An evaluation of palliative care education in the specialist training programme in family medicine
Jurgen Abela, Pierre Mallia

Abstract

Aim: The study aimed to evaluate the teaching in palliative care (PC) provided during the Specialist Training Programme in Family Medicine (STPFM) in Malta.

Methodology: A questionnaire was used, based on two other validated questionnaires used in a similar population. Fifteen topics commonly encountered in PC were analysed.

Results: Twenty-two (74.4%) trainees returned the questionnaire. All trainees received exposure to palliative care patients, but only 5 (22.7%) felt involved in their care and only 6 (27.3%) ever used a syringe driver. Most PC teaching in the STPFM was formal in nature. Trainees felt that palliative care subjects were covered well in the STPFM, but non-medical areas received lower scores. Trainees' confidence closely mirrored the scores for subject coverage. The Half-Day Release Programmes were the most useful palliative care teaching resource. A correct answer for the question on pain management was obtained by 63.3% of trainees and 23.7% got a correct answer for the question on the use of a syringe driver. Concerns on managing dying patients in the community were raised by 40.9% of trainees. Trainees judged overall positively their STPFM.

Conclusion: GP trainees need to be trained in PC in a manner that adequately addresses their future caseload. Changes need to be made in the PC teaching within the STPFM to address areas such as ethical issues in end-of-life; using a syringe driver; self-care and managing patients in the community.

Introduction and background

Family medicine can be defined as the medical specialty, which, irrespective of the health care setting in which it functions, includes the six core competencies of primary care management, person-centred approach, specific problem solving skills, community orientation, comprehensive approach and holistic care. Almost every family doctor interacts with dying patients at some point and identifying the goals of care can be a challenge.

Malta’s Specialist Training Programme in Family Medicine (STPFM) was launched in 2007, following approval of the programme by the Specialist Accreditation Committee in 2006. In Malta, the Malta College of Family Doctors and the Department of Primary Health jointly run the STPFM. The STPFM is spread over three years. One of the specialties in which GP trainees are involved is palliative care (PC).

PC aims to improve the quality of life of the patient with a limited prognosis through a combined approach addressing the physical, psychosocial and spiritual nature aspects of the patient, including bereavement support to the relatives of the patient. Historically, PC was very much associated with oncology. Following on a landmark study, PC has expanded to include non-cancer diseases such as heart failure and respiratory failure. Various proposals to include the elderly in the palliative care population have also been put forward.

The ethical importance of palliative care is also reflected in the Ethics Curriculum for the membership of the Royal College of General Practitioners. This is relevant locally since, once the STPFM is completed, in addition to getting accreditation of the Malta College of Family Doctors, trainees will be eligible for international membership (MRCGP[INT]). Relevant ethical issues include confidentiality, communication with relatives, treating the patient, sedation for the sake of the relatives and maintaining life at all cost.

Studies have shown that more than 90% of the last year of life of PC patients is spent at home and are cared for by generalists. As stated in the Oxford Textbook of Palliative Medicine: “Every terminally ill patient has a fundamental right to receive good palliative care wherever he is...it is the professional responsibility of all doctors and nurses caring for patients at home to provide such care...and that almost all patients would prefer to be cared for at home as long as possible.”

Hence, given all of the above, Family Doctors have a pivotal role in PC in the community. More so, the General Medical
Council (GMC) has given clear guidance that all medical students should receive training in taking care of terminally ill.10 Unfortunately, a survey of UK pre-registration doctors cast doubts on the adequacy of teaching of PC.11 Studies on established family doctors and GP trainees have also highlighted some worrying lacunae.12,13

This study was devised to evaluate the teaching in PC and end-of-life issues in the STPFM in Malta, given the importance of the field and its overlap with Family Medicine.

Table 1: Characteristics of respondents

<table>
<thead>
<tr>
<th>Initiation of specialist training</th>
<th>Number of trainees (n=22)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2007</td>
<td>10</td>
<td>45.5</td>
</tr>
<tr>
<td>January 2008</td>
<td>4</td>
<td>18.2</td>
</tr>
<tr>
<td>July 2008</td>
<td>4</td>
<td>18.2</td>
</tr>
<tr>
<td>July 2009</td>
<td>4</td>
<td>18.2</td>
</tr>
</tbody>
</table>

**Methodology**

PC education in the STPFM includes:

- Two month part time attachment at the Oncology and Palliative care unit, Boffa Hospital
- Full-time attachments in family medicine and at Mater Dei Hospital, which provide some further exposure to palliative care in different settings
- Four sessions of four hours each on PC in the mandatory Half Day Release Programme (HDRP) schedule.
- Tutorials carried out with the respective trainer or with any other doctor

In order to evaluate such training, a questionnaire was used. This tool was chosen since it is appropriate for the topic under investigation, it is appealing to the participants because it is not time consuming to fill in, and thirdly, it was used successfully in a similar population.13,14 In addition, although mainly quantitative in nature, it allows a minimal amount of qualitative analysis also.

The questionnaire used was built around two other questionnaires used to study similar populations.13,14 The questionnaire was divided into four sections:

- First section dealt with general aspects of exposure to PC
- The second section asked about:
  - The type of PC teaching imparted during hospital internship and the GP training programme
  - Coverage of PC topics during the STPFM
  - Confidence in dealing with the same topics in a clinical setting.
  - Usefulness of various settings of the GP training in PC.
  - The participants were asked to score the last three questions on a 5-point Likert scale. The list of topics was adapted to the local practice, keeping in mind the prevalence of symptoms and issues in community palliative care.15
  - The third section assessed the application of knowledge in PC.
  - The fourth section asked for an overall rating of the STPFM.

Room was left for comments. In addition, participants were asked about the worries in managing future palliative care patients. The questionnaire was delivered during one of the mandatory HDRP sessions.

Approval for the study was obtained from the Coordinators of the STPFM, from the Department of Primary Health and from the University Research Ethics Committee. Data were analysed using SPSS version 14.0.

Results

The questionnaire was divided into four sections, which will be reviewed and analysed individually.

Section 1: Demographic details and exposure to PC

Out of a total of 30 GP trainees, 22 returned the questionnaire, giving a response rate of 74.4% (Table 1). The respondents consisted of 14 female GP trainees and 8 male GP trainees.

All of the GP trainees claimed that they came across patients receiving PC, though 5 (22.7%) claimed they felt that they were not involved in the care of the patient. Interestingly, only 6 (27.3%) trainees admitted to using a syringe driver.

Of the 6 who claimed having used a syringe driver, only 2 were from the cohort that finished the training programme in 2010, implying that 8 of the total of 11 GP trainees who have finished their studies in July 2010 never used a syringe driver.

Section 2: PC topics: type of teaching, coverage and confidence

The first question dealt with the type of teaching received during hospital internship and STPFM (Figures 1 and 2). The teaching in the STPFM is formal in nature, as opposed to that occurring during hospital internship. Indeed in the latter, informal teaching or no teaching at all seems to prevail. A high percentage declared that no teaching was received for the non-medical issues (e.g. self care, communication with dying and ethical issues at end of life).

The second question assessed how well topics were covered during the STPFM. The participants were asked to score on a 5-point Likert scale and the results are summarised in Figure 3. Certain subject areas, traditionally regarded as non-medical seem to have a less optimal coverage than the traditional subjects. This situation can be seen to mirror the lack of teaching observed in the same areas in the hospital internship.

The second question assessed how well topics were covered during the STPFM. The participants were asked to score on a 5-point Likert scale and the results are summarised in Figure 3. Certain subject areas, traditionally regarded as non-medical seem to have a less optimal coverage than the traditional subjects. This situation can be seen to mirror the lack of teaching observed in the same areas in the hospital internship.

The third question, assessed confidence in dealing with the same topics when encountered in the clinical setting (Figure 4). Figure 5 compares the means obtained in each area for the two preceding questions. There is a slightly lower score in the mean for confidence in all subjects (with the exception of certification)
when compared to how well the subject was covered during the training. Yet again, there is an overall decrease in confidence in the non-medical topics. Using Spearman’s Correlation Coefficient, a significant correlation ($p<0.05$) between subject coverage and confidence was observed only in the following areas: using a syringe driver, managing constipation, breaking bad news, teamwork, certification at end of life and ethical issues at end of life.

The fourth question dealt with the usefulness of various settings to enhance PC skills and education (Figure 6). The HDRP (in PC) were found to be the most useful of all learning resources. All other resources, such as the various attachments (i.e those at the Oncology and Palliative Department, in Family Medicine and at Mater Dei rotating in various specialties) seem to be modestly useful alike, scoring mainly an average by trainees.
Figure 3: Coverage of Subjects during GP training
(N&V - nausea and vomiting; SD - use of syringe driver; BBN - breaking bad news; Commdying - communication with the dying; Commrel - Communication with relatives; Family - taking care of the family; certification – certification of death; ethical – ethical issues at the end of life)

Figure 4: Confidence rating in subjects related to palliative care
(N&V - nausea and vomiting; SD - use of syringe driver; BBN - breaking bad news; Commdying - communication with the dying; Commrel - Communication with relatives; Family - taking care of the family; certification – certification of death; ethical – ethical issues at the end of life)
**Figure 5:** Comparison of mean score in coverage and confidence for each subject area
(N&V - nausea and vomiting; SD - use of syringe driver; BBN - breaking bad news; Commdying - communication with the dying; Commrel - Communication with relatives; Family - taking care of the family; certification – certification of death; ethical – ethical issues at the end of life)

![Comparison of mean score in coverage and confidence for each subject area](Figure5.jpg)

**Figure 6:** Usefulness of educational resources
(Palliative Care – attachment at Oncology and Palliative Care Department, B offa Hospital; Mater Dei - attachments in a variety of other settings included in the STPFM; HDRP – half day release programmes in Palliative Care; tutorials – any done with the respective trainer or any other doctor)

![Usefulness of educational resources](Figure6.jpg)
Lastly, trainees listed their worries about managing future patients (Table 2). Most of the worries deal with managing dying patients at home, how to get through communicating effectively in such situations, their clinical attachment and the concept of self-care.

**Section 3: Assessment of application of knowledge in pain management and using a syringe driver**

Most trainees got a correct answer for the question on pain management and an incorrect one for the question on the syringe driver (Figure 7). The question on pain asked about the World Health Organization (WHO) analgesic ladder and prescribing issues in pain management. The question on the syringe driver dealt with indications for its use and also a question on conversion ratios of morphine.

**Section 4: Overall satisfaction with the STPFM**

Overall, trainees are happy with the STPFM, with 20 out of 22 (91%) rating it ‘good’ or ‘very good’ (Figure 8). No significant correlation was found between rating of STPFM and any of the above questions. There was no difference in score between the various cohorts of trainees.

**Discussion**

It has been reported that there is a wide variation on teaching of PC in family medicine. This is the first time that a subject area in the STPFM was studied in such detail and hence the study should contribute positively to the local medical literature. The response rate for this study was 74.4%. Given that questionnaires for GPs usually have a response rate of 61%, this study can be regarded to have a good response rate.
All trainees reported seeing PC patients, though 5 (22.7%) claimed not to have been involved in the care of the patient. Interestingly, only 6 (27.3%) trainees confirmed using a syringe driver. In a similar study, 83% reported seeing PC patients, while 40% reported using a syringe driver. Although the percentage of GP trainees seeing PC patients as reported in our study is much more, the fact that a much lower percentage ever used a syringe driver may suggest that the quality of exposure to palliative care patients, in various settings, may need to be improved. This is further supported by the fact that of the ten final year GP trainees who responded the questionnaire, only two actually used a syringe driver.

The training in PC during the STPFM has been overwhelmingly scored as being formal in nature. This should be interpreted positively, coming on from the less formal/absent teaching characteristic of the hospital internship. Indeed, this lack of teaching in the hospital internship, particularly in areas such as communicating with the dying, with relatives and taking care of self is a cause of concern for our current and future foundation doctors. This state of affair seems to contradict the importance laid down in appropriate training in PC for foundation doctors. This should be interpreted positively, coming on from the less formal/absent teaching characteristic of the hospital internship.

Hopefully, the doctors finishing the recently launched Foundation Programme will be better prepared.

Subject coverage and confidence showed similar scoring patterns. Since the non-medical areas received inferior scores than the traditional symptom control topics, it can be surmised that these non-medical areas in PC can be addressed better. This seems to be consistent with other studies, where, a preference (intentional or not) for the symptom based medical topics is given, by the various educational establishments.

An interesting issue is the fact that despite having only 6 GP trainees claiming to having used a syringe driver, 19 out of 22 trainees (86.3%) report as being confident, very confident or extremely confident in using a driver. Further to this, 17 out of 22 (77.3%) got the answer wrong in the question about using the syringe driver. This rather contradictory finding has been previously documented in the literature. Indeed confidence rating need not necessarily relate to/predict competence. In fact, competence, as opposed to confidence, can be defined as: “The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and the community being served.”

The mandatory HDRP sessions in palliative care, carried out by one of the authors (JA), are popular with and useful for GP trainees. Their content may need to be revised to better reflect the lacunae in knowledge and skills of the trainees as a result of this study. In particular, there is an evident and perceived lacuna in the teaching of ethics in PC (ethics is only part of the curriculum as a general topic and as a HDRP session). Trainees are also attached on a part-time basis to the department of oncology and palliative care. The score for this attachment is average. Possibly, the workload and lack of exposure to community palliative care are the main issues for which trainees do not find it so useful. This is supported by some of the comments of the trainees (Table 2). Trainees reported other attachments (in family medicine or other specialties at MDH) similarly of average usefulness. Although the latter attachments can certainly be improved on, they help ‘export’ concepts and skills learnt to different medical fields. In any clinical attachment, for teaching to have an appropriate impact on these (adult) learners, it should follow established theories of adult learning, which champion amongst other techniques, the so-called On The Job Teaching (OTJT).

The practical application of knowledge is crucial in any specialisation. The worries listed in Table 2, for a specialty (i.e. family medicine) which is based mainly in the community, are indeed a cause of concern. In particular, the fear of managing dying patients seems to prevail in a significant minority of trainees (40.9 %). This implies that there may be inadequate preparation of the trainees for what they will be actually doing i.e. taking care of people in the community in all phases of life, include the dying phase. A possible explanation to this finding may be found in the ‘death denying society’, prevalent locally, where death may be seen to be a defeat for medicine and hence preferably avoidable. Another possible explanation can be seen in the fact that community based medicine, is quite distinct from hospital-based medicine. This also applies to PC. Community PC, very much like family medicine, is characterised by a different setting, in which professional isolation is compounded, visits need to be planned, anticipation of problems is paramount, crises leading to potentially avoidable hospital admissions are more likely to happen, there is greater reliance on clinical skills due to the difficulty in organising investigations, coordination of care is much more time consuming and difficult, and finally, it is much more labour intensive.

In fact:

“Those familiar only with hospital practice may be forgiven for thinking that domiciliary care is identical with hospital care in all respects except the place where the patient is resident. This is emphatically not the case.”

Indeed, following consistent feedback from the trainees, and subsequent to this study, a regular placement in community palliative care at the Malta Hospice Movement was introduced in the recently revised version of the STPFM document.

Discussing and debating ethical issues such as ‘what is a good death’, issues relating to ‘cure’ vs ‘care’ and the principle of double effect in the delivery of treatment will benefit the programme considerably. Amongst the most pressing issues are cultural issues such as the right not to know and familial pressure. Finally, ‘good death’ needs good decisions that stem out of competence and appropriate ethical choices.
Strengths and limitations

A questionnaire built on validated questionnaires has been used. In addition, a vast amount of topics (15) were covered in this questionnaire, thereby providing a comprehensive review of palliative care education in the STPFM. The small size of the trainee population in Malta detracts from attaining statistical significance despite a good response rate. The questions on the use of syringe driver have highlighted the distinction between confidence and competence. Competence is certainly the more relevant of the two concepts, but also more difficult to evaluate. This indeed can be seen as a weakness of this study.

The use of qualitative methodology was very limited. This was due to the fact that the questionnaire was intended primarily as a quantitative tool, to identify any lacunae in the programme. A tool allowing a better qualitative approach (e.g. interviews) might have allowed better exploration of the worries of the trainees, but it can be argued that a qualitative methodology could not have presented as clear and broad picture as was done using the present methodology.

Conclusion

This study should add to the standing of the local STPFM by evaluating the educational content with respect to PC, identifying areas in need of improvement and highlighting positive aspects. Formal teaching in PC is prevalent in the STPFM, while there is a good overall degree of confidence that was paralleled by how well subjects are covered during the STPFM. The HDRP sessions are the most useful of teaching resources, while the other resources scored an average as regards usefulness. A significant minority of trainees identified worries in managing dying patients in the community. GP trainees need to be trained in PC in a manner that adequately addresses their future caseload. Changes need to be made within PC training in the STPFM, especially to address areas such as ethical issues in end-of-life; using a syringe driver; self-care and managing patients in the community.

Acknowledgments

The authors would like to thank Dr Stephanie Dowling Assistant Programme Director, South Eastern General Practice Training Scheme, UK and Dr Joe Low, Senior Research Fellow, Marie Curie Palliative Care Research Unit (UCL), UK for their support and input in the formulation of the questionnaire used in the present study.

References

19. Matthews BOJ. Do general practitioners have appropriate confidence in their knowledge base? Education for General Practice. 1996;7:23.