How common is medical training in palliative care? A postal survey of general practitioners

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SUMMARY

Background. General practitioners (GPs) have a central role in palliative care, yet research continues to reveal room for improvement in symptom control at home. There is a need to evaluate how well-prepared GPs are for this task of caring for the dying at home.

Aim. To evaluate the training in palliative care GPs have received throughout their careers.

Method. Postal survey of 450 randomly selected East Anglian GP principals, investigating training in five areas of palliative care (pain control, control of other symptoms, communication skills, bereavement care, use of syringe driver), as clinical students, junior hospital doctors, GP trainees (registrars), and GP principals.

Results. A response rate of 86.7% was obtained. While GPs were clinical students, training was uncommon, (32% reported no training in pain control, and 58% no training in bereavement care), although there has been a significant increase in more recent years. Training as junior doctors was particularly uncommon (over 70% report no training in communication skills or bereavement care); there was some evidence of an increase in more recent years. During the GP trainee year, training was much more common. For GP principals, most areas had been covered, although over 20% reported no training in communication skills and bereavement care. During the community-based years as trainee and principal, training was significantly more common than during the hospital-based years of training as clinical student and junior doctor.

Conclusions. There is a continuing need for medical education in palliative care. Particular attention should be paid to the basic medical education of clinical students and the training of junior doctors, especially regarding communication skills and bereavement care.

Keywords: education; vocational training; palliative care; postal questionnaire.

Introduction

Caring for dying patients at home has long been an integral part of the role of the family doctor. Although the average GP will each year care for two or three cancer patients who die at home, GPs have a central role in palliative care, as most of the last year of life is spent at home.1 The central role in cancer care played by the primary health care team has been recognised by the Calman-Hine report,2 and it is the recommendation of a further recent national report3 that the focus of palliative care should ideally be in general practice. Despite a decline in the proportion of cancer patients who die at home to the present level of 26%,4 the majority of patients and their lay carers see home as the preferred place of death.5,6

GPs repeatedly express interest in receiving training in palliative care,7,8 but research continues to show poor control of symptoms at home.9,10,11 Recent studies have suggested that improvement has occurred in GPs' communication with the terminally ill.1 Pain control in the community is also improving,6 but controlling other symptoms remains a difficulty.12

The aim of this study was to ascertain how well-equipped GPs are for this task of caring for the dying at home, by evaluating the training they have received in palliative care, and their knowledge of some key issues of symptom control. The present paper reports on the first phase, a postal survey of GPs' reported training in palliative care at different career stages.

Method

A questionnaire was developed, limited to a single sheet of A4 paper. This comprised four questions which asked the responders whether, during their four career stages as clinical medical student, junior hospital doctor, GP trainee, and GP principal, they had received any training in five key areas of palliative care: pain control, control of other symptoms, communication skills, bereavement care, and use of a syringe driver. They indicated in a tick box whether they had received any training, with further boxes to indicate in which of four forms it was given: formal didactic teaching (e.g. lecture or seminar), practical work (e.g. demonstrations, supervised practice), video-feedback of practice or role-play exercise, and reading or other study (e.g. books, cassettes, and videos). Demographic and career history data were also collected.

Following informal feedback from GP colleagues in other parts of the UK, the questionnaire was piloted on a random sample of 20 GPs from an adjoining Health District not taking part in the main study, and then mailed to a random sample of 450 GPs, drawn from the lists of unrestricted principals supplied by the FHSAs of Cambridgeshire, Norfolk, and Suffolk (36% of the total East Anglian GP population of 1247). To maximize the response rate, letters describing the study were individually addressed, and signed personally by the GP member of the research team: a stamped addressed return envelope was enclosed. Non-responders were sent up to two reminders. No incentives were offered.

Parametric or non-parametric statistical analyses were conducted using SPSS for Windows Version 6.0. In many of our analyses below we have followed Gardner's and Altman's13 recommendations, and present confidence intervals and confidence intervals for differences, rather than simply using P values to dichotomize significant and non-significant results. Confidence intervals were calculated using the CIA programme.14 Chi-square tests reported below have 1 degree of freedom and when appropriate use Yates' correction unless otherwise specified.

Results

Three hundred and ninety replies were received, a response rate of 86.7%. Table 1 gives some basic information on the respon-
Table 1. Sample compared with non-responders, East Anglia GPs, and GPs through England.

<table>
<thead>
<tr>
<th>Age</th>
<th>Sample</th>
<th>Non-responders</th>
<th>East Anglia GPs</th>
<th>England GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;35</td>
<td>62 (16.4%)</td>
<td>-</td>
<td>199 (16.7%)</td>
<td>4503 (16.9%)</td>
</tr>
<tr>
<td>35-39</td>
<td>78 (20.6%)</td>
<td>-</td>
<td>275 (22.1%)</td>
<td>5304 (19.9%)</td>
</tr>
<tr>
<td>40-44</td>
<td>80 (21.2%)</td>
<td>-</td>
<td>215 (18.1%)</td>
<td>4706 (17.7%)</td>
</tr>
<tr>
<td>45-49</td>
<td>70 (18.5%)</td>
<td>-</td>
<td>223 (18.7%)</td>
<td>4611 (17.3%)</td>
</tr>
<tr>
<td>50-54</td>
<td>48 (12.7%)</td>
<td>-</td>
<td>150 (12.6%)</td>
<td>3298 (12.4%)</td>
</tr>
<tr>
<td>&gt;55</td>
<td>40 (10.6%)</td>
<td>-</td>
<td>129 (10.8%)</td>
<td>4226 (15.9%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Sample</th>
<th>Non-responders</th>
<th>East Anglia GPs</th>
<th>England GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>301 (77.2%)</td>
<td>54 (90%)</td>
<td>916 (76.9%)</td>
<td>19162 (71.9%)</td>
</tr>
<tr>
<td>Female</td>
<td>89 (22.8%)</td>
<td>6 (10%)</td>
<td>275 (22.1%)</td>
<td>7486 (28.1%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practice size</th>
<th>Sample</th>
<th>East Anglia GPs</th>
<th>England GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 partners</td>
<td>29 (7.4%)</td>
<td>13 (21.5%)</td>
<td>134 (11.3%)</td>
</tr>
<tr>
<td>3+ partners</td>
<td>361 (92.5%)</td>
<td>47 (78.5%)</td>
<td>1057 (88.7%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Member of training practice</th>
<th>Sample</th>
<th>East Anglia GPs</th>
<th>England GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>167 (42.8%)</td>
<td>17 (28.3%)</td>
<td>P = 0.047</td>
<td>-</td>
</tr>
<tr>
<td>MRCGP 158 (40.5%)</td>
<td>8 (13.3%)</td>
<td>P&lt;0.001</td>
<td>-</td>
</tr>
</tbody>
</table>

| n = 390 | 60 | 1191 | 26648 |

The mean age of responders was 43.8 years (SD = 8.44 years); 187 (47.9%) had qualified from a London medical school, 151 (38.7%) from other UK medical schools, and 52 (13.3%) from non-UK medical schools. The median year of qualification was 1975 (range 1951 to 1988), and 301 (77.2%) had spent a year as a GP trainee. Those who had been GP principals for a median of 10 years (range 0 to 36 years), and were in partnerships with a mean of 4.9 partners (SD = 1.8 partners).

By use of the Medical Directory,17 we have been able to examine the characteristics of the 390 responders with the 60 who failed to respond (Table 1). There was no statistically significant difference in terms of year of qualification, clinical school, or holding the DRCOG (P>0.05). However, respondents were more likely to be male (χ² = 4.39, P = 0.036), to be members of training practices (χ² = 3.94, P = 0.047), to be in practices with three or more partners (χ² = 10.82, P = 0.001), and to hold the MRCGP (χ² = 29.57, P<0.001).

When compared with the GP workforce of East Anglia (Table 1), our 390 responders had a similar mix of age and sex (P>0.05), but were more likely to be in practices of three or more partners (χ² = 11.02, P<0.001). When compared with the data for the national GP workforce, our responders were of a similar age (P>0.05), but were more likely to be male (χ² = 5.37, P = 0.02), and to be in practices with three or more partners (χ² = 60.91, P<0.001).

The training received during the four career stages is displayed in Table 2. All but four GP's report training in at least one area of palliative care during their careers. During their training as clinical students, the emphasis was largely on physical symptoms in palliative care. Exposure to training appears to be low: 32% reported no training in pain or symptom control, and 52% reported no training in communication skills or bereavement care; 83 (22.2%) reported having received no training in any area of palliative care as a clinical student. Syringe driver training is a special case, as the technology was only introduced into palliative care in 1979,14 and 66.4% of respondents qualified before that date.

During their years as hospital doctors, the training picture for physical symptoms was similar to that of the medical student years. However, even less training was received for the psychosocial aspects of care than had been received in student years: over 70% reported they received no training in communication skills and bereavement care; 109 (29.5%) reported having received no training in any area of palliative care as junior hospital doctors.

The single year as a GP trainee was quite different: training was reported by over 82% of trainees in all areas, except for the use of syringe drivers (120 (31.7%) had their trainee year before the introduction of syringe drivers in 1979). Of those who had a trainee year, 16 (5.6%) reported receiving no training in palliative care during that year.

GP principals reported a high exposure to training in all areas; only 18 (4.9%) reported not receiving training in any area of palliative care. Two hundred and fifty two (67.2%) reported training in the use of syringe drivers, which may reflect both the age structure of the sample and the use of syringe drivers in general practice.

The hospital-based training as clinical student or junior doctor is compared with community-based training as GP trainee or principal in Table 3. In all five areas, there are significant differences between the training received in the hospital setting and that received while in the community. The absence of hospital-based training in communication skills and bereavement care is particularly evident.

When the single year as trainee is compared with all six or more years of hospital-based training, the reported training received as a trainee is more common in all areas, although this only reaches statistical significance for communication skills (difference 33.0%; 95% CI = 39.0–27.0%), and bereavement care (difference 30.8%; 95% CI = 37.4–24.3%), and is borderline for pain control (difference 6.2%; 95% CI = 0.38–12.1%).

There is a steady rise in the reported exposure of clinical medical students to training over time (Figure 1). The median year of qualification of responders was 1975. Comparison of those who qualified before 1975 with those who qualified from 1975 onwards reveals that the changes in medical student training are statistically significant in all five areas: 99 (55.6%) of those who qualified before 1975 reported receiving training in pain control, this figure rising to 156 (80.0%) of those qualified after 1975 (difference 21.4%; 95% CI = 12.1–30.6%); for control of other symptoms, this figure was 99 (57.2%) rising to 143 (74.1%) (difference 15.3%; 95% CI = 5.76–24.8%); for communication skills, 59 (33.1%) rising to 121 (61.4%) (difference 26.0%; 95% CI = 16.4–35.6%); for bereavement care, 49 (27.5%) rising to 109 (55.9%) (difference 25.5%; 95% CI = 16.1–34.9%); and for syringe drivers, 13 (7.3%) rising to 36 (18.8%) (difference 10.5%; 95% CI 4.1–16.9%). Thus it appears that medical student
training has become more common in all five areas over time.

There is a much more modest rise in the reported exposure of junior hospital doctors to training over time (Figure 2). Comparison of those who qualified before 1975 with those who qualified from 1975 onwards reveals that these rises are statistically significant in three areas only: 102 (58.3%) of those who qualified before 1975 reported receiving training in pain control, this figure rising to 137 (69.2%) of those qualified after 1975 (difference 9.8%; 95% CI = 0.2–19.5%); for bereavement care, 37 (21.1%) rising to 74 (37.9%) (difference 14.9%; 95% CI = 6.1–23.7%); and for syringe drivers, 19 (11.0%) rising to 96 (49.0%) (difference 36.3%; 95% CI = 28.2–44.4%). (The other areas had more modest changes, and the 95% confidence intervals include zero.) This suggests that in these three areas the exposure of junior hospital doctors to training has increased over time.

It appears that those 301 responders who had a GP trainee year had a high exposure to training in palliative care during their trainee year (Figure 3). The median time as GP principal for responders was 10 years. Comparison of those who had been principals for 10 years or less with those who had been principals for 11 years or more reveals a statistically significant rise in reported training for three areas only. For communication skills, 87 (79%) of those who had been in practice for 11 years or more reported receiving training, this figure rising to 173 (92.5%) of those who had been in practice for up to 10 years (difference 13.4%; 95% CI = 4.9–22.0%); for bereavement care, the figure was 84 (76%) rising to 163 (87.2%) (difference 11.5%; 95% CI = 2.18–20.8%); and for syringe drivers, 23 (21%) rising to 106 (57.3%) (difference 36.0%; 95% CI = 25.5–46.5%). (The other areas had more modest changes, and the 95% confidence intervals include zero.) This suggests that in these three areas the training of GP trainees has become more common over recent years.

Established principals reported a high level of training (Figure 4). This appears less common for new principals, but comparison of those who had been principals for up to 10 years with those who had been principals for 11 years or more reveals that no significant change has occurred. Data on the form of training received will be published elsewhere.

Discussion

Our response rate of 86% compares very favourably with a recent review,19 which found a mean response rate of published GP questionnaire studies of 61%. A number of factors may have enabled this high response rate to be achieved: the questionnaire was short (two sides of a single sheet of A4), anonymous, had a personalized covering letter that was personally signed, enclosed a stamped addressed envelope, and was followed by two reminders to non-responders.20 In addition, the study related to an area of work of particular interest to many GPs.21

The analysis of the characteristics of responders and non-responders indicates that we received replies from GPs who are more likely to be in practices that are larger and are approved for vocational training, and are more likely to hold the MRCGP than their non-responding counterparts. This may indicate a GP sample with a greater interest in postgraduate education than their peers.22 Such comparisons, as are possible with the limited published characteristics of England and East Anglia GPs indicate that GPs in our sample are less likely to be in small practices of one or two partners than are GPs as a whole.

This study was based on self-report, involving recall of events which in some cases may have occurred more than 30 years previously. As such, it is open to the criticism that the reports are potentially biased by memory effects and other self-report biases. However, the syringe driver question has given us insight into false-positive responses, as the technology was not in use in palliative care prior to 1979. There are 13 responders in Figure 1 suggesting that they received syringe driver training before that date, a false positive response rate of 3.9%. This probably indicates that our respondents were not under-reporting their training.

The covering letter specifically asked GPs to report training received in palliative care, but many of the training areas speci-

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### Table 2. Responders by career stages who reported receiving training at that stage (%).

<table>
<thead>
<tr>
<th>Career stage</th>
<th>Pain control</th>
<th>Other symptoms</th>
<th>Communication skills</th>
<th>Bereavement care</th>
<th>Syringe drivers</th>
<th>No training in any area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical student (n = 390)</td>
<td>68.3 (285/385)</td>
<td>65.1 (250/378)</td>
<td>47.8 (185/387)</td>
<td>42.1 (162/385)</td>
<td>13.4 (51/380)</td>
<td>22.2 (83/387)</td>
</tr>
<tr>
<td>Junior doctor (n = 390)</td>
<td>63.6 (245/385)</td>
<td>64.8 (247/381)</td>
<td>18.9 (72/381)</td>
<td>29.7 (113/380)</td>
<td>31.3 (119/380)</td>
<td>29.5 (109/387)</td>
</tr>
<tr>
<td>GP trainee (n = 361*</td>
<td>84.2 (250/297)</td>
<td>83.7 (246/294)</td>
<td>87.5 (260/297)</td>
<td>82.9 (247/290)</td>
<td>44.0 (122/283)</td>
<td>5.6 (18/288)</td>
</tr>
<tr>
<td>GP principal (n = 390)</td>
<td>91.9 (352/383)</td>
<td>92.1 (348/387)</td>
<td>72.1 (274/380)</td>
<td>79.2 (307/385)</td>
<td>67.2 (252/375)</td>
<td>4.9 (18/364)</td>
</tr>
<tr>
<td>Never received any training</td>
<td>1.3 (5/390)</td>
<td>1.3 (5/390)</td>
<td>4.8 (19/390)</td>
<td>3.8 (14/390)</td>
<td>9.7 (38/390)</td>
<td>1.0 (4/390)</td>
</tr>
</tbody>
</table>

*The denominator is lower for this part of the careers as the trainee year only became compulsory in 1981, and 86/387 (22.2%) reported not having a trainee year.

### Table 3. Hospital-based training (medical student and junior doctor) compared with community-based training (GP trainee and GP principal) (% of respondents).

<table>
<thead>
<tr>
<th></th>
<th>Hospital training (%)</th>
<th>Community training (%)</th>
<th>Difference (%)</th>
<th>95% CI for difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain control</td>
<td>77.9</td>
<td>79.7</td>
<td>20.0</td>
<td>15.7–24.3</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>79.5</td>
<td>79.4</td>
<td>17.8</td>
<td>13.6–22.3</td>
</tr>
<tr>
<td>Communication</td>
<td>54.4</td>
<td>94.9</td>
<td>40.5</td>
<td>35.1–45.9</td>
</tr>
<tr>
<td>Bereavement</td>
<td>52.1</td>
<td>95.1</td>
<td>43.1</td>
<td>37.7–48.5</td>
</tr>
<tr>
<td>Syringe driver</td>
<td>37.2</td>
<td>85.6</td>
<td>48.5</td>
<td>44.2–55.8</td>
</tr>
</tbody>
</table>
fied are broader than the care of the dying, and may have been covered during training in other clinical situations. Pain relief will be covered during anaesthetics, and communication skills during psychiatry or GP consultation analysis. While some of the principles may generalise to palliative care, others are very specific (communicating a terminal prognosis, or using a syringe driver).

Clinical student training may have become more common over recent years, but there is still room for improvement, particularly in the psychosocial aspects of care. Recent reports have called for an increase in the training of medical students in palliative care, and a recent survey of medical schools has found that such training has increased over the period being reported. This documented increase would tend to validate the reports of our responders that their training increased over time. The Joint Statement issued by the Royal College of General Practitioners and the Association for Palliative Medicine in 1991 provided valuable guidelines on the breadth of issues to be covered. However, palliative medicine is regarded by many students as providing little satisfaction and engendering considerable anxiety; they feel inadequately trained in palliative care, especially in breaking bad news and coping with their own emotions. Many are completing their medical training unable to convert patients from one opioid to another, and are being 'thrown in at the deep end' as junior doctors, with little preparation.

Our data indicate that training during the junior hospital doctor years is frequently absent, particularly in communication skills and bereavement care, despite the 1987 recommendation of the General Medical Council that training in communication skills and the care of the dying should be part of the pre-registra-

![Figure 1. Training received as a clinical student (n = 390).](image1)

![Figure 2. Training received as a junior doctor (n = 390).](image2)

![Figure 3. Training received as a GP trainee (n = 301).](image3)

![Figure 4. Training received as a GP principal (n = 390).](image4)

tion house-year. This gives cause for concern, since the majority of patients with terminal illnesses die in acute care hospitals, under the care of junior doctors who are often delegated the task of caring for the dying and breaking bad news. Dealing with distressed relatives is a major source of stress for junior hospital doctors. It is not clear from our study whether those doctors who stay in hospital careers received an increase in their palliative care training that mirrors the training received in the community, or whether their training remains largely absent throughout their careers; the latter seems likely.

It appears that the vocational trainee year affords a higher exposure to training in all five areas of palliative care than all the years of training up to that stage. With a strong emphasis on the consultation and communication skills, vocational training has been identified as an important opportunity for palliative care education. The majority of vocational training schemes now include sessions covering terminal care and bereavement.

GP's see palliative care as an important aspect of their work; since becoming principals, the great majority have received training in all five areas. Aspects of physical symptom control and emotional care are continuing challenges, and GPs continue to express interest in attending courses in palliative care.

There may be indications that the most recent principals have had less training than the earlier cohorts (Figure 4), although the training received by those who have been principals for up to 10 years does not differ from training received by longer-established principals. Not only is the clinical training agenda for principals very wide, including all aspects of medicine, but a major need of the young principal is to tackle the administrative and financial
aspects of practice (which have themselves become more time-consuming over recent years). Furthermore, it may take a few years looking after patients dying at home before GPs become aware of the need to refresh and develop the training received earlier in their careers.

While the present study assessed exposure to training, it did not assess its impact in preparing GPs to care for dying patients at home. GPs’ confidence in different areas of knowledge poorly predicts their actual knowledge as measured by an objective test.41

In order to assess the knowledge-base of our responders with respect to pain control, control of other symptoms, and use of syringe drivers, two further questionnaires were designed, in style much more like examination papers; the data from these questionnaires will be published elsewhere.

In conclusion, this paper indicates an absence of training in palliative care that clearly reveals the need for continuing medical education in this field. While only four GPs (1%) report having received no training at any point in their careers in any aspect of palliative care, the fact that 10% of GPs report that they were never trained to use a syringe driver, and that 4–5% were never trained in communication skills and bereavement care, is cause for concern: the problems can be addressed by encouraging them to attend PGEA-approved training sessions in palliative care. For future generations of doctors, whether in hospital medicine or general practice, there is a need to improve the training at clinical schools, but perhaps especially important is the need to improve the input in palliative medicine during the training years of a junior hospital doctor.

References
40. Mathews B, Oxenbury J. Do general practitioners have appropriate knowledge in their knowledge base? Education for General Practice 1996; 7: 23-27.

Summary
GPs report of their training in palliative care that:
• Training for clinical students focuses on physical symptoms, but 22% reported they had no training in any area of palliative care.
• For junior doctors the focus is again on physical symptoms, 70% reporting no training in the psychosocial aspects of care, and 29% reporting no training in any area of palliative care.
• The training of clinical students and junior doctors is particularly incomplete in communication skills and bereavement care.
• There is greater exposure to palliative care during community-based GP training than during hospital-based training.
• Most GP trainees receive training in all aspects of palliative care during their practice year.
• The great majority of established principals have received some training in all aspects of palliative care.

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