

Original Article

Cite this article: Bar-Sela G *et al* (2018). Medical students' attitudes towards participating in a palliative medicine course: A new specialty in Israel. *Palliative and Supportive Care* **16**, 528–533. <https://doi.org/10.1017/S1478951517000943>

Received: 7 September 2016
Accepted: 4 October 2017

Key words:

Medical students; Medical students training; Palliative medicine course

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Medical students' attitudes towards participating in a palliative medicine course: A new specialty in Israel

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Abstract

Background. Palliative medicine is a growing field in Israel, and its training program is still in process. The current study aimed to evaluate students' attitudes regarding a course in palliative care established in a division of oncology.

Method. Some 45 medical students in their 5th to 6th years participated in a one-week course on palliative care. At the end of each training week, students were asked to complete a questionnaire, evaluating their attitudes regarding different aspects of the program content, such as its importance and relevance to their training as physicians, as well as the contribution of specific parts of the program to their knowledge regarding palliative care.

Results. The overall satisfaction of the 45 students was high. The most contributory parts of the course were the multidisciplinary team and the complementary and alternative medicine. Participating in the staff meetings and accompanying physicians in their daily work were scored as the least contributory parts.

Significance of results. This preliminary study demonstrated students' overall high satisfaction with the newly established palliative care course and their need for more practical skills. Future studies should investigate and evaluate educational programs in palliative care in order to establish suitable training for medical students.

Introduction

In recent decades, there has been growing recognition of the field of palliative medicine as a formal medical field. In Britain, it was established as a subspecialty of general medicine in 1987, and in the United States it was recognized in 2007 (Hanks *et al.*, 2010). Palliative medicine aims to improve the quality of life and relieve the suffering of patients with severe illnesses, unlike traditional medicine, which focuses on curing illness and prolonging life. This “patient-centered” care requires multidisciplinary knowledge and specific skills, such as open communication with patients and caregivers that establishes realistic goals and enables improved decision making; routine assessment of symptoms and adequate treatment; addressing psychosocial and spiritual needs, as well as coordination of patients' medical and social services (Morrison and Meier, 2004).

Studies have shown that integration of palliative care as a part of routine medical treatment, particularly in the early stages of the disease, leads to improved quality of life, more accurate illness perception, and better end-of-life care (Lorenz *et al.*, 2008; Temel *et al.*, 2010; 2011; Greer *et al.*, 2012; Zimmermann *et al.*, 2014).

Given its importance, it is highly important to educate physicians regarding palliative care and to emphasize end-of-life issues, particularly during the early stages of their professional development (Dickinson, 2002; Holley *et al.*, 2003; Wiener *et al.*, 2015). This training may help medical students to be more aware of palliative issues, to face their own fears about death and dying, and to establish a more positive attitude about these topics. In addition, it may help them to integrate palliative care into their future work and to approach it with a sense of competence and tolerance, leading to better interactions with dying patients and their families (Dickinson 2002; Hanks *et al.*, 2010). For example, a study with 4th-year medical students from Liverpool, England, who completed an education program in palliative medicine demonstrated that it improved their perceived ability to practice palliative medicine and their attitude toward care (Mason and Ellershaw, 2008). In addition, a study with second-year

medical students at Ben-Gurion University in Beer Sheba, Israel, who participated in a one-week course in holistic cancer care, demonstrated that students felt more comfortable dealing with issues of death and dying following the course and felt more empathic with cancer patients (Granek et al., 2015).

Historically, the focus of medical schools has mainly been on curative care, with limited emphasis on issues of dying and death. However, the growing recognition of palliative care has led to the establishment of formal training programs throughout the world (Dickinson 2002; Morrison et al., 2005; Hanks et al., 2010).

In Israel, palliative medicine was recognized as a formal discipline in 2013. It is a growing field, and its training programs and academic curricula are still in the process of development. The faculty of medicine at Technion of the Israel Institute of Technology began a training program for palliative care in 2013. The course is designed for 4th- to 6th-year medical students and is held in the division of oncology of the Rambam Health Care Campus in Haifa. The goals of the course are to provide basic knowledge about different aspects of symptom control; to give students the ability to take palliative anamnesis; to expose them to questions about end-of-life care; and to train them to work on a multidisciplinary team. Given the need to establish suitable programs for this growing field and to properly train future physicians, it is vital to evaluate the new course. Hence, the current study aimed to evaluate students' attitudes regarding the course, so as to better understand their academic and professional needs and to adjust the training program accordingly.

Methods

Study Sample

The sample included 45 medical students in their 5th and 6th years who participated in a one-week course of the division of oncology at the Rambam Health Care Campus. The course is not a mandatory part of the curriculum, and students can rate it along with other elective courses according to their level of interest or schedule preferences. Not all participants chose the course as their first priority, and some were assigned to it by the faculty of medicine according to various considerations, mostly arbitrary schedule issues.

During the training week, they accompanied physicians in their routine work, participated in staff meetings, and learned about the theoretical and practical aspects of palliative care from the multidisciplinary palliative team, including spiritual care, psychological and social aspects, and complementary medicine. The study was approved by the ethics committee at the Rambam Health Care Campus.

Course Program

The curriculum of the course was designed by the senior staff in the palliative unit according to their professional knowledge and understanding of palliative care, as well as the academic requirements of the faculty of medicine. The main goal of the course was to expose students to the field of palliative care and its core concepts, and to demonstrate the multidisciplinary working model in the division of oncology. The rationale was to include formal didactic parts (such as lectures and texts) as well as informal parts (such as exposure to dying patients and interactions with them) (Bickel-Swenson, 2007; Billings et al., 2010). During the entire course, students were accompanied by a physician to

ensure adequate supervision and guidance and to promote a positive and secure learning experience for them.

Before the course, students received a letter detailing the importance of palliative care and the scheduled program. The course lasted for five days (7–8 hours a day) and included various activities (1.5 to 3 hours per activity). Each round included the same structured curriculum and was supervised by a senior oncologist trained in palliative care. The instructors of the course were staff members from the palliative unit in the division of oncology. Each round included the same staff, apart from exceptional cases (e.g., sick leave), to enable consistency and a reliable comparison of the groups.

The students participated in introductory lectures followed by bedside teaching on the symptoms discussed, including pain control, gastrointestinal symptoms, nutrition in end-of-life care, and dyspnea. They had a workshop with the psychologist on delivering bad news and with the spiritual caregiver on spiritual anamnesis. Along with the social worker, they met the family of a patient who had recently passed away. They also visited the pain clinic, the pediatric oncology department, and one internal medicine department for non-oncological patients. They also met some of the integrative medicine (complementary and alternative medicine) therapists and experienced two different therapies themselves.

During the week, every student followed one patient, whom he presented on the last day to the other group members, with respect to the palliative aspects of his hospitalization. This presentation replaced clinical examination in the course.

Measurements

At the end of each training week, students were asked to complete a questionnaire anonymously, evaluating their attitudes about the program (Appendix 1). The questionnaire was designed by the research team and included 17 items rated on a Likert-type scale of 1 (completely disagree) to 5 (completely agree). The items evaluated different general aspects of the program, such as its importance and relevance to their training as physicians, as well as the contribution of specific parts of the program to their knowledge regarding palliative care (e.g., medical lectures or psychological aspects). In addition, the questionnaire included an open section that allowed students to express their opinions regarding specific contributing or disturbing aspects of the program. The value of Cronbach's alpha of the questionnaire was found to be 0.82, demonstrating its internal consistency.

Data Analysis

Data analysis was carried out with SPSS statistical software (v. 19, SPSS Inc., Chicago, Illinois). Median and mean scores were calculated for each item of the questionnaire. In addition, the percentage of respondents rating it at 5 or 3 and below was calculated.

Results

From November of 2013 to July of 2015, 45 students (divided into 11 groups, with 2–7 students in each group) participated in the palliative care training course. The whole group included 26 students in their 5th year and 19 students in their 6th. There were 25 female and 20 male students in the group. The results of the study questionnaire are detailed in Table 1.

Table 1. Results of the questionnaire

		Number of respondents	Mean	Median	1–2 (%)	3 (%)	4–5 (%)
General evaluation	Total satisfaction	45	4.1	4.2	2.2	31.1	66.7
	Important for medical training	45	4.6	5	0.0	2.2	97.8
	Demonstrated complicated care	45	4.7	5	0.0	2.2	97.8
	Experienced holistic care	45	4.6	5	0.0	2.2	97.8
	Contributed to future work	45	4.4	4	2.2	6.7	91.1
	Fulfilled expectations	44	4.3	4	2.3	9.1	88.6
	Improved communication skills	45	3.6	3	4.4	46.7	48.9
Parts of the program	Multidisciplinary team	45	4.7	5	2.2	2.2	95.6
	Integration of CAM	39	4.4	5	2.6	7.7	89.7
	Meeting patients	45	4.3	4	2.2	15.6	82.2
	Case studies	45	4.1	4	2.2	20.0	77.8
	Ethical issues	44	4.0	4	4.5	18.2	77.3
	Social aspects	44	4.1	4	4.5	20.5	75.0
	Medical lectures	45	3.9	4	2.2	28.9	68.9
	Psychological aspects	45	4.0	4	6.7	26.7	66.7
	Spiritual care	45	3.7	4	13.3	26.7	60.0
	Accompanying physicians	42	3.7	4	14.3	31.0	54.8
Staff meetings	41	3.5	3	19.5	31.7	48.8	

The overall satisfaction of students was high (median score = 4.2/5). Some 97% of students noted that the palliative program was important for medical training (score >4). Most expressed their belief that the program adequately represented the concept of complex palliative treatment and holistic care (score >4 by 97.8%). In addition, approximately half the students felt that the program contributed to their communication skills with patients.

The most contributory parts of the program were meeting the multidisciplinary team that works with the palliative team of the division of oncology (score >4 by 95.6%) and the integration of complementary and alternative medicine into patient care (score >4 by 89.7%). Accompanying physicians in their daily work and participating in staff meetings were ranked as the least contributory parts of the program (score <3 by 54.8 and 48.8%, respectively). Other parts (e.g., social aspects, presenting and practicing case studies, or ethical issues) were rated as partially contributory.

The open section of the questionnaire was not fully completed by all students. However, most felt that the program should include more clinical/practical parts (rather than theoretical lectures), such as more exposure to physicians' work, their coping with daily challenges, and experiencing interactions with patients. For example, one student wrote, "The most significant for me was to learn and remember to ask patients about their daily life, sleeping hours, hobbies during their illness, what they ate today, and so on." Another reported, "For me, it was significant to ask and to hear answers about fear of death." Many also mentioned that the most contributory parts of the program were learning about the experiences of patients and their caregivers. More than one wrote that they were overwhelmed by the meeting with the family of a deceased patient. Nevertheless, it was the most challenging

and significant meeting during the week. Another wrote that the most efficient part of the course included an opportunity to meet other professionals and learning about the new perspective of palliative and holistic care. Only 14 students completed the part about the least contributory parts of the course. Some focused on the significant part of the learning hours dedicated to the psychological/spiritual aspects of palliative care, by learning more about symptom control.

All the students declared that they would recommend participating in this program to their colleagues.

Discussion

The current study aimed at evaluating a preliminary training program in palliative care for 5th- and 6th-year medical students that was established at the division of oncology of the Rambam Health Care Campus in Haifa.

It demonstrated that the students were satisfied with the newly established course, as reflected in their overall rating and their intention to recommend the program to other students. In addition, most recognized its importance and relevance to medical training.

The most contributory parts of the program related to the unique aspects of the palliative model in the division of oncology, such as the multidisciplinary team and the integration of integrative medicine (complementary and alternative medicine) into patient care. Indeed, multidisciplinary collaboration and teamwork is an inherent and essential component of palliative medicine. The process of coping with severe illness may affect and challenge various aspects of life, such as the physical, social, psychological and spiritual aspects, and it is difficult for one professional to address them all. Various studies have demonstrated the

positive effects of teamwork on patient care (Hanks et al., 2010). However, the multidisciplinary work is not emphasized enough during medical training, and there is a growing need and interest in it (Fineberg et al., 2004), as further reflected in the current findings. A previous study demonstrated that students' understanding regarding this important issue can be promoted by an interdisciplinary educational program in palliative care (Fineberg et al., 2004).

The students were least satisfied with the hands-on experience activities, such as meeting patients and exposure to physicians' daily coping, feeling that these parts were not given enough emphasis and focus during the program. They mentioned the need to address these issues from a more practical approach rather than a theoretical one (e.g., more exposure and practice of physician–patient conversations rather than learning the theoretical concepts of communication skills). This finding was demonstrated previously in a study with medical students who reported theoretical knowledge in palliative care but little confidence in their ability to perform practical skills (Bharadwaj et al., 2007). It is possible that the current findings reflect the fact that the students gained a basic preliminary understanding of palliative care, including its ideology and concepts, which led to their high level of satisfaction with the course. However, they felt that the training curriculum should include more practical and applicable skills. Alongside students' readiness to deal with end-of-life issues from a direct and active approach, it should be noted that this exposure can be highly challenging and overwhelming for them. It has been found that medical students' death anxiety may affect their perspective regarding palliative care and their ability to provide it in the future (Thiemann et al., 2015). Hence, palliative training should include adequate supervision and a supportive setting to ensure a positive learning experience.

As noted earlier, the students who participated in the study did not necessarily choose the course as their first option, but rather were selected by the faculty. This may have led to a more representative and general sample of medical students, reducing the possibility of previous expectations or bias.

In order to support the reliability of the current results, a comparison was made with a different course in the faculty of medicine: oncological training. This course is also held in the division of oncology at the Rambam Health Care Campus. It lasts five days, as does the palliative course, and focuses on the multidisciplinary aspects of oncological care. It should be noted that its curriculum includes palliative issues (4 hours): a seminar with a physician on the treatment of oncological pain and a workshop with a psychologist on breaking bad news to patients. Students who participated in this course completed a basic evaluation scale, a standard tool used regularly in the faculty of medicine to evaluate courses. It included various parameters of the course rated on a scale of 1 to 4 (e.g., teaching level, staff attitude), as well as an open-ended section in which students could detail their evaluations. This scale was found less suitable to evaluate a brand-new training program and was not used in the current study.

The open-ended parts of the two scales were compared. This comparison revealed a significant increase in student satisfaction. We found that students appreciated the exposure to the multidisciplinary teamwork and to complementary and alternative medicine. For example, one student reported the following about the oncology clerkship: "It was a good experience; however, I would have been more satisfied if we had access to real patients," while another wrote, "Good teaching, but we need more exposure

to the patient's story." Overall, a comparison between both questionnaires revealed no significant differences between the two types of courses.

A systematic assessment of study quality curricular innovations for medical students in palliative and end-of-life care was recently published (DeCoste-Lopez et al., 2015). The sample described 48 curricula in 12 countries, not including Israel. The sample represented varied settings, learner levels, instructors, educational modalities, and palliative care topics, and it was difficult to summarize specific advice for such courses. However, the need for collaborating across institutions, using validated measures, and assessing higher-level outcomes, including skills, behaviors, and impact on patient care, were raised.

In Israel, palliative care education and the acknowledgment of its unique aspects are highly important, given the heterogeneous population. Israeli patients differ in their ethnic, religious, social, and cultural backgrounds. It was demonstrated that these aspects may become more prominent when dealing with terminal disease, as patients seek a sense of belonging and security. Israeli health-care professionals should be aware of this as part of the "patient-centered" care and address these needs to increase patients' well-being and decrease feelings of isolation and anxiety (Forrest, 2000; Morrison and Meier, 2004).

We are aware of several limitations of the current study. First, it included a small sample of medical students. Second, the study did not include a control group, which would have enabled a more reliable examination of the results (e.g., the possibility that they reflect the quality of teaching rather than students' satisfaction with the academic contents of the program). Third, an evaluation before the course should be included, in order to better understand student expectations and needs. Finally, a valid and known measurement instrument should be used in order to evaluate the training program in order to ensure more reliable findings.

To conclude, there is a growing recognition of the field of palliative care, with many challenges in the establishment of appropriate structured education and training programs (Mason and Ellershaw, 2008; DeCoste-Lopez et al., 2015). The current study provided a preliminary step in this important process. It evaluated a new training course in palliative care, one that related to the new recognition of this medical specialty in Israel. It demonstrated students' overall satisfaction with the course and their recognition of its importance. In addition, it revealed the need to include more practical and applicable aspects, so students could feel more confident and qualified in dealing with these sensitive issues.

Future studies with larger samples and objective measurements should further evaluate training programs in order to expand our understanding and establish a suitable curriculum.

Acknowledgments. The authors wish to thank Ms. Tania Mashiach for her help with the statistical analyses.

Conflicts of interest. The authors hereby state that they have no conflicts of interest to declare.

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Appendix 1. The Study Questionnaire

Dear students,

Please answer the following questions evaluating the training week in palliative care you have completed. The questionnaire is anonymous.

Please rate the following statements:

	Completely disagree	Disagree	Moderately Agree	Agree	Completely agree
A week in palliative care is important for medical training, regardless of future internship	1	2	3	4	5
A week in palliative care demonstrated the complexity of end-of-life care	1	2	3	4	5
During this week, I experienced holistic care	1	2	3	4	5
A week in palliative care improved my communication skills with patients	1	2	3	4	5
I feel that this week contributed to my future work as a physician	1	2	3	4	5
The training program fulfilled my expectations	1	2	3	4	5

Please rate the degree of contribution of the following parts of the program:

	Not at all				Highly
Meeting a multidisciplinary team	1	2	3	4	5
Learning about spiritual care	1	2	3	4	5
Ethical issues	1	2	3	4	5
Meeting patients	1	2	3	4	5
Participating in staff meetings	1	2	3	4	5
Presenting and practicing case studies	1	2	3	4	5
Learning about psychological aspects	1	2	3	4	5
Accompanying physicians in their routine work	1	2	3	4	5

(Continued)

Appendix 1. (Continued.)

	Not at all					Highly
Medical lectures	1	2	3	4	5	
Learning about social aspects	1	2	3	4	5	
Integration of complementary medicine in oncology care	1	2	3	4	5	

Please note specific issues that should be added to/omitted from the current program

What was the most contributing/efficient/challenging part of the program? What was the least contributing/efficient/challenging part of the program?

Additional remarks:

Will you recommend the training week in palliative medicine to your friends?

Yes/No

Thank you for your co-operation!