means were sought to unlock the womb. As confessed by one of the participants, these remedies have never been successful. In spite of these failures, most of the people still opted for these purported remedies which imply the supremacy of their cultural belief. This belief factor, in essence, is a crucial factor that should be addressed in the prevention of maternal mortality in this and similar settings. So far, to the best of my knowledge, no programme for the prevention of maternal mortality has addressed the influence of people’s belief as a factor in maternal deaths in Cross River State, including Bakassi Local Government area in Nigeria. Preventive programmes have emphasised skilled birth attendance and the provision of emergency obstetric care (WHO, 2004).

Apparently guided by their superstitious beliefs, most of the women claimed that the TBAs and church were better in meeting their maternal healthcare needs for reasons previously stated. Mboho (2009) found that the main reason for preferring the TBAs and perhaps church by the women, is that they perceive such facilities to be hiding places from evil spirits. Ironically, in this study, they stated that the best place to attend, anyway, in the event of complications, was the hospital. This supported the finding of Osubor et al (2006) that, the secondary health facility and a private but contemporary hospital in their study setting were mostly attended only when women experienced maternal complications. As would be expected, this referral would be done when the TBAs may have tried out and exhausted all their ‘antidotes’.

Abodunrin, Akande, Musa and Aderibigbe (2010) found that 90% of TBAs who got their skills by inheritance, did not refer their clients appropriately as compared with those who acquired their skills through training. In this study, some TBAs said that they got their skill by inheritance, while some claimed it is a spiritual gift obtained through prophecy in the church. Etuk et al (1999) classified such churches as spiritual churches and they observed
that the birth attendants in such places claimed that they were trained by the Holy Spirit. Inappropriate referral obviously would result in delay in the referral to skilled attendants, as was observed by the doctor and midwives at the referral hospital during the fact-finding phase of this study. Usually in such situations, the women are referred to the hospital in a very bad state when little or nothing could be done to help them (Asuquo, Ottong, Olaniran and Duke, 2002).

Delayed referral to a contemporary health facility which can provide emergency obstetric care has been widely acknowledged as one of the major contributory factors to maternal mortality (Schmid, Kanenda, Ahluwalia and Kouletio, 2001; Hofman et.al. 2008). Three levels of such delays have been identified in literature and they are: delay in decision to seek care; delay in reaching a health facility that provides emergency obstetric care (EmOC) and delay in receiving adequate care from such facility (Hofman et.al.,2008). It was observed in this study that the TBAs delay in making decision to refer their clients because they claim to have remedies for complications that could arise, for example, a TBA said that she administers a special concoction of herbs and ‘ndom’ (type of clay) as enema or drink to treat postpartum haemorrhage. There was no indication that the remedies were effective. The proof of efficacy of the TBA’s claims is not documented in literature, to the best of my knowledge. Such proof was not also pursued in this study because there was no opportunity to observe a woman with post-partum haemorrhage under TBA’s care. This might highlight a focus for a pharmacological research. Another TBA had also said that she only refers the clients who are weak to the hospital. This might be an indication of a worsening client’s condition. These examples are typical of delayed decision-making.

Further findings in this study showed the belief that prolonged or difficult labour is caused by either marital infidelity or locking of the womb by evil persons through spiritual means. The solution employed by the people would entail confession by the woman if infidelity is alleged or in the case of locked womb, consulting a witch doctor to unlock the womb. Chit (2007) had posited that the underlying knowledge and belief system are important factors that influence the individual’s view of the world and social identity. Put differently, the individual is a product of socialisation in which the cognitive process which controls behaviour is influenced by the cultural environment. Apparently, from the point of view of contemporary science and health care professionals, these superstitious beliefs expressed by the people, are signs of ignorance and they prevent
or delay the opportunity of seeking help from skilled birth attendants, thus increasing the chances of occurrence of morbidity or mortality (Schmid et al, 2001; Hofman, 2008; Adegoke et al, 2010). From scientific perspective, prolonged labour beyond eighteen or twelve hours in the primigravida and multigravida respectively (Henderson and Macdonald, 2004), could be caused by a range of factors which include cephalo-pelvic disproportion, abnormal lie of the foetus such as oblique or transverse lie, macrosomia as well as inefficient uterine action (Henderson and Macdonald, 2004). All these conditions can be adequately managed to prevent maternal deaths. Details of the aspects of delay as it pertains to reaching a health facility with emergency obstetric care and receiving prompt treatment will be discussed in the appropriate sections of this chapter.

Identical with the superstitious beliefs are some religious beliefs and practices and these are discussed subsequently.

8.3.2.2 Religious beliefs/practices

Certain religious beliefs and practices were found to influence safe maternal healthcare. These include some churches discouraging their members from hospital deliveries by injecting fear into the pregnant women through ‘false’ prophecies that hospital delivery would lead to their death, particularly if they have a caesarean section. Based on the belief that the pregnant woman is vulnerable to attack of evil spirits, as mentioned previously, such churches proffer the provision of spiritual security to the women through subjecting them to fasting for about twelve hours daily for about seven to fourteen days at a stretch. In addition, some churches would also give the women a special ‘assignment’ which involves a clergy giving the pregnant woman a bath with a ‘special’ soap and water at midnight. These practices prevent the pregnant woman from seeking the services of skilled birth attendants. It is important to note that such practices are common in churches known as ‘spiritual or prayer houses and their Pastors are less well educated (Etuk et al, 1999). I do not know how many Churches that practice this in the study setting because no one admitted to this. The information was provided during a focus group discussion with the clergymen who complained about such practice.

Religious pronouncements are unquestionably accepted because they are believed to be sacred and portray a sense of certainty (Harris and Johnson, 2000). Etuk et al (1999) noted that prophetic warnings from the Spiritual Churches injected fear of spiritual attack into the pregnant women, thus making them not seek the care of skilled birth attendants.
Subjecting the pregnant women to fasting deprives them of adequate nutrition which is required to support the physiological demand of pregnancy and childbirth (Harding, 1999; Henderson and Macdonald, 2004). The practice of discouraging the women from utilising the services of skilled birth attendants exposes the women to unskilled attendants which increase their risk of dying due to childbirth. As observed by Etuk et al (1999) more maternal deaths occurred in church than at the TBAs. In another study, Fubara, Ikimalo and John (2007) found that majority of maternal deaths occurred at the TBAs’. These authors confirmed that, overall, it was safer to have deliveries attended by skilled birth attendants.

From my observation, the churches involved in these practices belong to a particular Christian religious sect, mostly attended by people with low or no formal education and their clergies similarly do not also have good formal education. With this background, they can hardly read and understand the Bible, therefore, they appear to thrive in the ‘so called’ prophecies and visions which they claim are revelations from the supernatural. They appear to provide a safe haven for the people whose beliefs are already saturated by the presence of evil spirits to cause harm to pregnant women. Further research is required to understand more about the characteristics of the people who attend such churches.

Osabor et al (2006) found that perception of the aetiology of pregnancy-related problem was a major deciding factor in the choice of place for healthcare, for example, if the problem was thought to have spiritual or traditional origin such as witchcraft or other evil spirits, the people believed that such would be best handled by traditional healers and spiritualists (Harrison, 1997; Asowa-omorodion, 1997; Etuk et al, 1999; Fatusi, 2004; Osabor et al, 2004 and Adegoke et al, 2010). As an adjunct to the superstitious beliefs and religious practices, nutritional taboos were also highlighted as predisposing factor to maternal morbidity and mortality.

8.3.3 Nutritional taboos
Nutritional taboos for pregnant women were also observed in this study. These are also an important indicator of the degree of ignorance among the people. It was found that TBAs perpetrate this, whereas, the health care professionals do not do that. Certain nutritious foods like beans, snails, okro, milk and chocolate drinks were forbidden in pregnancy for fear of their consequences on the baby. This practice deprives the women of essential
nutrients. Whereas, beans and snails are widely available and affordable sources of protein and okro is cheap and available source of vitamins and mineral salts. Other sources of protein which include, meat, poultry and milk are expensive and so, not easily affordable, given the socio-economic status of the members of this rural community who express that they are poor. Thus, food taboos have the implication of malnutrition which could serve as a predisposing factor to severe anaemia, thus making the woman more susceptible to postpartum haemorrhage and sepsis after delivery (McCarthy and Maine, 1992; Okolocha, Chiwuzie, Braimoh, Unigbe, and Olumeko, 1998). This practice, coupled with the religious practice of fasting, place the pregnant woman’s health in a critical situation.

8.3.4 Other social factors
Some other social factors were discussed by the community members as also being contributory to maternal deaths. These included seeking marital security or having a fairer deal in marriage by implicitly competing with co-wives through having many children to out-do the others in a polygamous home. Another factor is the seeking of a child with a particular sex, most commonly son preference. In an ethnographic study of maternal mortality in Nigeria, Mboho (2009) found that giving birth to children attracted gifts from the husband and so, some women would want to have many children which obviously mean more gifts to them.

Male-child preference has continued to be a social issue in some parts of the world and Nigeria in particular, despite the global movement on gender equity (Gray, Hurt and Oyewole, 1983; Pooler, 1991; Anyanwu, 1995; UN, 1995; Leone, Mathews and Zuana, 2003; Olaogun, Ayoola, Ogunfowokan and Ewere, 2009). This idea is said to have stemmed from the feudal views derived from the warring states of the middle age which holds that men are superior to women. This belief has continued to some contemporary societies in various parts of the world like China, India, Nepal and Africa. The major reason for the continuation of this preference in the contemporary world including Nigeria, is that men are seen as the heirs to family properties and they would perpetuate the family name whereas, females loose these privileges because they eventually get married and leave their natal families (Olunloyo, 1993; Liu and Gu, 1998; Bandyopadhyay and Singh, 2003).
In addition to son preference, lack of acceptance of birth control measures was identified as a problem because children were seen as gift from God (Mboho, 2009; Olaogun et al., 2009). The implication of all these is that the woman goes through pregnancy and childbirth several times to be able to achieve her husband’s and family’s desire. From scientific position, this practice invariably compromises the maternal health thus making her highly susceptible to complications like hypertension, diabetes, anaemia, postpartum haemorrhage, placental complications, fetal malpresentation, microsomia and preterm delivery (Babinszki, Kerenyi, Torok, Grazi, Lapinski and Berkowitz, 1999; Simonsen, Lyon, Alder and Varner, 2005). The reasons for high parity as found in this study clearly portray ignorance about the attendant risks of grand and great grand multi-parity. Like for the other behaviours that highlighted ignorance, this problem was mediated through the community education programme. It is difficult to change a belief but it is hoped that with time, the highlights of the community education would diffuse among the people and would make more sense to them.

Negative peer group influence resulting in teenage pregnancy with the consequence of either death from complications or poverty and lack of proper attention from parents and other relations, also has an important negative impact on maternal mortality (Fullerton, Dickson, Eastwood and Trevor, 1997 et al., 1997; Okonofua, 2000). The teenager is handicapped, not only with physical and psychological immaturity, (Shehu, 1992; Airede and Ekele, 2003) but also lacks knowledge and financial independence to cope with pregnancy, thus placing her at a high level in the risk continuum (Okonofua, 2000; Airede and Ekele, 2003). This situation is made worse, as observed in this study, where parents react by absolving themselves and sending such girls away from the home in anger, to nowhere in particular and with no financial support. Following the socio-cultural factors, attitudes towards maternal deaths will subsequently be discussed.

8.3.5 Attitudes towards maternal deaths 
Findings from the study showed several attitudinal dispositions towards maternal deaths. These ranged from sadness, fear of pregnancy, helplessness/hopelessness, sympathy and willingness to help to judgment for the adulterous woman. These findings, particularly, the state of helplessness/hopelessness and willingness to help exhibited by some members of the community portrayed how desperate the people were. This suggested that the people
were intrinsically motivated, thus, that depicted a state of readiness to take action that would ameliorate the situation if empowered. This claim is supported by an excerpt from the theory of motivation as follows:

‘No single phenomenon reflects the positive potential of human nature as much as intrinsic motivation, the inherent tendency to seek out novelty and challenges, to extend and exercise one’s capacities to explore and to learn... though humans are endowed with intrinsic motivational tendencies, there is evidence that support is required to enhance this’ (Deci and Ryan, 2000, p 69).

On the other hand, being judgmental on occasions that such deaths were well deserved, call for concern about the degree of ignorance imposed by some cultural beliefs as has been already discussed. Both major areas of attitudinal manifestations were considered as enabling factors for the education programme to prevent maternal mortality in this community. Evaluation of the community education showed that the cultural belief in marital infidelity, stubbornness or locking of the womb as causes of maternal deaths were being repudiated as expressed by the members of the community.

8.3.6 Birthing practices

Birthing practices identified in this community are hereby presented based on the following categories: age at first pregnancy; attendance in pregnancy and delivery; care of lochia, help in emergencies and control in pregnancy. The ideal age for first pregnancy and delivery was a controversial issue among members of the community. Many of the women of childbearing age had said that from the age of twelve years, it was safe for a girl to start having babies, while some men were of the opinion that eighteen years and above was ideal. The women supported their opinion by their personal experiences because some of them claimed that they started having babies from age twelve and thirteen. From obstetrical perspective, pregnancy in a girl below eighteen years is classified as a ‘high risk pregnancy’ because girls within this age group have been found to present with maternal complications include eclampsia, obstructed labour and complications of unsafe abortion (Fullerton et al., 1997; Okonofua, 2000; Airede and Ekele, 2003). A survey in Nigeria revealed that 50% of the maternal deaths occurred in adolescents (Ransome-Kuti, 1996). In this study, women who had their babies at the age of twelve and thirteen might find it difficult to understand why this age is classified as high risk. However, these women did not disclose if they had complications or not. Although such early teenagers, particularly,
those aged 14 years and below, are at a higher risk, literature suggests that not all of them would die of complications in pregnancy and childbirth because of some technological and social support, for example caesarean section to overcome an obstructed labour, as well as provision to deal with other obstetric emergencies (Mayor, 2004). In view of this community which is already resource-poor, the teenage mothers may not be as lucky because of all the odds working against them which include poverty, poor nutrition and lack of proper health-care resources. However, in view of the risk implications of such early teenage pregnancy, the action research group addressed it through the community education programme.

Another birth practice that was discussed, was the attendance at pregnancy and childbirth. Most women in this setting were attended by TBAs during pregnancy and delivery, some were attended by their Pastor’s wife in the Church, while some who had health problems would consult the local patent medicine dealer in the community for treatment. This scenario is typical of health-seeking behaviour by pregnant women in rural parts of Nigeria. Kruk, Rockers, Mbaruku, Paczkowski and Galea (2010) found that the quality of health service as perceived by the community, exert influence on the choice the women make to use it for delivery.

Osubor et al. (2006), in a study of another rural community in Nigeria, also found that most women preferred being attended by TBAs to skilled attendants. Other studies also observed that some women had their babies in the church (Esienumoh et al (unpublished), Etuk et al. , 1999 and Mboho, 2009). As already mentioned, about 67% of births in Nigeria, are attended by unskilled birth attendants (Ating, 1989). Only very few out of all the women of childbearing age interviewed, were attended by skilled birth attendants. On the other hand, Okolocha et al (1998) suggested that if modern health care facilities are upgraded to provide effective obstetric care, more pregnant women would be encouraged to use them, irrespective of their perceived causes of complications.

However, the choice of the place of care during pregnancy and delivery has been found in this study, to be influenced by the people’s cultural belief. The implication of this is that, since most of the women in this community are attended by unskilled birth attendants, they are at a higher risk of dying due to childbirth than those attended by skilled attendants. Etuk et al. (2000) found that women who were attended by unskilled attendants had a 3.5-fold more complications than those attended by skilled attendants.
That the TBAs and Church attended to most deliveries in this setting was a sensitive issue because this was observed to be influenced by the cultural beliefs of the people. As noted by (Okolocha et al, 1998; Van Dyk, 2001, Towle and Lende, 2008) attacking a cultural belief can result in resistance. To avoid resistance, we were careful about the actions undertaken in this study not to explicitly condemn the TBAs and the church for undertaking midwifery roles, rather, emphasis in the community education and TBA training was on the causes of maternal deaths and how they could be prevented. Our approach through community education was based on the proposition of Blumer (1969) that meanings have the potential of being changed during the process of interaction. Details of these actions were discussed in Chapter Five. It became increasingly clear during the evaluation, that skilled birth attendants became more favoured choice than the unskilled attendants especially when women experienced complications. Evidence of this was also seen in the renewed and increasing attendance at the community Health Centre by pregnant women. Pregnant women’s attendance at the Health Centre had increased from zero in 1995 (the past fifteen years) before the commencement of this project to 35 and seven for antenatal care and delivery respectively covering the period from October, 2009 to October, 2010 (Health Centre Records, Ekpri Ikang, 2010).

Although most of the participants utilised the services of unskilled birth attendants during delivery, there was a consensus to seek help from skilled birth attendants when complications occur. This finding corroborates that of Osbor et.al. (2006), who found that women with major maternal complications were referred to skilled birth attendants in public healthcare facilities.

While the pregnant woman is the one that will give birth, the decision about her care was found to be mostly under the control of other people (Mboho, 2009). The decision about choice of place of healthcare was mainly the prerogative of the husbands followed by other significant extended family members such as mothers/mothers-in-law as well as the Pastor and his wife. These persons mostly advised on the use of TBAs’ services. Such power relations in Nigeria were also observed by Shehu (2000) and Mboho (2009). However, this power relation is not true across all of Nigeria because better educated women are more likely to be autonomous (Osbor et al, 2005). Thaddeus and Maine (1994) found similar male dominance in the study of maternal mortality in Ethiopia, India and Tunisia. Studies in Nepal have suggested power relations also between mothers-in-law and daughters-in-
law. Mothers-in-law were found to have a strong influence on the uptake of health services because they see themselves as key decision-makers in perinatal care (Simkhada, Porter and Teijlingen (2010). Such key role played by these persons was an important factor considered in actions to prevent maternal mortality in this study. Thus, this project involved all these categories of persons in the community education to prevent maternal mortality.

I am not aware of any study on the prevention of maternal mortality in Nigeria which includes all the persons in the inclusion list as done in this study to involve them in finding out their local factors for maternal mortality before working with them to solve the problems. Therefore, that makes this study the first of its kind in Nigeria. With regard to prevention of maternal mortality, most authors have called for education of the people without specifically delineating those to be involved except for Iliyasu, Abubakar and Galadanci (2010) who suggested the involvement of men in maternity care through culturally sensitive community education.

Finally, in the broad category of causes of maternal deaths, ignorance of the main cause of maternal deaths was also highlighted by some members of the community. This was expressed as the dilemma of maternal deaths because they said that women attended by skilled birth attendants as well as those attended by unskilled attendants were seen to die from the process of childbearing. Attendance by skilled birth attendants does not guarantee total absence of maternal deaths though there is a better chance of survival for the women than if they were attended by unskilled attendants (Etuk et.al. 1999). Literature has shown that some emergency situations can occur during delivery in about 15% of women who apparently had normal antenatal period (Roseberg, 1981; van den Broek, 2007). The attendance of a woman by a skilled birth attendant in a facility equipped to cope with obstetric emergency is, therefore, an advantage over the unskilled attendant. As observed by Etuk et.al. (1999) in the study of maternal mortality related to place of delivery, most deaths occurred in the church, followed by the TBA’s facilities and the contemporary health facility was found to be the safest place for childbirth. Ignorance as frankly expressed by the women about what can lead to maternal deaths, was also mediated by the community education as already discussed.
In summary, although members of the community showed some awareness of the obstetric and medical causes of maternal mortality, but having based these on superstitious beliefs and opting for healthcare from unskilled attendants, portrayed ignorance to the actual causes of maternal deaths. Further behaviours which portrayed ignorance as observed, included the practice of high parity, neglecting pregnant teenagers. Ignorance in this study was addressed through the community education as discussed in a previous chapter, with the expectation that they would be empowered to take action to repudiate the unhelpful beliefs thus bringing about a change in their knowledge, attitude and practice to prevent maternal deaths.

Repudiation of beliefs was not expected to occur easily because this implies a change from what the people are used to. Kotter and Schlesinger (1979) remarked that change from the status quo often meet with human resistance owing to several reasons which include the following: fear of losing something valuable; lack of understanding the implication of the change; an impression that the change does not make sense to the people as well as poor tolerance of change. Furthermore, they also stated that individuals react to change in different ways ranging from passive resistance to aggressively trying to undermine the change or sincerely accepting it. However, to guard against resistance, they suggested that the potential resistors should be involved in the designing and implementation of change. This suggestion is a parallel to the principles of participatory action research which basically is involved with the process of collaborating with the people to empower them to bring about change that emanates from them (Reason and Bradbury, 2006; Somekh, 2006). In this study, as discussed in a previous chapter, some members of the community who volunteered to work with me as co-researchers, were fully involved in this project. The purpose of this was to ensure that they would become the change agents in their community. I now turn to discuss community education as a potential tool for change utilised in this study.

Community education

Education is universally acknowledged as a means of enlightenment which invariably develops the individual’s outlook to life. This point is also shared by Akande (2010), who posits that community education should address the issues of everyday life to bring about improvement of individual and social life. There is evidence that education leads to the development of positive attitude as was demonstrated by Dyson (1997) who found a strong relationship between these two attributes. Therefore, the provision of appropriate education
enables people to acquire knowledge and understanding of the situation of interest, thus develop positive attitudes (Dyson, 1997).

Community education in this project involved active participation of the people. This strategy was found to have some similarities with the approach of education or learning for sustainability as described by Tilbury and Wortman (2008), who described the approach as action oriented and learner centred. This idea took its root from Agenda 21 of the Earth Summit in Rio de Janeiro (UN, 1992) which stated that informal community education is an important requirement to increase awareness, build partnership and influence action which would encourage people to work for sustainability with the purpose of solving a problem (Tilbury and Wortman, 2008).

It is important to note that creating awareness alone cannot lead to changes in the behaviour of individuals to address the causes of prevailing problems and the challenges of sustainability (Tilbury, Coleman and Garlick, 2005; Fien and Tilbury, 2002). Therefore, for sustainability, community education needs to go beyond sheer awareness creation to the promotion of active learner participation in activities of visioning, critical thinking, clarifying values as well as making assessments or judgments (Tilbury and Wortman, 2008).

This idea of education for sustainability corresponds with the ethos of this study, and thus, action research at large, which has the overall aim of collaboration with and empowering the people to bring about change that is sustainable with the view to improving their situation. Details of the process of working with the community on the path towards empowerment and emancipation had been discussed in Chapter Four of this thesis.

Some authors have also successfully utilised participatory community education, working with the local inhabitants, as a means of creating awareness for sustainability to solve indigenous problems. Waterman, Griffiths, Gillard, O’Keefe, Olang, Ayuyo, Obwanda, Ogwethe and Ondiege (2007) in an action research project to reduce HIV-related stigma, employed this strategy with the purpose of raising the awareness of the impact of HIV/AIDS in the community. Another previous study in Nepal has also reported success in utilising the participatory approach maternal birth outcomes though, however, this was not by action research (Manandhar et al, 2004). In Nigeria, through a special programme on the prevention of maternal mortality, Shehu (2000) carried out a community participation
and mobilisation project. Her approach featured partial participation of the people because they were not involved in all the stages of the study, they were mainly mobilised to receive an education package that had been previously prepared by the researcher. No studies could be located that had employed a full participatory action research approach to prevent maternal mortality in Nigeria, making the present research, therefore, a unique project.

Evaluation of the community education indicated that the people had acquired new knowledge with regard to maternal deaths, which in turn has empowered them to start taking action to prevent such deaths. Evidence of this was discussed in Chapter Six.

8.3.7 Poverty
8.3.7.1 Lack of money

The issue of lack of money was identified by the community members as one of the leading causes of maternal deaths. Hospital service was seen as unaffordable because the people were expected to pay a fee on arrival for registration before they could be attended to. This also was presented as a reason for encouraging the utilisation of the services of TBAs which were thought to be cheaper. Poverty as a factor in maternal mortality, supports findings from other studies which identified financial constraint, user fees and poverty as issues mitigating against the utilisation of the services of skilled birth attendants (Asowoa-Omorodion, 1997; Lawoyin et.al. 2007; Adegoke et.al. 2010). In contrast, an ethnographic study, Mboho (2007) found that the TBAs were more expensive than the local hospital. Although some of the participants claimed that hospital fees were higher than the TBAs’, findings in this study too revealed that overall, hospital fees were found to be cheaper than those of some TBAs’ who generally get their fees by cash and in kind.

In this context, one could wonder if the poverty is only a mind-set or really genuine, given the fact that these are the same people who can afford to pay the TBAs. Admittedly, some TBAs were said to be flexible and accommodating to the women by not being fussy about their fees. The women had the liberty of paying what they could afford.

Poverty reduction programme was not addressed in this context because it is beyond the scope of this study. I am aware that the Government of the State, through the Ministry of Social Welfare, has embarked on poverty reduction in the rural areas in a programme tagged ‘Unconditional Cash Transfers’. This involved giving grant to families without established means of earnings to engage in trading to boost their income (Ministry of
Social Welfare, Cross River State, 2009). The poverty reduction programme is relatively new, barely about six months old before the onset of this action research and the extent to which it was effective and effect maternal mortality is beyond the scope of this study.

8.3.8 Physical environmental factors
Some issues that were based in the physical environment were also identified as potential causes of maternal deaths. These were lack of readily available means of transportation and health facility issues.

8.3.8.1 Lack of means of transport
Lack of transportation when needed particularly in emergencies and night labour was another contributory factor in maternal deaths which is also supported by literature (Shehu, 2000; Schmid et.al (2001; Hofman et.al. 2008). This was another reason presented as justification for the utilisation of unskilled birth attendants and is a very important factor in maternal deaths. This issue becomes more critical when a complication develops because it further delays reaching the hospital or emergency obstetric care facility, thus jeopardising the life of the woman. Some women in this community who developed complications in childbirth were said to have died while waiting to be transported to the hospital. This may not have been so critical if the TBAs had referred them in a timely manner. In the north-western part of Nigeria, an attempt was made to improve transportation of women during obstetric emergency by involving the local commercial transport organisation through giving the drivers an orientation on the need to assist the women in such circumstances (Shehu, 2000). The evaluation of that study reportedly showed a reduction in the delay due to lack of transportation.

In recognition of transportation problem and subsequent seeking of solution to it, Schmid et.al (2001) in a participatory problem-solving research, were able to work with some communities in Tanzania with the aim to empower them to solve their transportation problems encountered during obstetric emergencies. They reported that at baseline level, none of the fifty communities involved had any plan to provide means of transportation of the women in emergencies. Though this project did not follow the action research pattern, however, at the end of their project, thirteen communities were able to provide transport during emergencies while the others were still at various stages of progress towards this development. However, this study did not evaluate if the number of maternal deaths fell.
Similarly, in Malawi, provision of motorcycle ambulances in remote rural health centres were found to reduce referral delay by 2-4.5 hours (Hofman et al. 2008).

The finding of Schmid et al. (2001) at baseline is similar to mine in the fact-finding phase where the community did not have any plan to facilitate urgent transfer of the women during emergencies to the hospital. Rather, they had expressed hopelessness and helplessness about the situation of maternal mortality. Following the actions of community education and lobbying in the second phase of this study, the Chiefs who previously expressed despair, now pledged to help out in emergencies by providing their motorcycles and also mobilise others in the community to do the same. One of the Chiefs also promised to provide money in lieu if his motorcycle was not available.

Further theme that developed from this study, was the state of both contemporary and traditional health facilities in this community, this is also discussed next.

8.3.8.2 Poor national and local health care systems and facilities

In this study, issues were raised by members of the community about both the traditional and contemporary health facilities. Several complaints by the people militated against the use of the Health Centre for maternity services. These included its location in a lonely and bushy area in the outskirts of the community which makes it difficult to access at night due to lack of means of public transportation. Other issues included unavailability of staff and service for about sixteen hours a day because members of health staff were usually at work in the mornings and early afternoons. In addition to that, inadequate number of staff, unfriendly attitude of staff towards the women and unhelpful protocols such as buying a card for the medical records and insistence of fee before service were also mentioned. It is important to note that through action research, sociocultural issues can be slowly addressed by community mobilisation and participation but the really stubborn issue is lack of support from the government for pregnant women’s health.

WHO (2007) recommends that public healthcare facilities should be available and accessible to all. By availability, it means that it should be functional with sufficient goods and services. Accessibility connotes easy reach physically (geographical), affordability, easily accessed information and non-discriminatory services (WHO, 2007). A study highlighting physical accessibility in rural Tanzania, found that women were not likely to deliver in health facilities outside their village (Rockers, Wilson, Mbaruku and Kruk
(2009). This issue as presented by these authors make it appear as though the single factor of location of the health facility determined its use. Whereas, in my study setting, the health facility is located in the community, though in the outskirts, was not utilised by the women for childbirth due to several reasons as presented previously which included unavailability of staff. Another study which supported my findings, had been carried out across six African countries. This study showed strong community influences on the women’s decision to have their children in a health facility (Stephenson, Baschieri, Clements, Hennink and Madise (2006)).

The unfriendly attitude and unavailability of health staff as identified in my study are also reported to be factors in non-utilisation of health services by other authors (Ndikom, 2010; Ibeh, 2008). Akin-Adenekan (2009) found that the women were more satisfied in the primary and secondary health facilities than with the tertiary level. This was because members of staff were more friendly than at the tertiary level. In this study, we attempted to address the problem of negative staff attitude through a dialogue with the midwife who was also a member of the action research group. The co-researchers also asked her to discuss with other health workers at the centre, the need for a mother-friendly health service to enhance their patronage. This may have impacted positively, coupled with the community education as witnessed by the resumed utilisation of the Health Centre.

The staff also complained that there were no equipment to work with in the Health Centre. This situation had persisted for over a decade and had totally discouraged the people from use of the facility. The only midwife in this facility is constrained and unable to do much. The WHO recommends the provision of emergency obstetric care at the basic and comprehensive levels of healthcare as a means of dealing with any life-threatening complication in pregnancy, delivery and during the puerperium (WHO, 2006; WHO, 2009). The Health Centre in the community should be providing basic obstetric care according to the standards of the WHO (van den Broek, Dornan and Islam, 2007), but this is not the situation because of lack of basic equipment and human resources. This also applies to the conduct of normal deliveries. As observed, there is no readiness in the health centre to undertake basic emergency obstetric care which requires the following procedures: intravenous (IV) or (IM) intramuscular antibiotics; IV or IM oxytocic drugs; IM or IV anticonvulsants; manual removal of placenta; removal of retained products of conception and assisted vaginal delivery (van den Broek, et al., 2007). In addition to the
procedures, sufficient number of health professionals to cover duty for twenty-four hours should be available and should have adequate training and skills in dealing with such emergency situations (Ijadunola, Ijadunola, Esimai and Abiona (2010). Adegoke et.al. (2010) in a rural community study in Nigeria, also found shortage in the number of midwives in the health facilities and as a result, these could not offer services 24 hours a day and seven days a week. These shortfalls in staff and equipment as well as other issues raised about the contemporary health facility were important factors which the community attempted to address in this study through lobbying of the relevant authorities.

At this point, the third type of delay in getting healthcare as previously discussed, comes to bear when women are not promptly attended to at the health facility with Emergency Obstetric Care facilities. As shown in this study, the Health Centre has not been functional for the past fifteen years and this created a big gap with regard to the provision of basic emergency obstetric care. At the commencement of this study, there was no midwife working in the Health Centre, the staff in charge was a Community Health Officer with no midwifery background. As would be expected, there were no midwifery services and the healthcare was focused on immunisation and nutritional programmes for children aged 0-5 years. In the course of this study, a midwife was posted to work in the Health Centre and this is grossly inadequate, given the population of this community. Although much later, other four midwives were also transferred to the centre but they never resumed their work there due to lack of residential accommodation.

With the dearth of human resources at this Health Centre, the people over the years had lost confidence in the facility because it did not meet their health needs. Therefore, in emergencies, their only option was to attend a secondary health facility in another Local Government Area which is about thirty minutes away by car which was difficult to get to especially at night. The community members have expressed unpleasant experiences at the referral health facility causing further delay in receiving prompt treatment. This was linked with the practice of insistence on payment of some deposit to the hospital before the patient was attended to and in many cases, the people did not have the money to pay readily. Some complained that relations of the affected women had to go back home to try to borrow some money for this purpose. This, obviously is a very unhelpful practice and does not promote the prevention of maternal mortality. WHO policy states that
‘everyone should be able to access health services and not be subject to financial hardship in doing so’ (WHO, 2010, p 8).

This unethical practice presented an image of revenue generation rather than lifesaving about the health facility.

The need for the functionality of the health centre in this community is very strategic in the prevention of women dying from childbearing. As discussed in a previous chapter on planning and actions, the advocacy/lobbying meetings with the relevant authorities were only partially successful. For example, the action research group was not granted the opportunity to discuss face to face with the Chairman of the Local Government Council about the identified problems and ask for assistance to the community with regard to their solution. Face to face meetings to lobby policy-makers would have given us the opportunity to discuss the issues at stake and answer questions where necessary.

Meeting with the Health Commissioner did not also produce the expected speedy response due to some bureaucratic bottle-necks. These obstacles would amount to long term planning procedures which details had earlier been discussed in this project. The only success achieved was with the Social Welfare Ministry and the community leaders in the areas of free healthcare and transportation provision in emergency obstetric conditions respectively. Apparently, the State Government recently inaugurated a free healthcare package for pregnant women and children under five years old but had not yet implemented it. Our lobbying of the Commissioner for Social Welfare created a better outcome on maternal mortality in this community. The Commissioner promised to create an additional package in the following year’s budget, for funding to facilitate community education on prevention of maternal mortality. This would be a step in the positive direction towards the prevention of maternal mortality in this community and it would have the potential of diffusing to similar communities. A major outstanding problem is that of the equipment of the health centre with both material and human resources, which if acquired, would greatly complement the effort of this study. This becomes very necessary now that the people’s awareness has been raised coupled with their decision to be actively involved to the best of their ability to prevent maternal deaths. There is evidence that they are beginning to appreciate the usefulness of skilled birth attendants as shown in the resumed maternal healthcare service at the Health Centre.
Poorly equipped health facilities in Nigeria is a common phenomenon. In line with this finding of this study, other authors have also identified deficiencies in the contemporary health facilities in Nigeria and have recommended proper equipment of these facilities by the Government as a process toward the prevention of maternal mortality (Osubor et al., 2006).

On the other hand, most participants identified the traditional health facilities operated by TBAs as providing succour in the absence of a satisfactory contemporary health service. The TBAs were described as being more easily accessed, cheap and with allowance for flexible fees, for example, the client can pay what she affords, which is not the case with the contemporary health facility where there is insistence on pay before service.

Although the TBAs provided some service to the people, it has been found that there were more morbidities among women delivered by them than those delivered by skilled birth attendants (Etuk et al, 2000). This would be expected because the TBAs lacked knowledge of basic anatomy and physiology of reproduction as well as concrete measures to deal with emergencies. Some participants also conversely remarked on dirty delivery environments and non or late referral of women with complications by the TBAs. The higher rate of attendance to births by the TBAs is an important factor to consider in any action in this community to reduce the high maternal mortality rate. A recent policy by the WHO emphasises that 85% of births should be attended by skilled birth attendants in 2010 and this should increase to 90% by 2015 (WHO, 2005). This policy must have been informed by the findings of the systematic review by Sibley et al. (2004) which showed no evidence that TBA training reduced maternal mortality. Critically examining the situation of Nigeria and this community in particular, as shown in this study, there is inadequate number of skilled birth attendants, thus the WHO policy might be very difficult to implement immediately. This would require several years to train the required number of midwives and doctors as skilled birth attendants. The current ratios as recommended by WHO for these professionals are nurse/midwives 28 per 10,000 population and doctors with midwifery skills, 13 per 10,000 population (WHO, 2009). In comparison, this community of about 8,000 people is served by only one midwife and no physician. This shows how grossly under-served is this community.
As a long-term measure to address the need for adequate human resourcing in the community, career counselling of the youths in this community was also undertaken, to set them thinking about the option of training as midwives. This idea has become very topical, based on the shift of focus of the WHO from the training of TBAs to skilled birth attendants (WHO, 2004). If eventually, this materialises, there is no guarantee that such midwives would be deployed to work in their community of birth. However, part of why this idea was conceived, was to solve the problem of lack of accommodation for community midwives. The government is tasked to formulate policies that would favour staffing to prevent maternal mortality.

However, the figures presented about the staff situation at the Community Health Centre, gave us the impetus to train TBAs to fill the gap in the interim. This was particularly necessary if the women went into labour when the midwife has gone off duty. Areas emphasised in the training included causes and prevention of maternal deaths and referrals (Appendix 33). Following the training of the TBAs, we went a step further to suggest the collaboration of the TBAs and the midwife as well as the community health extension workers through a common forum. On acceptance, the common forum was inaugurated. This is expected to create a cordial relationship among these cadres of healthcare providers, to facilitate monitoring of the TBAs to ensure that they would not exceed their bounds, for example, they would not attend to high-risk clients and would carry out prompt referrals.

The World Health Organisation had endorsed the training of TBAs between the 1970s and 1990s as a strategy to reduce maternal mortality (Sibley et al, 2007). Since it appeared that the strategy was not successful, the emphasis now is on the promotion of skilled birth attendance (WHO, 2007). Given the situation of maternal mortality in the rural communities, particularly in Nigeria and lack of adequate number of skilled birth attendants, I would recommend that the WHO should revisit the issue of training TBAs and emphasise their monitoring and integration into the healthcare delivery system.

TBA training has been supported by some other scholars in Pakistan, sub-Saharan Africa including Gambia and Nigeria who hold a similar view with me as a means of assisting the women until there is an adequate number of skilled birth attendants (Jokhio, Winter, and Cheng, 2005; Ngoma and Himiila, 2009; Mboho, 2009; Dietsch and Mulimalimba-Masururu, 2010). Some authors in Tanzania have observed total dissatisfaction about the
services of TBAs and discourage any form of TBA training. They rather called for the removal of health system barriers to enhance its utilisation by the women and also, that the government should not assume that the high patronage of TBAs by the women was synonymous with preference (Mbaruku, Msambichaka, Galea, Rockers and Kruk, 2009). That study did not appear to emphasise the women’s perception on the issue because it limited responses to pre-determined answers on a questionnaire. It was not clear if these authors explored the socio-cultural factors related to the utilisation of the services of the TBAs. As identified by Mboho (2009) and supported by findings in this study, the women believe that there is spiritual protection that they derive from the TBAs.

Having identified the perspectives of the community members about the causes and contributory factors of maternal deaths, subsequently, their views about the prevention of this scourge is discussed.

8.4 Community perspective on prevention of maternal deaths
The people presented a range of ideas about how maternal deaths could be prevented. Their solutions resided in prayers, good food for pregnant women, free healthcare, functional health centre with attitudinal change by midwives as well as attendance in pregnancy and delivery by experts. Other means of prevention of maternal deaths opined by the people were the need for moral education to prevent teenage pregnancy, community education on maternal mortality, and training of TBAs to make their practice safer.

Quite importantly, all the actions undertaken in this study following critical reflection by the action research group, were based on the opinion of the community members, thus ensuring that I did not impose my agenda on them. This strategy is supported by the community organising model which states that projects initiated by the community are more likely to succeed, as opposed to projects imposed on the people (Rimer and Glanz, 2005). Consequent on this strategy, evaluation of the actions showed evidence of empowerment and emancipation of the people expressed by them as having acquired new knowledge and new practices towards the prevention of maternal deaths.
8.5 Conceptual framework

8.5.1 Community organisation model

The whole process of this study is supported by the Community organisation model. This is a participatory model described by Rimer and Glanz (2005) and it involves helping the community to identify common problems, resources, develop and implement strategies to reach collective goals. As seen, this model shares the philosophy of action research of developing the identity of the population studied, for action to bring about solution to problems that confront them, thus effecting a change (Winter and Munn-Giddings, 2005; Somekh, 2006, Stringer, 2007; Reason and Bradbury, 2009). Community organisation model also has similarities with critical theory (see Chapter three) which aims at collaborative ideology critique to emancipate people from oppressive norms (Habermas, 1992; Carr and Kemmis, 1994). The aim of this model is to engender change which must come from within and not from the ‘outsider’ (Somekh, 2006). Change process which emanates from the priorities of such population has been found to be successful (Rimer and Glanz, 2005). Similarly, as Somekh narrated:

‘the key to the process of change is the hearts and minds of the individuals who have the power to make it happen. One good way of engaging their hearts and minds is by involving them in some way...’ (Somekh, 2006:125).

This model recognises the ecological nature of health problems which has to be considered as important factor for successful interventions or actions. Such factors are identified in the dynamic relationship among individuals, the social and physical environments. Thus, a multilevel approach to the solution of health problems is proffered. Explaining this further, the individual is an embodiment of his/her ideas which are consequences of inputs from both environments. The social environment in the context of this study includes members of the nuclear and extended families as well as the community at large. These share a common socio-cultural heritage which has been learned from handed down traditions (Harris and Johnson, 2000). Not only are individuals influenced by their social environment, they also have the potential to influence that environment. This relationship has been described as the concept of reciprocal causation and should be considered in
health actions or interventions. This idea is summarised the words of McLeroy and his colleagues, thus:

‘individual behaviour both shapes and is shaped by the social environment’ (McLeroy, Bibeau, Steckler and Glanz, 1988:10).

In this study, the potential of the individual to influence his/her environment was recognised and utilised through the encouragement of community participation and involvement for the ultimate purpose of empowerment to affect their environment thus resulting in change in the maternal mortality situation. The outcome of this process, evidenced in this study included acquisition of new knowledge, development of positive attitudes and practices towards maternal deaths. These led to increased uptake of the services of skilled birth attendants, prompt referrals of pregnant women with complications by TBAs as well as making informed requests to the relevant agencies to improve the maternal healthcare. The study by Shehu (2000) on community mobilisation to reduce maternal mortality, as shown in Table 2.3, also supports this strategy. The evidence shown in that study included reduction of delays in seeking emergency obstetric care, improved transportation to emergency obstetric care facilities, increased awareness of causes of maternal deaths and increased uptake of antenatal and delivery services in the hospital.

McLeroy et al. (1988) delineated the ecological factors further by classifying them into the following levels: intrapersonal, interpersonal and community level. The intrapersonal level describes inherent factors in the individual like the knowledge, attitudes, beliefs and personality traits. Interpersonal factors include the influence of family, friends and peers in the attempt to provide social identity and role definition. Lastly, the community influence is brought to bear through enforcing norms, rules and regulations as well as policies which can also be from the government. The importance of these levels was acknowledged in this study as reflected in the persons involved in the inclusion criteria and data generated clearly demonstrated the interplay among these various levels with resultant potential for a high incidence of maternal mortality. For example, the pregnant woman typically demonstrates ignorance about the causes of maternal deaths, her situation is made more grave by the superstitious beliefs and unfavourable cultural norms within her family and the general community as well as the unavailability of a functional health service.
Rimer and Glanz (2005) also noted that the community organising model is not a single mode of practice and that it involves various approaches to effect change. These approaches as classified by Rothman (2001) include community development, social planning and community action. Community development component targets the building of group identity, consensus and capacity. Social planning emphasises problem-solving while community action is the sum of the other two and its main thrust is to increase the capacity of the community to solve problem. Central to these approaches in the pursuit of change is the concept of empowerment and this is subsequently discussed.

8.5.2 Empowerment

Empowerment has been described in various ways (Rodwell, 1996). From the feminist perspective, it is seen as a process which aims at changing the nature and distribution of power in a particular cultural context from the traditional male models (Bookman and Morgan, 1988). Mason, (1991) describes empowerment as the process of enabling people to recognise their strengths, abilities and personal power as well as power-sharing, respect for self and others. It does imply that empowerment involves the process of transferring power and this includes the development of positive self-esteem and recognition of the worth of self and others (Rodwell, 1996). As stated in chapter one, the purpose of this study is to empower members of the community to take action to prevent maternal mortality.

In 1981, Rappaport proposed that the concept of empowerment is based on social action ideology which metamorphosed into self-help model and recently, it has become widely used in community interventions (Gibson, 1991). It connotes the process of gaining mastery by the people over their lives and community (Rappaport, 1984). It has been described as the process of helping people to take control over factors that control their lives (Gibson, 1991). Through this process, the people assume greater power to act for themselves, which is a panacea to effect change (Rimer and Glanz, 2005). This idea parallels the position of Habermas’ critical theory in that, for people to be able to gain mastery over factors that control their lives, they need to go through the process of critiquing those factors or ideas in order to generate knowledge which eventually will emancipate them. Kincheloe and McLaren (2000) and Hope (2001) argue that critical theory is best understood in terms of empowerment because this is connected to an attempt
to confront unjust situations. In relation to this study, empowerment entails that the people critique their age-old beliefs in relation to maternal mortality, vis-à-vis theoretical evidence. This process, as argued by Freire (1970) would lead to the development of their critical understanding about this situation which in turn positions them to be able to take appropriate action to improve their situation. The process of empowerment in action research is facilitated by the power broker role of the outside researcher (Stringer, 2007).

This concept promotes a synergistic paradigm in that, although the self-esteem and self-efficacy of individuals are enhanced in this process, effective empowerment requires the ingredients of mutual beneficial interactions, which strengthen rather than weaken, between the individual and the larger society (Rappaport, 1984; Butterfield, 1990; Gibson, 1990). In other words, positive collaboration strengthens empowerment with the aim of solving a problem. Also, Reason and Bradbury (2009) stated that participation in the action research project, creates empowerment because it enables the people to perceive their capability to construct and use their own knowledge. Collaboration with the community, therefore, has been the focus of this project as demonstrated in all the phases of this study beginning from the fact-finding, through the planning and actions to the evaluation. It is worth noting that the nature of this collaboration was democratic to ensure mutual learning and pooling of effort to achieve the desired change. As posited by Gibson (1990), the democratic nature of empowerment entails the consideration of how the powerless acquires more power and the initially more powerful, releases power. This position conceptualises empowerment as a developmental process comprising the initial stage in which the individual is unsure of the venture and so explores the situation while simultaneously, power structures are demystified. This progresses to the stage of mentoring and supportive peer relationship characterised by opportunities for collaboration and problem-solving enabled by an external agent. This stage parallels the community education in this study. Subsequently, the next stage involves confronting barriers which had hindered self-determination. As illustrated in a previous chapter of this study, following the community education, the people started questioning the authenticity of some of their superstitious beliefs with regard to maternal wellbeing and some of the people had expressed repudiation of such beliefs. The final stage of empowerment as narrated by Gibson (1991), is evidenced by the people integrating the new knowledge into their everyday life. Findings from the evaluation of this study as previously discussed, showed that new practices in various ways towards the prevention of maternal deaths have
been initiated, for example, utilising the services of skilled birth attendants. Overall, community empowerment is said to take place when the people work together for a common cause as a result of consciousness-raising thus resulting in conscientisation (Minkler and Cox, 1980; Gibson, 1991; Reason and Bradbury, 2009). As discussed previously, consciousness-raising resulting in conscientisation is a process that emanates from sensitisation which raises awareness of the people to be able to critique their status quo and thus develop a critical understanding of their unpleasant circumstances (Freire, 1970; Greenwood and Levin, 2007). It then follows that conscientisation is the empowered state of the people and is a pre-requisite for action to bring about change.

Critically examining the concept of empowerment, it does not come on very easily because of the behaviour of the individual has been set by personal and cultural traits. Therefore, its initiation requires great tact by the ‘outsider’ as well as skills to enable a level playing ground with the members of the community to ensure that no power relationship is perceived. This is an important determinant of the success of the process. Otherwise, the people would feel threatened and this has the potential of hindering the process thereby causing failure of the project. To this effect, Gibson (1991) had suggested that the professional should legitimise the belief that the people are equal partners in the project, the professional’s role include that of offering support to strengthen the people and also as a facilitator as opposed to a provider of services, bearing in mind that the onus of empowerment lies within the people because nobody can empower any other person. These principles of empowerment were employed in this study through working democratically with the action research members as explained previously in the chapters on the fact-finding, planning/action and the evaluation phases of this study. This ensured that I did not impose my ideas on them.

Having discussed empowerment as a process of enhancing the abilities of the people to take action to solve their problems, the outcome of this procedure is a state of emancipation which is discussed hereafter.

8.5.3 Emancipation

Emancipation could be viewed as the end-point of Habermas’ critical theory which main thrust is to generate knowledge that brings about liberation from oppressive norms (Carr
and Kemmis, 1994). This process goes beyond individual empowerment of the people to the addressing of those factors that could still hinder them in the larger society thus making their enhanced ability appear not helpful. Emancipation is described as the phenomenon which emphasises the collaboration of the empowered individuals to ensure that the emergent change process is established (Somekh, 2006). Habermas advocates collaborative ideological critique coupled with political determination to act to overcome contradictions, thus resulting in critical practice. By critical practice, it means that enlightened action is being taken which implies the integration of theory and practice (Carr and Kemmis, 1994).

To emphasise the idea of emancipation, Harbemas further described the modern society from a systems perspective that is made up of organisational and institutional structures which include roles and rules (Habermas, 1992; Reason and Bradbury, 2009). The structures and processes are geared towards the achievement of the system’s goals. He further explained that the society is characterised by differentiation in various dimensions which threaten the achievement of the goal of the system. Therefore, he proposed the interrelationship within the system in a mutually-compensating way. In his analogy, he called for interrelationship among the individual, culture and society, noting that the individual cannot exist on his own without socialisation and that there cannot be socialisation without the individual (Habermas, 1992).

Habermas’ ideology can be adapted to this study in the sense that the diversities in this community espoused by roles, gender, religious inclinations and other cultural beliefs should be harnessed in a positive manner to support and sustain the new knowledge and behaviours acquired through this project. There is need for members of the community to act with a unity of purpose to achieve the goal of prevention of maternal deaths.

As discussed previously in the evaluation of this study, the people had started to demonstrate signs of emancipation through plans to collaborate in various ways to improve the status quo. These included members of the action research group volunteering to become members of the common forum for the TBAs and the midwife/other health workers, for the purpose of ensuring that a cordial working relationship exists among these healthcare providers and also for a sustained monitoring of the activities of the TBAs to make sure that they do not exceed their bounds. Also the chiefs had promised to provide
means of transportation to facilitate referral in emergency obstetric situations as well as continue to lobby the government to equip the Health Centre. In addition to that, the husbands would also contribute in their little way to the equipment of the Health Centre. Overall, the community members have now started to diffuse the innovation to their larger community to ensure that more people become aware of the causes and prevention of maternal mortality. However, a new problem emerged concerning how the community can sustain the innovation. From their perspective, they would require reinforcement on the community education from time to time from the health professionals, this should be matched with a functional health centre.

8.6 Conclusion
The parallels and contradictions of the findings of this study in view of existing literature were discussed. These included the perspectives of the community in the domains of knowledge, attitude and practice, with regard to maternal mortality. These domains were observed to be grossly influenced by superstitious beliefs which invariably portrayed the ignorance. This state was observed to be made more critical by certain environmental factors as depicted by the poor states of the traditional and contemporary health facilities in the community coupled with poor transportation system. However, following mediation, some changes from the initial status were observed. The overall process of this action research was supported by the principles of the Community organisation model which culminated in the concept of empowerment of the people. Finally, emancipation as a means to sustain the empowered people was discussed based on the ideology of Habermas, which promotes collaboration among the people to achieve the goal of prevention of maternal mortality.
CHAPTER NINE
CHAPTER NINE
CONCLUSIONS AND RECOMMENDATION

9.1 Introduction
In this chapter, the important outcomes of this study will be presented and their implications for policy and further research to prevent maternal mortality in Ekpri-Ikang Community, Nigeria. The limitations and strengths will also be discussed.

Prevention of maternal mortality has been a global problem and more so in the Sub-Saharan Africa and Nigeria in particular. Various strategies, as discussed previously in the literature review, have been implemented to solve this problem, but the desired goals have not been met, as evidenced in high maternal mortality rates. Emphasis on the involvement of the community in such preventive programmes has not been popular. Therefore, this study was premised on the apparent need to involve the community in the process of prevention of maternal mortality.

This collaborative action research project set out to empower members of the community to take action to prevent maternal mortality, following fact-finding. In phase one, the perspectives of the members of the community on maternal mortality were identified. Ignorance, some cultural and religious practices as well as poverty and certain environmental factors were suggested as contributory to maternal deaths. After critical reflection on the findings in the first phase by the action research group, actions were taken in phase two to solve the identified problems. In phase three, evaluation of the impact of the actions was carried out and this showed that some positive changes had become apparent. These were discussed fully in chapters 5, 6 and 7.

9.2 Outcomes of the study
In the first phase, it was clear in this study that the knowledge, attitudes and practices of the members of the community with regard to maternal mortality mostly depicted ignorance as portrayed by their reliance on superstitious or cultural beliefs to explain the causes of complications during the childbirth process. Their actions, therefore, generally towards pregnancy and its complications were driven by those beliefs, thus, care was sought from unskilled attendants like the TBAs and from the Church, which they believe
are more capable to deal with such problems than the skilled birth attendants. These unskilled attendants have a potential for unfavourable outcomes. The services of skilled birth attendants were said to be required mostly when all other means had failed.

Typical examples of the superstitious beliefs shown in this study included the attribution of prolonged or obstructed labour to either locking of the womb through diabolical means or due to the woman’s marital infidelity. It was clear in this study that the remedy for the purported locked womb was to get a witch doctor to unlock the womb spiritually. A community member confessed that this remedy had never been successful and such women usually died. Secondly, if marital infidelity was suspected, the remedy involves making the woman to confess her infidelity, after which, she would be expected to have the baby. Thereafter, if labour fails to progress, she is said not to have made a full confession and is allowed to her fate. Eventually also, such women had died in childbirth and such deaths were seen as nemesis.

These are very significant and horrendous findings which clearly suggest ignorance. In such situations, these women were denied the opportunity of referral to skilled birth attendants. During the action phase of this study, this situation was addressed through community education. The outcome was that the people expressed repudiation of their belief concerning prolonged or obstructed labour. As an evidence of this, a participant in the FGD group for the husbands, said that instead of allowing the women to die from unduly long labours, they should be taken to the hospital for help. This evidence suggests that a change of belief and attitude in that regard has taken place from nemesis to advocacy. Also, to add to that, during evaluation, a TBA said that she now takes note of the duration of labour in the women, and refers any woman who has laboured for up to twelve hours without delivery.

Another evidence of the repudiation of belief was on the issue of nutritional taboos as well as fasting to pray for God’s protection during pregnancy. Evaluation following the community education also suggested a change. Some women said that there was no need to abstain from certain foods due to cultural taboos because the practice was unhealthy. Furthermore, another woman said that she has now realised that the religious practice of fasting during pregnancy was not necessary and that pregnant women could pray without
fasting. This was the consensus by most of the community members except for one woman who said that she would still fast and pray, though with reduced hours.

This research has also shown that, it was a common practice for childbearing women to be attended by TBAs as well as by other unskilled attendants based in the Church. Following the community education, pregnant women have started attending the community Health Centre again for maternity services, after about fifteen years of abandonment. By the time of this report, the Health Centre has attended to 35 and seven women for antenatal care and deliveries respectively, between October, 2009 and November, 2010. Evidence from this study also showed that husbands and other significant decision-makers on pregnancy care, are now encouraging hospital attendance. This strongly suggests that the collaborative strategy of this project to identify and solve problems, has yielded a positive impact on the people, stirring them up to take action to prevent deaths of women during the process of childbearing. This finding has made it clear that more births in this community are now being attended by skilled birth attendants, whereas, the contrary had been the situation in that community and Nigeria at large. I strongly recommend the application of the strategy of this study for practice in other communities in Nigeria and beyond, where maternal healthcare is still predominantly attended by unskilled birth attendants.

Taken together, the foregoing findings, in a broader sense, suggest the possibility that, through the process of collaborative action research with the people, myths and superstitious beliefs can be renounced. It was also evident in this study, that the people did not have the appropriate education to equip them with the proper orientation about maternal deaths.

Maternal outcomes of pregnancy in this community have been found to be greatly influenced by the people’s cultural and religious beliefs. As evidenced in the new knowledge and new practices that the people attested to, following the action through community education, I recommend the reinforcement of such community education programmes in collaboration with midwives and other relevant health professionals with the action research group members in the community. These factors should be considered in national and local orientation programmes to prevent maternal mortality.

It was also shown that most pregnant women did not have control over decisions made about their pregnancies, particularly regarding the place for healthcare. Such power resided
with others, such as their husbands, mothers, mothers-in-law, Pastors and Pastor’s wives. This has an implication for practice, particularly, in this community where this is an accepted norm, therefore, I suggest that these persons be included in any community programme to prevent maternal mortality as a way of empowering them to make decisions that are supported by scientific knowledge. This strategy would enhance culture-sensitive programme which has been found to be acceptable by the people (Shehu, 2000). In addition to that, attention should be paid to the provision of better education for girls and boys.

Also, it was apparent that young teenage pregnancy was acceptable by many members of the community, particularly, by the older women. This position suggests ignorance about the risks associated with such pregnancies. However, this was also addressed in this project through the community education. During the evaluation, it was evident that teenage pregnancy was condemned and as a way of discouraging it, the people requested for moral instruction to the teenagers and the slightly younger girls who were approaching menarche. This situation has an implication for practice, in that, teenagers need to be focused in a special health programme to highlight these risks and how to prevent them. For success, I recommend that such a programme should be culture-sensitive and should receive the ethical approval of parents.

It was also evident in this study that beyond the problems of superstitious and religious beliefs of the people, certain environmental factors also contributed to maternal deaths, for example, lack of transportation and health facility issues.

In emergencies, the people needed to travel a long distance in the midst of transportation difficulty to the referral hospital in another community for treatment. A case was reported in this community of a woman who died following childbirth complication at the TBA’s, while the family was still trying to arrange for a means to transport her to the hospital in another community. A special meeting to lobby the Chiefs on this issue, coupled with community education yielded a positive result, in that, they promised to provide means of transportation during obstetric emergencies. This response was typical because at the beginning of the study, the chiefs had expressed helplessness and hopelessness about what could be done to prevent maternal mortality.
Inadequacies in both the contemporary and traditional health facilities were made obvious in this study. The contemporary health facility within the community had ceased to render maternal health services for over a decade due to lack of equipment and qualified staff. As a result, this had indirectly perpetuated the patronage of unskilled birth attendants. It is made clear from this study that, the Health Centre within this community is not mother-friendly due to staff harshness to the women, besides that, there were no basic equipment to conduct normal deliveries. One wonders if the harshness could be due to frustration of the staff as a result of lack of equipment to work with. The practical implication is that, this health facility is not ready for the provision of Basic Emergency Obstetric Care. It lacks skilled birth attendants to provide care within twenty-four hours daily. This means that the WHO strategy of prevention of maternal mortality through emergency obstetric care and skilled birth attendants are not met here. By recommending a policy which is presently unachievable, means that, the risk of women dying in the process of childbirth due to preventable and treatable conditions will continue in this community. A meeting to lobby the Commissioner for Health in this regard, did not yield an immediate response as would be expected due to policy restrictions which do not empower him to take decisions that involve the Health Centres and rural health matters. The implication of this is that, the State government, though closer to the rural health services, does not appear to be in the position to monitor primary health care services.

Meeting with the Chairman of the Local Government Council failed because the action research group was not given audience by him, however, we had to submit a report on our interim findings to his office. The implication of this is that, prevention of this problem does not appear to be a priority to the Local Government Council, whereas, the Federal Government of Nigeria (2004), as stated in the health policy, places the responsibility of primary health care on the Local Government Councils. The Health Centres, by this policy, are the responsibilities of the Local Government Councils. It also appears to me that the present structure whereby the Federal government (tertiary level) supervises the primary health services directly through the Local Government Councils, thus, bypassing the secondary level (State governments/Ministries of Health), is not efficient. I suggest a review of the present policy so that the State Government, through the Ministry of Health, would collaborate with the Local Government Councils to control the primary healthcare services, and thus, the Health Centres and other rural health facilities. The reason is that, practically, the State government is closer than the Federal Government to the people at the
grass-root or rural areas served by the Local Government Councils, therefore, the proximity can facilitate monitoring.

Meeting with the community leaders on the state of the Health Centre also resulted in positive response from them, in that, they promised to mount pressure on the government to equip the Centre. Previous to this study, they did not show concern about what they could do to revamp the Health Centre.

Another significant finding which emerged about the contemporary health service is that the referral hospital, a secondary health facility, was not easily accessible financially. The financial constraint was about the insistence on payment of some fees before service was rendered, even during obstetric emergencies. This suggests that the hospital laid more emphasis on revenue generation than saving lives. I recommend that the State Ministry of Health should set up machineries to ensure the effective implementation of the recent policy on free healthcare for pregnant women, formulated by the State government.

In addition to the state of the contemporary health facilities, the facilities of the TBAs were observed to lack the basic hygiene features. Some TBAs did not even have any built structure for delivery, they attended to the women during delivery, in an open space at the back of their houses. This predisposes the women to infection and if not promptly treated could result in puerperal sepsis and death. It was also clear that they were not referring their clients promptly as they claimed that they have remedies to treat complications as presented in the text, in the fact-finding phase as well as their belief that prolonged or obstructed labour was the result of marital infidelity or locking the womb by evil spirit. This means that some women were deliberately denied referral to the skilled birth attendants for help. The implication of this is that, the TBAs lack adequate knowledge of the gravity of obstetric complications as well as the consequence of some aspects of their practice. Following their training, evaluation showed that they are beginning to effect changes in their practice as discussed in a previous chapter of this project.

As shown in this study, the TBAs are the major healthcare providers for the women during pregnancy and childbirth in this community. With dearth in skilled birth attendants in this community, the services of the TBAs still remain relevant until there is adequate number of skilled birth attendants. Based on this, I recommend that they should be given basic
training with emphasis on hygiene and referral, to make their practice safer. In addition to the training, they should be closely monitored and made close to the main stream of the health system, through having common forums with midwives and other relevant healthcare personnel.

Another important finding that emerged from this study is the role played by the local medicine peddlers in the community, popularly known as patent medicine dealers. These have licence from the Government to sell off-the-counter medicine only for the treatment of minor ailments which include colds, slight pains, and indigestion. Unlike the TBAs, they are not expected to be involved with attending to women in childbirth. An incident was reported in this community about a medicine dealer who attempted to deliver a teenager and the girl died in the process. Besides that, this study had found that some pregnant women go to them for treatment. It was obvious that, if the women do not go to the TBAs, the next consideration is the medicine dealer while the hospital is the last resort. Following this finding, this group of persons should be monitored closely by the appropriate government Agency in the Ministry of Health and the errant ones should have their licences revoked.

It was also identified in this study that prayer is considered to be an important factor held the people for the prevention of maternal mortality. This suggests their deep religious inclination. I recommend that this should be encouraged because it is not a harmful practice, in as much as it is not coupled with fasting for the pregnant women. This implies the provision of care that is culture-sensitive in order to attract the members of the community to utilise the services of the skilled birth attendants as recommended by Kim-Godwin (2003).

Limited funds were also said to have hindered the women from seeking healthcare from skilled birth attendants and has also limited their ability to access nutritious foods while pregnant. I find it difficult to isolate these factors from the influence of their superstitious beliefs which have also been found in this study to determine their health-seeking behaviour as well as the nutritional taboos. As has been suggested previously in this study, lack of money could be a mind-set because generally, these women could afford to pay higher fees to the TBAs. Secondly, it has also been found in this study that TBAs perpetrate nutritional taboos which invariably contribute to limited access to nutritious
foods. This situation presents a complexity of causative factors of maternal mortality in this community and, therefore, suggests a comprehensive approach to the prevention of maternal mortality. To ensure the comprehensiveness to mitigate these issues, I recommend that such preventive approaches should include poverty relief measures in the process of empowerment of the people to take action to prevent maternal deaths. This approach should complement the strategy of the WHO on the prevention of maternal mortality which are skilled birth attendance and emergency obstetric care. I further suggest that free healthcare to the women during pregnancy, childbirth and puerperium, should be part of the poverty relief.

9.3 Impact of the study
This study has impacted positively on the members of this community by raising their awareness, thus stimulating ideological critique as explained in a previous chapter (that is, critique of their beliefs), which led to critical understanding of the causes of maternal deaths, thus resulting in the acquisition of new knowledge. The new knowledge led to empowerment and emancipation to some extent. This process enabled the people to take some actions to prevent maternal deaths. The evidence of this includes repudiation of some fatal beliefs about maternal deaths, resumed uptake of the services of the skilled birth attendants and the promise by the chiefs to provide transportation in emergencies as well as advocate for the equipment of the Health Centre. Also, members of the community indicated interest to work closely with the staff of the Health Centre and assist in the equipment of this health facility to the best of their ability.

Another aspect of impact of this study is that, members of the community, who were actively involved in this study, became engaged in the diffusion of the new knowledge by sharing lessons from the community education with other members of the community. It was also evident that some Clergymen have started reflecting what they learnt during the community education in their Church programmes and counselling. This practice suggests that since the Clergymen are very highly respected in the community, their involvement in education to prevent maternal mortality will have a far reaching effect. Therefore, I recommend their involvement in community programmes to prevent maternal mortality.
It was obvious in this study that the desired impact on the government was not achieved. This was deduced from the unsuccessful outcomes from the lobbying of the authorities. The only success was from the Commissioner of Social Welfare who provided information on the recent government policy on free healthcare for pregnant women and also promised to plan a budget for community education to prevent maternal deaths. The disappointment from the government, particularly at the Local Government Level, makes the desire for political will an important requirement to support the community in the prevention of maternal mortality.

The summary of the impact of this study on the community as shown in the evaluation of the actions, included the acquisition of new knowledge, new practices, ability to make informed request for help and the desire for continuity of the project in a collaborative manner. This development suggests that the people have moved from the initial state of ignorance to a state of empowerment and emancipation to take action to prevent maternal mortality.

9.4 Strengths of the study
This study focused on reducing the problem of maternal mortality through the involvement of the participants. Also, it facilitated their ownership of the project to ensure sustainability after I have left the community.

The study attempted to enable the members of the community to critique and challenge their acquired ideology about maternal mortality, thus resulting in a reconstructed knowledge which also enlightened, empowered and emancipated them.

The collaborative and cyclic paradigm of the action research approach in this study made it possible for some changes to take place in the perspectives of the people about maternal mortality. This is evidenced in the difference shown between data in the fact-finding and evaluation phases. They were able to identify their areas of problem, plan and take actions to solve these problems, with me playing the role of a facilitator. This means that they were empowered to take charge of their circumstances.
This study also has been able to provide knowledge and theoretical ideas about maternal mortality and how to involve the community in the prevention of this phenomenon. Based on this, a recommendation is made for the training of TBAs and integrating them with midwifery service as demonstrated in the common forum for TBAs and midwives in this study.

Although this study is not based on statistical procedures and so, its findings might not be generalizable on a larger population, the procedures of this project provide basis for transferability of the action research process to similar situations to prevent maternal mortality.

9.5 Limitations of the study
The study was only carried out in a relatively small area and did not observe changes at the community Health Centre as anticipated. This project could have carried on for longer and really embedding the changes, given the zeal demonstrated by the community members. Therefore, I do not know if the rate of maternal mortality has been reduced.

This project was unable to enlist the level of political will desired to support the zeal of the members of the community following evidence of their empowerment. For example, there was failure in getting the government to improve the status of the health facility in the community.

With regard to poverty in the community, this study was not able to provide a mediation for the issue but rather acknowledged the poverty relief programme of the State government tagged ‘Unconditional cash transfer’ and the free health care policy for pregnant women. We did not also prove the efficacy of the unconditional cash transfer. The free health care policy of the government was not implemented before I left the study.

In view of the common occurrence of teenage pregnancy in this community, it would have been apt to carry out sex education for the teenagers and children aged 9 to 12 years to ensure that the girls had an idea of how pregnancy occurs and so would take precaution in their cultural sensitive way to prevent it. This was not possible because the focus of this
study was on the prevention of maternal deaths in women who are actively reproducing. I, therefore, recommend sex education for the younger age group not reached in this study. This study was not also able to prove the efficacy of the remedies claimed by the TBAs to treat complications during childbirth because there was no opportunity throughout the study to observe the TBAs apply the remedies.

9.6 Recommendations for policy
Based on the findings of this study, I make the following recommendations for policies to prevent maternal mortality.

- The participatory action research approach should be adopted to prevent maternal mortality in the rural communities. This would facilitate the involvement and empowerment of members of the community to take responsibility for the prevention of maternal deaths in a positive manner. Such programmes should include the community leaders, the Clergy, heads of families/husbands and other significant relations like the mothers and mothers-in-law, because of the influence they wield.

- There should be a budgetary allocation to support the reinforcement of community education following an action research, to facilitate adequate diffusion and sustainability of the change.

- Rural health facilities should be equipped with adequate human and material resources so that suitable services could be rendered to the people.

- Birth attendants in the contemporary health facilities, particularly those working in the rural areas, should mandatorily, have training on life-saving skills so that they would be able to cope efficiently with obstetric emergencies.

- More midwives should be trained and also employed, in order to increase the population of skilled birth attendants to meet the recommendation of the WHO.

- Incentives should be given to retain midwives in the healthcare system, thus prevent migration from the profession or to other countries.

- An additional incentive should be given to midwives who work in the rural health services to encourage them to remain at their duty post and to work with TBAs.
As part of the service scheme, every experienced midwife should be made to serve in the rural area for a given period of about two years on a rotatory basis. This would check the overcrowding of the health facilities situated in the urban areas to the detriment of those in the rural areas.

Training of TBAs should continue in the interim in this community and in other rural communities where there are insufficient skilled birth attendants. This is in the attempt to make their practice safer.

A close working relationship should be encouraged between the TBAs and the Midwives and other health practitioners involved birth attendance, to facilitate the monitoring of TBAs and referral of their clients in emergencies.

A review of the policy on the supervision of the primary health care should be undertaken by the Federal government of Nigeria, to enable the State governments to monitor the activities of the primary health care facilities located in the rural areas.

Implementation of the free health care policy of the State should be commenced, to reduce the financial hardship faced by the women and their families, especially during obstetric emergencies when fee payment is required before treatment is given.

Ambulance service should be provided for the Health Centre to facilitate transfers of the patient during an obstetric emergency.

The patent medicine dealers should be closely monitored to ensure that they operate within the restriction of their licence.

9.7 Recommendations for further research
- A further research should be carried out on the effectiveness of a close working relationship between TBAs and skilled birth attendants, in the prevention of maternal mortality in rural communities.

- A community action research should be carried out on the prevention of young teenage pregnancies in this community. Teenage pregnancy is a common phenomenon in this community, as shown in the fact-finding phase of this study, not everyone knew the high risk associated with such pregnancies. Also, this study was not able to address this
problem in detail, I therefore recommend further research which would involve the teenagers, to bring about a change.

- An exploratory study should be carried out to identify the role of patent medicine dealers in the occurrence of maternal mortality. This is important because this study has identified that these categories of persons are also involved in some maternity care.

9.8 Summary/Conclusion
In this chapter, I have summarised the major outcomes of this study, the impacts of the study, its strengths and limitations and recommendations have been made for both policy and further research. Based on the outcomes of the study, I draw the conclusion that: the community is an important resource which, if mobilised through the process of action research, would be empowered to take action and also collaborate with skilled birth attendants to prevent maternal deaths, thus bringing about a change in their circumstances. The implication of this is that, this process will complement the other strategies set by the WHO, which are: skilled birth attendance and emergency obstetric care to prevent maternal deaths.
REFERENCES


APPENDICESES

APPENDIX 1: MAP OF NIGERIA, SHOWING THE STATES OF THE FEDERATION
APPENDIX 2: MAP OF NIGERIA SHOWING THE NEIGHBOURING COUNTRIES
APPENDIX 3: MAP OF CROSS RIVER STATE SHOWING BAKASSI LOCAL GOVERNMENT AREA
APPENDIX 4: SKETCH MAP OF EKPRI-IKANG COMMUNITY
APPENDIX 5: ETHICS APPROVAL FROM THE UNIVERSITY OF MANCHESTER

Ekpoanwan Esienumoh  
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27 May 2009  

Dear Ekpoanwan,

Title of Project: Prevention of maternal mortality: A community action research in Bakassi Local Government Area of Nigeria

Thank you for the clarifications and amendments to the above study as requested by the Research Ethics Committee.

I am of the opinion that no major concerns or objections are evident of an ethical nature. Therefore on behalf of the Committee I am happy to grant full ethical approval.

During the progress of the study please inform the committee of any changes or amendments that may be necessary. Furthermore, on completion of the study please provide the Committee with a “Completion of Study Report”.

In order to arrange University of Manchester Insurance Cover please forward a completed Insurance Form (enclosed) along with your Research Proposal and a copy of this letter to the Purchasing Office at the address printed on the form.

With every good wish for the successful completion of your study

Yours sincerely,

Dr Ann Wakefield  
Senior Lecturer Nursing  
School Quality Assurance and Enhancement Officer  
Acting Chair School Ethics Committee

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28th May, 2009

The Honorable Commissioner,
Ministry of Health,
Calabar,
Cross River State,
Nigeria.

Sir,

AN APPLICATION FOR APPROVAL TO CARRY OUT A RESEARCH PROJECT

I hereby solicit your approval to carry out a research project in Ekpri Ikang in Bakassi Local Government Area of Cross River State of Nigeria. The topic of the research project is 'Prevention of maternal mortality: a community action research in Bakassi Local Government Area of Nigeria'.

I am a PhD student in the School of Nursing, Midwifery and Social Work in the University of Manchester, United Kingdom. The study will seek the perspectives of some healthcare practitioners like doctors, midwives, nurses and community health extension workers as well as some members of Ekpri Ikang community in Bakassi Local Government Area, on the topic. The project will entail a collaboration of the healthcare providers and the lay community members in a sequence of activities peculiar to action research, with the aim to empower members of the community to take action to prevent maternal mortality.

As you might be aware, maternal mortality in Nigeria is one of the highest in the world as documented by the World Health Organisation. Community involvement in preventing maternal deaths is advocated globally as an adjunct to the provision of emergency obstetric care and skilled birth attendants.

Following the consent of the participants, the findings of this study will be communicated to you with the hope that it might be relevant for your policy formulation with regard to maternal healthcare planning.

Your kind approval will be highly appreciated.

Yours faithfully,

EKPOANWAN ESINUMOH
APPENDIX 7: CERTIFICATE OF ETHICAL APPROVAL FROM CROSS RIVER STATE MINISTRY OF HEALTH

DEPARTMENT OF CLINICAL GOVERNANCE, SERVICOM & E. HEALTH, CROSS RIVER STATE MINISTRY OF HEALTH, CALABAR.

1st June, 2009

EKPOANWAN E. ESIENUMOH.

Dear Madam,

CERTIFICATE OF ETHICAL APPROVAL

I am directed to advice you that the State Research Ethics Committee, having received your application for ethical approval of the research title: Prevention of Maternal Mortality: A Community action Research in Bakassi Local Government of Nigeria. FULL ETHICAL APPROVAL.

This approval is valid for one year from the date of its issuance.

You may proceed with your study in accordance with the protocol. You are requested to abide by every professional and ethical code for the conduct of this research, including advising the REC of any changes to your protocol in advance.

The REC reserves the right to request an audit of this research at any time during or post implementation.

Yours Sincerely,

Elder Mrs. Comfort Ekanem,
Head of Department
APPENDIX 8: LETTER TO THE CHAIRMAN BAKASSI LOCAL GOVERNMENT AREA

1st June, 2009

The Honorable Chairman,
Bakassi Local Government Council,
Akwa Obutong,
Cross River State,
Nigeria.

Sir,

AN APPLICATION FOR APPROVAL TO CARRY OUT A RESEARCH PROJECT

I hereby solicit your approval to carry out a research project in Ekpiri Ikang in Bakassi Local Government Area of Cross River State of Nigeria. The topic of the research project is ‘Prevention of maternal mortality: a community action research in Bakassi Local Government Area of Nigeria’.

I am a PhD student in the School of Nursing, Midwifery and Social Work in the University of Manchester, United Kingdom. The study will seek the perspectives of some healthcare practitioners like doctors, midwives, nurses and community health extension workers as well as some members of Ekpiri Ikang community in Bakassi Local Government Area, on the topic. The project will entail a collaboration of the healthcare providers and the lay community members in a sequence of activities peculiar to action research, with the aim to empower members of the community to take action to prevent maternal mortality.

As you might be aware, maternal mortality in Nigeria is one of the highest in the world as documented by the World Health Organisation. Community involvement in preventing maternal deaths is advocated globally as an adjunct to the provision of emergency obstetric care and skilled birth attendants.

Following the consent of the participants, the findings of this study will be communicated to you with the hope that it might be relevant for your policy formulation with regard to maternal healthcare planning.

Your kind approval will be highly appreciated.

Yours faithfully,

EKPOANWAN ESIENUMOH
APPENDIX 9: LETTER OF CONSENT FROM BAKASSI LOCAL GOVERNMENT AREA

BAKASSI LOCAL GOVERNMENT
Cross River State of Nigeria

CONSENT FORM

This is to certify that Ekpoanwan Esienumoh Esienumoh has been given consent to carry out an academic action research on the prevention of maternal mortality at Ekpri Ikang Community of Bakassi Local Government Area, Cross River State, Nigeria.

Rt. Hon. (Chief) Ene Cobham
Vice Chairman

(All communication to be addressed to the Chairman)
APPENDIX 10: LETTER TO EKPRI-IKANG COMMUNITY

3rd June, 2009

The Head and Members of Community Council,
Ekpri Ikang,
Bakassi Local Government Area.

AN APPLICATION FOR APPROVAL TO CARRY OUT A RESEARCH PROJECT

I hereby solicit your approval to carry out a research project in Ekpri Ikang in Bakassi Local Government Area of Cross River State of Nigeria. The topic of the research project is ‘Prevention of maternal mortality: a community action research in Bakassi Local Government Area of Nigeria’.

I am a PhD student in the School of Nursing, Midwifery and Social Work in the University of Manchester, United Kingdom. The study will seek the perspectives of some healthcare practitioners like doctors, midwives, nurses and community health extension workers as well as some members of Ekpri Ikang community in Bakassi Local Government Area, on the topic. The project will entail a collaboration of the healthcare providers and the lay community members in a sequence of activities peculiar to action research, with the aim to empower members of the community to take action to prevent maternal mortality.

As you might be aware, maternal mortality is a big problem and particularly in the rural areas. Maternal deaths in Nigeria is the second highest in the world as documented by the World Health Organisation. Community involvement in preventing maternal deaths is advocated globally as an adjunct to the provision of emergency obstetric care and skilled birth attendants.

Following the consent of the participants, the findings of this study will be communicated to you with the hope that it might be relevant for your policy formulation with regard to preventing maternal deaths.

Your kind approval will be highly appreciated.

Yours faithfully,

EKPOANWAN ESIENUMOH
APPENDIX 11: LETTER TO THE OFFICER IN CHARGE OF EKPRI-IKANG HEALTH CENTRE

The Officer in-charge,
Health Centre,
Ekpri Ikang,
Bakassi Local Government Area.

3rd June, 2009

Sir/Madam,

AN APPLICATION FOR APPROVAL TO CARRY OUT A RESEARCH PROJECT

I hereby solicit your approval to involve your health centre and some of the staff in a research project in Ekpri Ikang, Bakassi Local Government Area of Cross River State of Nigeria. The topic of the research project is ‘Prevention of maternal mortality: a community action research in Bakassi Local Government Area of Nigeria’.

I am a PhD student in the School of Nursing, Midwifery and Social Work in the University of Manchester, United Kingdom. The study will seek the perspectives of some healthcare practitioners like doctors, midwives, nurses and community health extension workers as well as some members of Ekpri Ikang community in Bakassi Local Government Area, on the topic. The project will entail a collaboration of the healthcare providers and the lay community members in a sequence of activities peculiar to action research, with the aim to empower members of the community to take action to prevent maternal mortality.

I also seek your permission for some members of the action research group to observe the provision of maternal healthcare including birth attendance in your health centre. This may involve taking some photographs as permitted by you and others involved.

As you might be aware, maternal mortality in Nigeria is one of the highest in the world as documented by the World Health Organisation. Community involvement in preventing maternal deaths is advocated globally as an adjunct to the provision of emergency obstetric care and skilled birth attendants.

Following the consent of the participants, the findings of this study will be communicated to you with the hope that it might be relevant for your policy formulation with regard to maternal healthcare planning.

Your kind approval will be highly appreciated.

Yours faithfully,

EKPOANWAN ESJENUMOH
APPENDIX 12: PARTICIPANT INFORMATION SHEET

(For the action research group)


You are invited to participate in a research study but before you make up your mind, I would like you to understand the reason for the research and what it involves. Please take time to read through the following information carefully or listen carefully as I read the following information to you. You may wish to talk to other people about the study and also ask me for more information that will assist you to decide whether or not to participate.

What is the purpose of the study?
The purpose of this study is to explore the perspectives of the community with regard to maternal mortality and its prevention. It also aims to empower members of the community to take action to prevent maternal mortality. I would also like to add that this research project is an academic study.

How do you intend to carry out the research?
This is an action research study. This means that it involves both inquiry (research) and action (taking part in the study as a volunteer by answering questions or helping to plan the research). For this reason, you can volunteer to be a co-researcher while some other community members will be general participants. Co-researchers will work with me to generate and analyse data and also plan and implement actions through a series of meetings based on the data. These activities are expected to bring about a change that will lead to the prevention of maternal deaths in your community. The general participants will be those that data will be generated from, through interviews, focus group discussions and observations.
What is expected from the co-researchers?
As a co-researcher, you will be trained on the action research process and you will be expected to collaborate with me to collect and analyse data if you wish, as well as attend action research meetings. At the meetings, we will critically reflect on the results from the data and plan and implement actions expected to prevent maternal deaths in your community. It is important that you maintain confidentiality of data collected.

If I volunteer as a co-researcher, what is the time frame for this research project?
The project is expected to last for about ten months, but you and I and other co-researchers will have to work out the schedule of the activities so that it does not conflict with your other interests.

Why have I been approached?
As a member of this community, you are in an ideal situation to discuss your perspective on maternal deaths and their prevention in your community. This will help in developing action plan and intervention to empower members of the community to prevent maternal deaths.

Do I have to participate?
It is up to you to decide whether to participate or not. To participate, you will be required to give informed consent either by reading and signing the consent form or by verbal consenting to take part. If you give a verbal consent, with your permission, the consent will be audio-taped. Note that you should feel free to withdraw at any time without giving any reason.

What will happen if I decide to take part in the research as a co-researcher?
If you decide to take part in the research, I will discuss further details of the research with you. You will join a small group of a few other community members and health professionals (midwives, nurses, doctors as well as community health extension workers) which will be called the action research group. The group will meet each month for a minimum of ten months. The activities of the group include data gathering and analysis as well as planning and implementation of actions to prevent maternal mortality. All meetings will be audio-taped and then transcribed. All tape recordings will be destroyed after use.
What are the possible risks to me taking part in this research?
There are no real risks associated with being a member of the action research group. However, you will need to spend your time to attend the meetings and also collect and analyse data if you wish. Your travel expenses will be paid to cover your journey to and from the venue of activities with regard to the research.

What are the possible benefits of participating in this study?
It is possible that you will learn about maternal mortality and its prevention. I cannot promise the study will help you but the information we will obtain from this study will help to give understanding on maternal mortality and its prevention. This may give you the opportunity to contribute to developing a plan and intervention to empower members of your community to take action to prevent maternal mortality.

What if there is a problem?
If you have a concern about any aspect of this study, you should ask to speak to the researchers (contact details below) who will do their best to answer your questions. If you remain unhappy and wish to complain formally, you can do this through the University Research Governance and Practice Coordinators in the University Research Office (+44 161 275 7583 or +44 161 275 8093, email research-governance@manchester.ac.uk)

In the event that something does go wrong and you are harmed during the research and this is due to someone’s negligence then you may have grounds for a legal action for compensation against the University of Manchester, but you may have to pay your legal costs.

Contact details of researchers:

i) Ekpoanwan Esienumoh,
School of Nursing, Midwifery and Social Work,
University of Manchester, UK
(c/o Department of Nursing Science,
University of Calabar, Calabar, Nigeria.)
Will my taking part in the study be kept confidential?
All information will be anonymous. Your confidentiality will be safeguarded during and after the study. Your name and address will not be reflected on any information that goes beyond the study area. You will be identified with a code and the list of codes and data will only be accessed by the research team and these will be locked in a filing cabinet. All transcripts will be kept for 10 years and then disposed of securely.

What happens if the confidentiality of data is compromised?
At the outset of the study, ground rules and sanctions are put in place collaboratively by the action research group members to control their behaviour. One of the rules is confidentiality of data. Anyone who breaks the rules will be sanctioned by the group. Also, data will be protected by storing under lock and key.

What happens if I do not want to continue with the study?
You may withdraw at any time without any previous notice.
Must I be involved in the process of data analysis?
As many action research group members as would volunteer, will take part in the process of data analysis. These ones will analyse the data with me because it is a collaborative process.

How will the information obtained from the field (data) be analysed?
Data analysis will be done collaboratively by the researcher and co-researchers. This will entail your access to data from members of your community; however, confidentiality must be strictly maintained. You will be trained on how to analyse the data.

What will happen to the result of the study?
The result of this study will be used in writing the final report of this study. The result will be communicated formally to your community and your Local Government Council for the purpose of preventing maternal deaths. The result will also be published in academic journals as well as presented in national and international conferences. In all these uses, anonymity will be maintained. Direct quotes will not be linked to you.

Who has reviewed the study?
Being a research student of the University of Manchester in the United Kingdom, the Research Ethics Committee of the University has reviewed the proposal of this study, to ensure your safety, rights, wellbeing and dignity.

Who are your supervisors?
I have two supervisors, Professor Heather Waterman and Doctor Janette Allotey. They are Professor of Nursing/Ophthalmology and Senior Midwifery Lecturer respectively.
APPENDIX 13: PARTICIPANT INFORMATION SHEET

(for the general participants)


You are invited to participate in a research study but before you make up your mind, I would like you to understand the reason for the research and what it involves. Kindly listen carefully as I read the following information to you. You may wish to talk to other people about the study and also ask me for more information that will assist you to decide whether or not to participate.

What is the purpose of the study?
The purpose of this study is to explore the perspectives of the community with regard to maternal mortality and its prevention. It also aims to empower members of the community to take action to prevent maternal mortality. I would also like to add that this research project is an academic study.

What is expected from the participants?
You will be expected to spare some time to be interviewed in your home, or be part of a focus group discussion which will take place in a central place in your community. If you are involved in birth attendance, through appropriate permission, your practice will be observed by me and some co-researchers at your place of work.

Why have I been approached?
You have been approached because understanding is sought from your own perspective about maternal deaths and their prevention in your community. This will help in developing an action plan and intervention to empower members of the community to prevent maternal deaths.
Do I have to participate?
It is up to you to decide whether to participate or not. To participate, you will be required to give a signed or verbal consent. If it is a verbal consent, through your permission, it will be tape-recorded. Note that you should feel free to withdraw at any time without giving any reason.

What will happen if I decide to take part in the research?
If you decide to take part in the research, I will contact you and discuss further details of the research with you. Should you decide to participate in the interview and/or focus group discussion, you and I will arrange a date and time that is convenient for you.

What are the possible risks to me taking part in this research?
Your personal information may be required. You may choose not to give out any information you do not wish to. The interview can stop at any point you want.

What are the possible benefits of participating in this study?
The information you give may contribute to developing a plan and intervention to empower members of your community to take action to prevent maternal mortality. However, I cannot promise to help you.

What if there is a problem?
If you have a concern about any aspect of this study, you should ask to speak to the researchers (contact details below) who will do their best to answer your questions. If you remain unhappy and wish to complain formally, you can do this through the University Research Governance and Practice Coordinators in the University Research Office +44 161 275 7583 or +44 161 275 8093,
email research-governance@manchester.ac.uk

In the event that something does go wrong and you are harmed during the research and this is due to someone’s negligence then you may have grounds for a legal action for compensation against the University of Manchester, but you may have to pay your legal costs.
Contact details of researchers:

i) Ekpoanwan Esienumoh,
School of Nursing, Midwifery and Social Work,
University of Manchester, UK
(c/o Department of Nursing Science,
University of Calabar, Calabar, Nigeria.

ii) Professor Heather Waterman
School of Nursing, Midwifery and Social Work,
The University of Manchester,
Block 3, University Place,

iii) Dr Janette C. Allotey
School of Nursing, Midwifery and Social Work,
The University of Manchester,
Block 3, University Place,

Will my taking part in the study be kept confidential?
All information will be anonymous. Personal information will be kept confidential and the names of people and the community will also not be mentioned. Your permission will be sort before taking the photograph of any object and you will need to give consent for the pictures to be used in journals and presentations.

What happens if the confidentiality of data is compromised?
At the outset of the study, ground rules and sanctions are put in place collaboratively by the action research group members to control their behaviour. One of the rules is confidentiality of data. Anyone who breaks the rules will be sanctioned by the group. Also, data will be protected by storing under lock and key.
What happens if I do not want to continue with the study?
You may withdraw at any time without any previous notice.

What happens if I express distress during the interview because of touching sensitive issues?
The interview will be stopped immediately and you will be given the opportunity to compose yourself. At this point you should indicate to the interviewer whether you wish the interview to continue or withdraw or rearrange the interview.

What will happen to the result of the study?
The result of this study will be used in writing the final report of this study. The result will be communicated formally to your community and your Local Government Council for the purpose of preventing maternal deaths. The result will also be published in academic journals. In all these uses, anonymity will be maintained.

Who has reviewed the study?
Being a research student of the University of Manchester in the United Kingdom, the Research Ethics Committee of the University has reviewed the proposal of this study, to ensure your safety, rights, wellbeing and dignity.

Who are your supervisors?
I have two supervisors, Professor Heather Waterman and Doctor Janette Allotey. They are Professor of Nursing/Ophthalmology and Senior Midwifery Lecturer respectively.
APPENDIX 14: CONSENT FORM

(Action research group [co-researchers])

Study number:___________

Participant Identification Number for this study:__________

Title of project: Prevention of maternal mortality: a community action research in Bakassi Local Government Area of Nigeria.

Name of researcher: Please initial box.

1 I confirm that I have read and understand the information sheet/(the information sheet has been read and interpreted to me) dated.................... for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily

2 I understand my participation is voluntary and I am free to withdraw at any time without giving any reason.

3 I understand that the discussions during the action research meetings will be audio-taped.

4 I agree to take part in the above study.

Name of co-researcher Date Signature

*When completed, 1 for the co-researcher; 1 for researcher site file
APPENDIX 15: CONSENT FORM

(other participants apart from action research group)

Study Number: 
Participant Identification Number for this study: 

Title of Project: Prevention of maternal mortality: a community action research in Bakassi Local Government area of Nigeria.

Name of researcher:

Please initial each box

1. I confirm that I have read and understand the information sheet /(the information sheet has been read and interpreted to me) dated....................... for the above study. I have the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and I am free to withdraw at any time without giving any reason.

3. I understand that the interviews will be audio-taped. I give my consent to the interviews being audio-taped.

4. I agree to take part in the above study.

Name of participant Date Signature (or right hand thumb print)

Name of person taking consent Date Signature

NOTE: Right hand thumb print for those who cannot write

*When completed, 1 for participant; 1 for researcher site file
APPENDIX 16: GROUND RULES BY ACTION RESEARCH GROUP

1. Exposure of participant’s secret is subject to dismissal from the action research group.
2. Punctuality and regularity at meetings. Failure attracts a fine of N20.00.
3. We should work as a team.
4. Nobody should be ridiculed.
5. There should be orderliness, that is, no chorus talking, one person should speak at a time.
6. There should be no distraction e.g. phone calls, unnecessary movements, noise-making, chewing etc.
7. There should be no quarrelling and no fighting.
8. There should be mutual respect.
APPENDIX 17: INTERVIEW GUIDE (for women of childbearing age)

Age:
Sex:
Level of education:
Parity (number of children):
Occupation:

KNOWLEDGE OF MATERNAL MORTALITY

- At about what age should a girl or a woman have her first pregnancy?
- What reason(s) do you give for the above answer?
- At what age were you pregnant for the first time?
- At what stage in pregnancy should a woman start receiving antenatal care?
- What signs could indicate that a woman has complication(s) in pregnancy?
- In the event of complication, where should she go for treatment?
- What is your reason for the choice of place to get treatment?
- How can maternal deaths be prevented?
- What do you understand by maternal deaths?
- What are the specific causes of maternal deaths?
- Are there any contributory causes of maternal deaths, if yes, can you discuss these causes?

ATTITUDE

- How do people in your community react to the death of a woman during pregnancy and childbirth?
- How do you react to the death of a woman due to pregnancy and childbirth?

PRACTICE

- Have you ever suffered any complication(s) during pregnancy?
- If yes, what was the nature of the complication?
- Where did you receive treatment?
- Where do you have your babies?
- Who decides where you have your baby?
- Who attends to you during childbirth?
• Describe how you take care of the usual bloody discharge from your vagina following childbirth?
• Have you suffered any health problems during delivery and within the first two months after delivery?
• If yes, what were these problems and where did you receive treatment?
• Has any woman or some women died in your community within the past five years due to pregnancy or childbirth?
• If yes, what do you think was responsible for the death?

It is important to note that the interview schedule was a guide and flexibility was allowed during the interview process.
APPENDIX 18: BROAD TOPICS FOR FOCUS GROUP DISCUSSION

- Perception of maternal deaths
- Specific and contributory causes of maternal deaths
- Prevention of maternal deaths
- What the community does to prevent maternal deaths
APPENDIX 19: OBSERVATION GUIDE

TOPIC: PREVENTION OF MATERNAL MORTALITY: A COMMUNITY ACTION RESEARCH IN BAKASSI LGA, NIGERIA.

AREAS TO OBSERVE
The facility (TBAs or Contemporary health facility)
1. Accessibility (geographical and financial [fee])
2. General layout
3. Equipment (including medicines)
4. Environmental hygiene
5. Staff (skilled/unskilled and number)
6. Staff client interaction/ staff attitude

Practice in the following areas:
Pregnancy (antenatal care)
1. General / abdominal examination / investigations
2. Health education
3. Immunisation / simple remedies
4. Referral
5. others

Delivery (intrapartum care)
1. General layout of delivery room or place
2. Available equipment in delivery room or place
3. Environmental hygiene
4. Delivery practice (intra partum and post-delivery care)
5. Referral

Puerperium (i.e. period following delivery up to six weeks)
1. Structure in place for care during puerperium
2. Examination
3. Health education
4. Post natal check-up
APPENDIX 20: HEALTH CENTRE AT THE COMMUNITY
APPENDIX 21: DILAPIDATED STAFF QUARTERS AT THE HEALTH CENTRE
APPENDIX 22: MAKE-SHIFT BOILER FOR DELIVERY INSTRUMENTS AT THE HEALTH CENTRE
APPENDIX 23: THICK BUSH AROUND THE CLINIC
APPENDIX 24: DELIVERY ROOM AT THE HEALTH CENTRE
APPENDIX 25: A TBA’S DELIVERY HUT
APPENDIX 26: INTERIOR OF THE DELIVERY HUT
APPENDIX 27: TBA’S DELIVERY EQUIPMENT
APPENDIX 28: A TBA’S PLACE OF DELIVERY
APPENDIX 29: HERBS PROVIDED FOR THE PREGNANT WOMEN BY THE TBA FOR ENEMA
APPENDIX 30: DELIVERY ROOM ATTACHED TO A CHURCH
APPENDIX 31: INTERIOR OF THE CHURCH DELIVERY ROOM
APPENDIX 32: A TBA’S PRAYER ALTAR
APPENDIX 33: A TBA’S DELIVERY ROOM
APPENDIX 34: A TBA’S LYING-IN ROOM
APPENDIX 35: TBA DURING A TRAINING SESSION
APPENDIX 36: TBAS WITH DELIVERY KITS AFTER TRAINING

Contents of the delivery kit:
- Antiseptic lotion
- Methylated spirit
- Disposable examination gloves
- Roll of cotton wool
- Vulval pad
- Two plastic bowls with lid
- One packet of blade (for cutting the umbilical cord)
- One roll of thread (for tying the umbilical cord)
- A sheet of waterproof material
- Disposable rubber apron
APPENDIX 37: DETAILS OF THE WHO POLICY ON THE REDUCTION OF MATERNAL MORTALITY

The WHO also recommends that the social, economic and legislative environment should be supportive by allowing women to overcome the obstacles that limit their access to healthcare. Such obstacles include distance from their homes to the appropriate health facilities, lack of transport, financial and social barriers as well as paying for service. Also, legislation that supports women’s access to care must be formulated to permit health workers at the periphery of the health system to perform specific life-saving functions. Otherwise, only highly skilled health professional, based largely in urban centres, can provide such care, which implies that only women with sufficient money and means to reach such centres can benefit from the care.

The WHO also called for careful review of national laws and policies in the following areas: family planning, adolescents and children, barriers to access, regulation of practice, delegation of authority and abortion.

**Family Planning:**

Policies should address regulatory, social, economic and cultural factors that limit women’s control over sexuality and reproduction, in order that pregnancies that are too early, too late or too frequent may be avoided.

**Adolescents and children:**

WHO advocates that policies should encourage later marriage and child bearing as well as the expansion of economic and educational opportunities for girls and women. Good nutrition in childhood and adolescence should be promoted as well as supplementation if necessary during pregnancy.
Policies should enable adolescents to take responsibility for and protect their sexual and reproductive health, and facilitate their access to information and services. Also, all children, before they become sexually active, need to be taught the risks of unprotected sex and helped to develop the skills needed to protect themselves from sexual coercion.

**Barriers to access:**

Health workers trained in midwifery should be assigned to village-based health facilities as this can help to overcome problems of distance and transport. Policies should support service provision at minimum cost, at same time, health workers should have job security, be paid adequate wages and be provided with sufficient supplies to do their jobs. It is also essential to have policies that will increase women’s decision-making power, particularly, with regard to their own health. Also, health workers should be trained to deal sympathetically with women patients.

**Regulation of practice**

The WHO also advocates that protocols should be developed at each level of healthcare system to provide both routine maternal care and referral for obstetric complications. Responsibilities at each level for supervision, deployment of personnel and reporting procedures must be defined nationally. It is also important to develop curriculum for education and training to reflect maternal health needs.

**Delegation of authority**

Health service should be decentralised to bring facilities close to the people’s homes. Trained staff should be available in all health facilities, particularly in rural and remote
areas. This should be coupled with written policies and protocols to guide service provision as well as delegating functions to personnel at lower levels when appropriately trained.

**Abortion**

Appropriate legislation should ensure the availability of services for management of abortion complications and post abortion care. Facilities for safe termination of pregnancy should be made available where abortion is not prohibited by law. National policy should discourage unsafe abortion by promoting protection against unwanted pregnancy (WHO, 1999:22-24).

Policies were also formulated at other forums to aid the reduction of maternal deaths, one of such was at the fourth World Conference on Women in Beijing.
APPENDIX 38: COMMUNITY EDUCATION GUIDE ON MATERNAL MORTALITY

MATERNAL MORTALITY

DEFINITION:
*Death of a woman while pregnant or within 42 days (6 weeks) of termination of pregnancy; irrespective of the duration and site of pregnancy; from any cause related to or aggravated by pregnancy or its management BUT not from accidental or incidental causes (WHO, 2005).*

Most maternal deaths are avoidable (80%) given the right strategies (Emergency Obstetric Care, Skilled Birth Attendants and Community involvement) (UN, 2007).

<table>
<thead>
<tr>
<th>Region of the world</th>
<th>Maternal Mortality Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>900</td>
</tr>
<tr>
<td>Developed regions</td>
<td>9</td>
</tr>
</tbody>
</table>

Variations of maternal mortality in Nigeria
Higher in rural than urban areas

Causes of maternal mortality

*Direct Obstetric complications*
- Haemorrhage 25%
- Eclampsia – 12%
- Obstructed labour – 8%
- Sepsis – 15%
- Unsafe abortion – 13%

*(also includes complications from interventions, omissions, incorrect treatment or from a chain of events)*

*the health of the neonate is closely related to that of the mother
*15% of complications are unexpected, so access to Emergency Obstetric Care is very important (Royal College of Obstetricians and Gynaecologists, 2007).*

*Indirect Obstetric deaths*
From previously existing diseases or diseases that developed in pregnancy eg malaria, hepatitis, heart disease, renal disease, HIV/AIDS etc.

Factors associated with maternal mortality
Poverty leading to poor nutrition
Gender inequity
Girl-child marriage
Some cultural beliefs
Prevention of maternal mortality

Strategies for prevention
- Skilled birth attendants
- Emergency obstetric care
- Community mobilisation