

Medical Students Reflections Toward End-of-Life: a Hospice Experience

Andrea Bovero¹ · Chiara Tosi¹ · Marco Miniotti¹ · Riccardo Torta¹ · Paolo Leombruni¹

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Abstract In this study, we want to investigate the personal reflections toward care of the dying cancer patients among second year medical students. Two hundred fifty second year medical students attended an elective short course on end-oflife care and a brief training at the hospice Valletta, in Turin. After group discussion, the students explained their reflections about their experience. Two different supervisors of the study analyzed themes of the students and subdivided them in categories according to the frequency. The most recurrent themes were symptoms, coping skills, distress, hospice, and insight. Each theme is subdivided in categories. In 95 of 250 transcriptions, students talked about symptom (38%), 60 transcriptions (24%) were focused on coping skills. In 45 transcriptions (18%) students described emotional distress, and in the other 30 (12%) transcriptions, they pinpointed hospice philosophy. Finally, 20 recorded data (8%) were characterized by insight theme. These results have emphasized the need to integrate the clinical training with an experiential training that prepares future doctors for dealing with suffering and death. The qualitative analysis of the reflections showed that the students gained a deep appreciation of the human identity of hospice patients and the relevance of a humanistic approach to care as future physicians.

Keywords Medical students · End-of-life care · Medical education · Reflections · Dying patients

Introduction

Even if in the past few years, there has been an increase in the number of academic courses on end-of-life care (EOLC) [1–3] and new teaching guidelines have been implemented [4]; many medical students are still feeling unprepared to deal with end of life [5, 6].

Agencies that accredit medical education have emphasized the relevance of instruction in palliative care. The Liaison Committee on Medical Education in the USA and the Committee on Accreditation of Canadian Medical Schools in Canada use common standards and require specific instruction in EOLC [7].

The Royal College of General Practitioners curriculum in the UK includes competence in person-centered and holistic care to manage the spiritual needs of patients and their families. It also stresses the potential interaction of one's own cultural and religious beliefs with patients' EOLC decisions [8].

When treating cancer patients in the terminal stages, a good doctor-patient relationship is essential. Therefore, it is fundamental to provide medical students with the correct training on communication and relationship skills and to develop an appropriate attitude toward terminally ill patients [9, 10]. Notions of end-of-life care are taught in medicine schools, even if they are not quantitatively and qualitatively exhaustive. This kind of education cannot fill the gap in western medicine which is still considering death as a clinical failure [11, 12]. Such point of view on death permeates the thoughts of medicine students and doctors. In fact, they do not tend to consider terminally ill patients care as a professional and personal achievement, with negative consequences on the doctor-patient relationship.

Quantitative studies have been performed in order to study the effects of EOLC training and to evaluate the students'

Andrea Bovero abovero@cittadellasalute.to.it

¹ Clinical Psychology and Psycho-Oncology Unit, Department of Neurosciences, University of Turin, Turin, Italy

attitude toward death [13, 14]. Qualitative researches have been carried out among medical students in order to analyze their experiences with dying patients. According to medical literature, students are feeling unprepared to cope with end-oflife matters [3, 15].

Actually, in Italy, there are few experiential trainings in end-of-life care for undergraduate medical students which prepare them to provide care, manage symptoms, communicate bad news, evaluate psychological and spiritual patients' needs, and improve their personal reflections about death, dealing with the professional and emotional problems related to this particular situation. Therefore, in response to this need, an evaluation of the emotional impact of this experiential learning is needed; a better understanding of the range of emotions students experience during the training and its transformative effect on the development of their professional and personal identity would be helpful [16].

Teaching future physicians about end-of-life care is essential to affirm two core dimensions of medical practice: patienttailored care and relationships and the value of doctoring as a source of meaning and identity and professional growth.

In 2012, we already realized a previous study focused on the attitudes of Italian medical students toward dying patients [17]; whereas this paper has a qualitative approach to the students' experience in hospice.

The purpose of this study is to investigate the reflections of medical students, of University of Turin, analyzing students' considerations after attending an elective course on end-of-life care and a short training at "Vittorio Valletta" Hospice, in Turin.

Methods

Two hundred fifty second year students of Medicine at University of Turin attended an elective short course on endof-life care. The course purpose was to sensitize and help students to develop a positive attitude toward the terminally ill patient. These students did not have any professional experience in a hospital environment; their didactic background was only based on disciplines such as chemistry, physics, biology, anatomy, and pathophysiology that do not study death closely.

The Clinical and Oncological Psychology team, part of the Neuroscience Department, proposed this course focused on different aspects of treating a dying patient through lectures, workshops, and video meetings. The themes covered included humanistic conception of medicine, doctor-patient relationship, developing new communication and relationship skills, bioethics, hospice mission, and palliative care.

Students have been divided into ten-people groups and invited to a 5-h didactic training at the hospice. Here, hospice mission, medical and nursing professional aspects, end-of-life psychological aspects, and medical records have been analyzed. Along with the doctor, the nurse, and the psychologist, they took part in inpatient visits and participated in meetings where medical and nursing aspects, together with difficulties encountered while relating to patients and caregivers, were discussed. Within this clerkship, interpersonal and communication skills were reinforced by focus groups, one in particular dedicated to communicating bad news. The training was based on the established best practices that are fundamental to the success of EOLC programs as follows: integration of lectures and experiential learning, professional role-playing, and reflection on action [11]. In fact, the analysis focus was qualitative: reflections and particular subjects emerging from students' comments were investigated during their hospice experience. Students were invited to reflect about their hospice experience, the emotional impact, and the relationship with dying patients after the focus group.

All participants were informed about the research purposes and methods and they were also asked to sign an informed consent. Reports were confidential and students identified themselves with nicknames to keep the forms anonymous. None of the participants declared to feel vulnerable to the treated topics.

The reflections were audio taped and transcribed verbatim. The data set consists of 250 transcriptions of the students' reflections. Analysis of the students reflections was conducted with a qualitative method based on grounded theory [18], attempting to identify the analytical categories as they emerged from the data.

The study's subject and students' considerations were registered during group discussions and qualitatively analyzed by two external supervisors. At the beginning, authors (AB and CT) gave a randomized numerical code to each transcription. Firstly, the external supervisors conducted a lexical frequency analysis of the reflections. Then, they analyzed the data individually, extracting relevant themes and assigning them an identification code, according to their narrative and thematic contents. Then, they collectively reviewed the individual given codes, dividing them into definitive codes, according to their frequency and obtaining five major themes.

Results

All 250 students attending the course and the hospice training accepted to participate in the research.

The mean age was 20.5 ± 1.2 ; 110 students (44%) were males and 140 (56%) were females.

According to the subjects and considerations the external supervisors investigated, the analysis of transcriptions showed five major themes: "symptoms," "coping skills," "distress," "hospice," and "insight." These themes, and their specific categories, are summarized in Table 1.

Theme (transcriptions)	Description	Categories	Frequencies of categories (%)
Symptoms, 38% (95/250)	Major patients' symptoms discussed by students during their hospice experience.	 Pain Opiates Therapy asthenia Cachexia-anorexia Dyspnea 	1.40 2.25 3.15 4.12 5.8
Coping skills, 24% (60/250)	Personal emotional and cognitive strategies to face experiences, life events, and difficulties. In the study, the strategies used by students to cope their hospice experience.	 Talking with family and friends Avoidance to talk about death Distractions Focus only on clinical aspects 	1. 67 2. 12 3. 11 4. 10
Distress, 18% (45/250)	Emotional distress of dying patients, emotive overload of caregivers and families, and burn-out risk for personnel working in EOLC.	 Emotional detachment Emotional hospice experience impact Emotional overload of families and caregivers Attention to patients' QoL Sadness and concern about working in hospice 	1. 47 2. 29 3. 13 4. 8 5. 3
Hospice, 12% (30/250)	During this experience, students discovered hospice mission, its multidisciplinary approach, and the differences between hospice and other care settings.	 Difference between hospice care and other care settings Importance of multidisciplinary approach Attention to communication in doctor-patient relationship Importance of psychosocial aspects during treatment More attention to a correct hospice admission 	1.36 2.24 3.20 4.14 5.6
Insight, 8% (20/250)	First students' hospice experience that allowed them to increase knowledge about EOLC practice and to increase awareness about hospice philosophy that influenced students' attitudes toward end-of-life.	 Importance of physical, psychological, and spiritual needs First opportunity of reflection about dying Value the "person" more than the "illness" 	1.72 2.16 3.12

Table 1 Five major themes highlighted by the qualitative analysis and their categories' frequencies

Theme 1: Symptoms While discussing clinical cases, students underlined the importance of controlling symptoms to improve inpatients' quality of life with a specific interest in pain treatment and opioid therapy. Within the 250 transcriptions, 95 of them (38%) showed a focus on "symptoms" theme. The majority of students talked about pain control (40%) and opiates therapy (25%). Other symptoms discussed were asthenia (15%), cachexia/anorexia (12%), and dyspnea (8%).

Theme 2: Coping Skills Many students described their personal coping styles used during their hospice experience or in complicated situations. This theme is included in 60 transcriptions of 250 (24%). Most of the participants, who focused on coping skills during the discussion, mentioned talking as the most efficient strategy. In fact, 67% of students faced difficulties by talking about their experiences to their friends and family. During these talks, they felt free to express their opinions and feelings without fearing judgment. Moreover, thanks to friendship outside the hospital environment, they showed to have a different perspective to the one based on their academic studies. Another 12% avoided to talk about death, 10% preferred to focus only on clinical aspects, and 11% used distraction as coping style. **Theme 3: Distress** Students emphasized emotional distress and burn-out risk for personnel working with dying people; in 45 of 250 transcriptions (18%), they focused on this theme. Forty-seven percent pinpointed the risk of extreme emotional detachment as a form of defense from the anxiety of dying, 8% drew attention to the patients' pain, 3% showed sadness and concern about working in such an environment, 13% accentuated the emotional overload of caregivers and families during the treatment, and 29% declared to be deeply conditioned by the hospice experience and by discussions with healthcare professionals.

Theme 4: Hospice Most of the students were satisfied with the possibility of a hospice experience because it was the first time they attended this particular care setting. In fact, the information received about the hospice mission and palliative care was totally new to them. Moreover, 36% of students pointed at the differences between hospice care and other care settings, 24% highlighted the importance of a multidisciplinary approach, 20% drew attention to the communication problems in the doctor-patient relationships, 14% emphasized how positive it is to treat psychosocial aspects along with physical problems, and 6% thought there should be more attention to the correct moment to ask for hospice hospitalization. Theme 5: Insight In 20 of 250 (8%) transcriptions, students talked explicitly about increased knowledge and awareness about EOLC and hospice philosophy. The vast majority of students' reflections inserted in the Insight theme (72%) considered the hospice care effective because all physical, psychological, and spiritual needs of inpatients were acknowledged and fulfilled. Twelve percent of them admitted that such experience make them value the "person" more than the "organ" concerned. Sixteen percent commented on the opportunity they had for the first time to reflect on dying and on the importance for medical and nursing staff to express their feelings.

For each theme highlighted, examples of students' sentences are showed in Table 2.

Discussion

In our research, we only analyze reflections of second year medical students with no experience or clinical academic background.

After analyzing students' impressions, it is clear that such educational experiences may influence the development of a professional identity [11], highlighting how an experiential training may contribute to acquire some new skills and attitudes. Reflecting on patients' human condition could develop a deeper understanding of dying with dignity.

Students' impressions varied from technical to human and psychosocial topics. The discussion that students had with hospice medical and nursing staff allowed them to present and share their own ideas and approaches; however, medical students did not achieve uniformity in their reflections [19]. According to this interactive process, students' attention moved gradually from diseases and personal anxieties to death and to the different aspects of treating a patient and his/her caregiver. The students underlined that end-of-life concerns, such as dignity of patients and families and their quality of life, are a core aspect of professional approach to caring terminally ill patients. As described in another study [20], relationship-centered care is an essential lesson that should be learned by physicians, mostly in EOLC. Students learned how the hospice medical and nursing staff understands and recognizes emotional, spiritual, and psychosocial patients and caregivers' needs.

The great importance given to the group discussion in the hospice environment arose from the need to enter a problematic field: a thematic learning alone cannot overcome the reluctance toward death and dying.

Therefore, it is important that trainers participate in the discussions, sharing their point of view and feelings so that students sense the investigation process as the correct way to proceed. The investigation of personal attitudes has to be considered as a continuous process and not as a static situation where attitudes are cryptic and uncontested.

Students noticed, as in other studies [21, 22], that the lack of clinical experience in their academic background helped them to focus not only on clinical aspects but also on the patient and his/her needs. During the group monitoring, students internalized the end-of-life care principles, understanding the differences between curing and caring, as well as the importance of accompanying the dying patient to end-of-life. This process consists of changing the concept of death and dying: not only a termination of the biological system, but mainly an empowerment experience for the patient and the caregiver. Positive consequences were obtained by drawing attention to clinical, psychosocial, and personal aspects.

First of all, students were informed that self-reflection is an important aspect of medical practice. In fact, this experience allowed medical students to recognize emotions and feelings related to hospice experience and dying patients and to discuss their pertinence.

With this EOLC experience during their academic studies, each student had the opportunity to reconsider his/her concept of medicine treating dying patients and to reflect on the doctor-patient relationship carried out from hospitalization.

Particular attention has been given to the mechanism of psychological and sociocultural adjustment, implemented by patients, family members, and caregivers. When feeling the need to react against death, students investigated the coping styles in order to find the one that could favor a personal and appropriate way to face the emotional impact, according to [23].

Discussions with non-medical staff allowed students not only to understand their point of view but also to acknowledge their own role. Such discussions may be for to-be doctors a primary component of professional and personal growth.

A lack of continuous training on psychosocial aspects has been noticed when analyzing students' reflections. Likewise, a multi-level (personal, professional, inter-professional) training on death and dying seems to be needed.

To our knowledge, also other studies made use of the analysis of medicine students' reflections on end-of-life care [24, 25]. Our paper highlights how students fully comprehended the hospice mission and acquired new skills even without having a previous clinical experience. According to the literature, our study underlined the importance to allow medical students to have a clinical experience on death and dying people before the end of their academic studies. In fact, we have observed that only a continuous training during the academic course of studies can guarantee an integrated education. Such education is

	Table 2	Examples of students	' sentences for each theme and its categories
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Theme and its categories	Examples
"Symptom" categories	
Pain	"I think that the most important thing in hospice care is pain relief and treatment, because pain is the most complex and disabling symptom that a patient can experience."
Opiates therapy Asthenia	"As a future physician I'm really interested about opiates therapy and its use in EOLC practice." "During hospice experience I saw many patients who were really tired and had no energy to do even simple daily activities. Asthenia is very disabling."
Cachexia/anorexia	"For the first time in my life I saw a cachectic patient. This experience helped me to reflect also on this clinical aspect."
Dyspnea	"Living with a severe breathing difficulty is really scaring to me. As person and also as a medicine student think it's very important to treat and control breathlessness."
"Coping skills" categories	
Talking with family and friends	"It was really helpful to me to talk with my family, but most of all with my closest friends, about hospice experience because it helped me to express my deepest feelings about death and to admit some emotiona difficulties I had."
Cognitive avoidance Distractions	"I distanced myself from it, trying to get busy and not talk and think about it." "I think that sometimes I tried to do something else, for example watching TV or doing sports, instead
Focus only on clinical aspects	thinking about death and dying patients." "For me it's important to study and focus my attention on clinical aspects, firstly pain treatment. During
"Distress" categories	hospice experience I was concentrated on it."
Emotional detachment	"I think sometimes you have to distance yourself from death and from the sad feelings you have in front of a dying patient because they're too much intrusive; it is a form of useful defense but it could be also dangerous for a good relationship between doctor and patient."
Emotional hospice experience's impact	"I was deeply touched by the hospice experience. It was the first time I had in front of me a person who struggles with death. It was emotionally hard and it takes me some days to reflect calmly about what I saw."
Emotional overload of families and caregivers	"When I was in hospice I thought a lot about families and caregivers, about their feelings and fears. I imagined myself in that situation and I believe it is so heavy and hard to manage the death of a relative or a loved one."
Attention to patient QoL	"Staying in hospice was a particular experience; during it I concerned about patients' daily experience and their quality of life. I focused my following reflections on pain-related feelings such as sadness and anger."
Sadness and concern about working in hospice	"Working with dying patient is hard, it could be very sad and there is a real risk for personnel of being emotional distressed."
"Hospice" categories	
Difference between hospice and other care settings	"There is so much difference between a hospice and a hospital ward. In hospice there is a quiet environment nursing staff has more time to spend with the patient instead of a hospital setting where everything is chaotic and speeded."
Importance of multidisciplinary approach	"As a future doctor I think is very useful, to have an improved patient care, the presence of different professional figures and a multidisciplinary approach during the treatment. It is also reassuring to me as a future patient."
Attention to communication in doctor-patient relationship	"When I was in hospice I really appreciated the communication skills of the staff. I think it is a core aspect o EOLC."
Importance of psychosocial aspects during the treatment	"While we discussed clinical cases I thought about psychological, social and spiritual aspects of the patients' experience. I think is necessary to consider them to improve patient's QoL and also for a good practice."
More attention to a correct hospice admission	"During the visit I saw many differences among patients conditions. I think that having strictly criteria for patients incoming is important to improve EOLC practice and to provide the necessary care to whom need it."
"Insight" categories	
Importance of physical, psychological and spiritual needs	"Here in hospice there is the person with her psychological features, her symptoms or physical needs and also her faith or spiritual aspects. Not only a patient! It was surprising for me how all these things are considered in hospice care!"
First opportunity of reflection on dying and expression of feelings about that Value the "person" more than the "illness"	"I believe that this experience is very helpful to me as person and also as medicine student because it was the first time I really thought about death. It was such a strange feeling and I never had it before.""When I was there with the patient, listening to his history and his emotional experience, I thought that was the crucial point: it was clear to me the importance of taking care of the person rather than curing the cancer."

based not only on technical aspects; actually, it allows a personal growth and a new self-awareness that is of paramount relevance elements in EOLC training. The present study is subject to several limitations.

First is the absence of a strict qualitative analysis of students' reflections.

Further, the present study cannot be generalized due to the lack of similar studies in Italy, the small sample size, and the absence of a control group.

Moreover, the emotional impact of this experience and its potential change of students' attitudes might be greater if they would have more time to spend in hospice.

Despite all the abovementioned limitations, it is important to remind that our study analyzed the reflections of students that have no previous clinical experience; at this point, students have not yet dealt with death. Further researches would be useful to investigate potential changes in students' attitudes as they acquire clinical experience.

Conclusions

This study emphasized the real need of a training whose purpose is to handle pain and death. An experiential approach creating a favorable environment for developing new adaptive coping strategies seems to be a must for EOLC education. Particularly, the hospice visit provides a meaningful and personal emotional experience for medical students, allowing them to reflect on the patients' human identity and dignity, as well on their own.

Further studies should be carried out in the future to try to confirm how students' reflections toward end-of-life care can be a predictor of their future attitude (as doctors) toward terminally ill patients.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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