Survey of inhaler technique for patients of the Cardiff and Vale University Health Board: An MPharm research project.

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Background: We set out to design a 4th year MPharm research project that would be relevant to future practice, feasible to be carried out in one month and sufficiently scalable to allow the participation of multiple undergraduates.

Method: We designed a project to audit inhaler technique in patients of the local health board. Ethical approval was obtained prior to students starting work. Students were trained in the use of a Vitalograph™ AIM device, to check inhaler technique, and how to provide corrective advice before data collection. Over a month, patients recruited in primary and secondary care, had their technique in using either a dry powder inhaler (DPI) and/or a metered dose inhaler without (MDI) or with a spacer (MDI+spacer) assessed.

Results: Unless otherwise stated, percentages refer to the total of 89 patients who consented to participate in the study. 38% used both an MDI and DPI, 43% used a MDI and 18% used a DPI alone. Of the patients using MDIs, 12 (16% of MDI users) used spacers. Based on the AIM device, the technique of 74% of MDI users was categorised as ‘fail’, 25% as ‘suboptimal’ and 2% as ‘good’. For users of DPIs, 8% were classified as ‘fail’, 64% as ‘suboptimal’ and 28% as good. The majority of patients reported that a nurse (52%) was the last health-care professional who gave them advice about inhaler technique was a nurse (52%) with pharmacists (6%) lagging behind GPs (22%).

Conclusions: The audit worked well as an MPharm group research project with students gaining experience in working with patients and other healthcare professionals. Positive feedback was received about the relevance of the project to future practice. We hope that the project could be expanded to other areas of the UK by collaborations with other Schools of Pharmacy.