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An Introduction to Human Anatomy for Medical Education on Death and Dying

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ABSTRACT

The art of medicine receives little attention in the majority of medical schools' programs, which is especially clear when it comes to teaching students about death. In this paper, we argue in favour of early introduction of the topic of death and dying in the anatomy course in medical schools.According to studies, while dissecting cadavers is often a fascinating learning experience for students, for others it is traumatic, and if this issue is not addressed, students may utilise depersonalization and denial as a coping mechanism It describes the experiences students had during dissection in two distinct medical schools. A traditional curriculum was used to construct the University of Massachusetts programme, which uses lectures and small-group discussions to examine humanistic topics. Dissection and patient care are compared, and frank discussion is had about different coping mechanisms. In the first week of medical school, students in Dalhousie Medical School's problem-based curriculum examine death bereavement and learn about the body donor programme and student support networks. An extensive curriculum on death and dying is included in this programme. Both schools give prospective students tours of the dissection labs before to the start of the course, and at the conclusion of the academic year, students plan memorial services for the body donors. These instances show how death education can be introduced early on in the medical curriculum and help to cultivate practitioners who are sensitive to larger issues relating to human mortality. Clinical AnaesKey words: anatomy; dissection; death; medical ededucation thesis0:118-122, 1997

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INTRODUCTION

The medical curriculum places little focus on the art of becoming a physician, particularly how to communicate with patients, in contrast to its concentration on the science of medicine.relating to patients as another person,especially as their illness undoubtedly worsens outside the reach of technology (Hilfiker, 1985; Hill, 1995). Educating doctors on death is relative fresh student in the medical programme, and with onewith notable exception (Mermann et al., 1991), frequentlycontains very little that is experimental. most programmesconsist of lectures and discussions in small groups during theYears before diagnosis (Dickinson, 1981; Mermann et al.,d by but operationally independent of the Dean's Office.

The ongoing struggles doctors have in dealing with their patients' psychological discomforts (Maguire, 1989; Quill and Williamson, 1990; McCue, 1996) in speaking with families after their patients have passed away (Tolle et al., 1984; Hull, 1991; Loxterkamp, 1993) and in maintaining their own self-confidence when saying goodbye and ending the doctor-patient relationship in these situations demonstrate that these approaches are not entirely effective (Macauley, 1992).

According to a recent assessment of the treatment of terminally ill patients, doctors significantly mistreat dying people because they insist on using only a scientific, detached, and rational approach to patients in both education and practise (Hill, 1995). The fundamental distinctions between curative and palliative medicine, which foster the openness and collaborative abilities necessary for humane care of the dying, are obscured by this institutional and attitudinal union. A significant difficulty in medicine is still providing physicians with experientially based training in support of the terminally sick (Hill, 1995).

Any curriculum devoted to teaching about death should take into account a number of medical education interactions that could have a negative impact on students' attitudes in the future.

Two inevitable death encounters often happen in the first two years of medical school, one during the anatomy dissection course in the first year and the other during the pathology

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autopsy experience in the second year. There is no denying that these are challenging experiences for some pupils.

A dead body is exposed to repeatedly and frequently during dissection, and it has been stated that 5% of students find this experience traumatic (Finkelstein and Mathers, 1990; Evans and Fitzgibbon, 1992). Additionally, these studies and others (Marks and Bertman, 1980; Penney, 1985; Wear, 1989; Druce and Johnson, 1992) have demonstrated that the majority of medical students experience high levels of anxiety during dissection, that depersonalization and denial are their primary coping mechanisms, and that students base their initial attitudes toward patients on these experiences (Lewin, 1946; Gustavson, 1988). For the autopsy experience, comparable data are not available, although we would be shocked if they were different.

Some sensitive students may well come to the conclusion that the curriculum is not concerned with their own welfare and that palliative medicine and care of the dying and the bereaved are primarily about other people's lives if these situations and other death encounters in the preclinical years are not acknowledged and supported in the curriculum (Hilfiker, 1985). In a curriculum that is unable or unwilling to examine experiences with death and dying through the students' eyes, it is difficult, if not impossible, for pupils to create alternatives to disengagement, detachment, and desensitisation (Sharkey, 1982; Hill, 1995). We believe that ignoring death encounters in the pre-clinical years makes it more challenging to achieve these goals later because students will have strengthened their ability and resolve to use denial and distraction as their sole strategy for coping with pain, trauma, and death, and the curricular disregard for their earlier exposures to death will make them sceptical of later attempts to broaden their skills. The focus of the curriculum at few medical schools is on students' responses to patients and their illnesses when they are started into physicianhood, hence few medical schools mandate rotations through palliative care or hospice services or continuous group support (Balint, 1957; Finkelstein, 1986).

This could explain why the sensitive student we originally admit to medical school often ends up becoming a cynical doctor (Conrad, 1988; Gustavson, 1988; Dyer, 1992; Nuland, 1994). With each year of education, medical students' empathy tends to diminish, and by their third year, many of them wish to separate themselves from their patients (Fasano et al., 1993).

We agree with Callahan (1994) that a wide perspective on human death and vulnerability is necessary for medicine and medical education (Callahan, 1994). In order to combat the

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inescapable trend toward powerlessness and desensitisation, death education must first be viewed through the perspective of the learner and must offer resources for these and other potentially traumatic occasions (Hilfiker, 1985). Through the role models offered in a humane curriculum, this strategy will promote the development of a compassionate doctor (Hill, 1995).

We outline two various strategies used at our separate institutions in order to achieve this. The first step of the University of Massachusetts Medical School's death education programme is to address the students' first-hand experience with death in the human anatomy course. It is integrated into the first year's current curriculum and is named "On Dissection, Dying, and Death." It is sponsored jointly by the Department of Cell Biology and the Program of Medical Humanities. At the Dalhousie University Faculty of Medicine, death education is a part of the curriculum as well as a larger programme for student assistance that is operationally separate from but supported by the Dean's Office.

THE ANATOMY COURSE BEGINS DEATH EDUCATION

The rationale and resources for starting death education within the anatomy course have been described in part by us (Marks and Bertman, 1980; Bertman and Marks, 1985; 1989; Penney, 1985). When the anatomy course begins during the first week of the first year at the University of Massachusetts Medical School, students are given the following description about the dissection experience and the objectives of the humanities program. Dissection of the human body often raises questions about the source of cadavers, invasion of privacy, and human mortality. We encourage you to explore attitudes toward dissection and death as you experience the first year of medical school in the belief that facing and expressing any aversions, fears, and fantasies associated with human.

Dissection can help prepare you, not only for academic work in the anatomy laboratory, but also for the emotional work that patient care—the ‘‘laying on of hands’’—implies. Our aim is to help you develop a foundation for continuing personal self-inquiry and exploration of humanistic, ethical, and existential issues in medicine. On Dissection, Dying and Death is a series of lectures and small group discussions where the history of dissection, coping styles, and the students’ own responses to dissection are shared. These reflections form a basis for reflective self-awareness and the presentation of a service of memoriam and thanksgiving for the body donors at the end of the academic year. The scheduled offerings take up less than 10

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hours of curricular time, extend throughout the first year and are composed of the following: 1. Anticipating Dissection: Just prior to entering medical school, students are asked to create and comment upon an image that reflects their view of dissection. 2. Facing Dissection: Course Overview: A lecture introducing the themes and timeline of the course, the history of dissection, the anatomical gift, and the parallels between dissection and patient care. 3. Meeting the Cadavers: A tour of the dissection laboratory in small groups before dissection begins. 4. Facing Dissection: Coping Styles: An exploration of the experience of dissection through presentation of the students' own images and experiences. This lecture is followed by small group discussions and occurs six weeks after classes begin. 5. The Anatomy Lesson: A lecture illustrating traditional and contemporary responses to dissection as portrayed in fiction and the arts is followed by a film and discussion of a balletic interpretation of Rembrandt's masterpiece. This session immediately precedes dissection of the head and neck. 6. Service of Memoriam and Thanksgiving: The first year concludes with this commemoration near Memorial Day. Initiated, designed and produced by students, it provides closure and celebration of the gift of body donation for medical students and donors' families. Recently we sent graduating classes a collage of the images they gave us four years earlier (see ''Anticipating Dissection'' above) to rekindle memories and remind us of our common journey. These experiences throughout the first year provide a base for discussions of death and ethical decisions about the end of life during courses, symposia, and clerkships in subsequent years.

DEATH EDUCATION AS PART OF THE FACULTY'S STUDENT SUPPORT

The death and dying curriculum at the Dalhousie University Faculty of Medicine consists of a number of components. In the Anatomy Department, this component is organized by the student advisor, who is a member of that department and also involved in teaching other areas of the death and dying curriculum. On the students' arrival in medical school, the first person they meet in the classroom is the student advisor, who gives an ''Introduction to Human Dissection'' where dealing with grief is introduced. During this session it is suggested that anyone who knows of a recent donor or who has experienced a recent death should see the advisor before entering the dissecting room. Either of these experiences can make dissection difficult. Any known donor is removed from the dissecting room for that year. In the case of a recent death, the student dissects a donor who is not of the same age or sex as the deceased friend or relative. Subsequently, with other anatomy faculty, students are taken to the

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Research paper UGC CARE Listed (Group -I) Journal Volume 11,Iss 7, Oct 2022

anatomy laboratory where they see the cadavers for the first time. Discussions include reactions to seeing the cadaver, previous experiences with death, fears of their own deaths, retaining sensitivity while dealing with difficult situations, use of gloves, and the impact of religious backgrounds in facing death. During the first week of medical school, students have a number of other sessions with the advisor, which enhance or complement these dissection themes, including ‘‘Managing Yourself in Medical School’’ and an introduction to the student support programs. One of these, the Student Advisor Program, was proposed by the students as a ‘‘follow-up’’ to their ‘‘Introduction to Dissection.’’ The students concluded ‘‘you help us to deal with death and dissection, but there are other areas where we need support. We have other concerns that we would not talk about to anyone who also evaluates us.’’ Hence, the student advisor program evolved from the death and dying program. At the end of the academic year, memorial and burial services for body donors are organized by the Department of Anatomy. The relatives of donors are invited to a local church where the university chaplains conduct a service and a student delivers the eulogy. 120 Marks et al. The teaching program at Dalhousie Medical School is a problem-based curriculum that integrates preclinical and clinical knowledge commencing in the first week of the first year. During years 1 and 2, case studies involve malignant disease, grieving families, and issues of palliative care. In the third and fourth years, sessions are offered with group discussion about facing one’s own mortality, care in the context of advanced disease, death and bereavement, communication, symptom assessment and control, children and death, and a large group experience with a visiting bereaved person or family. Electives on death and dying are available in all years.

DISCUSSION AND CONCLUSIONS

Style, curriculum, and cultural differences can be seen in the two examples from the United States and Canada above. Both were developed under the direction of our students in answer to specific questions they had, and they both have since taken on their current forms (Marks and Bertman, 1980; Penney, 1985; Bertman and Marks, 1985, 1989). We are currently assessing the long-term effects of these programmes on the attitudes and aptitudes of our students and want to compare them to comparable reports of other student populations where human death is not addressed in anatomy classes (Charlton, 1993; Charlton et al., 1994). Even while a problem-based curriculum can provide wonderful chances for conversations

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Research paper UGC CARE Listed (Group -I) Journal Volume 11,Iss 7, Oct 2022

about death and dying, it is conceivable for teachers who are not sympathetic to death education to avoid the problems.

We think that death education must be a part of the medical curriculum, that it should start early in medical education, and that it may be effectively based on the death encounters that all students encounter. In addition, we have found our students to be enthusiastic, perceptive companions on our own journeys toward personhood (Osler, 1932).

Following are the findings we reach as a result of our experiences and our analysis of the material mentioned above:

1. For 5% of students, dissection, and especially the prospect of it, is a terrible experience, and for many others, it is a stressful period. At least initially, it is expected that the perspectives on death developed during dissection will be applied in clinical settings.

2. Education about death and human mortality is necessary for students. The best way to introduce students to death education is through dissection of a human body, which is typically their first exposure to death in the classroom. But for such a programme to be successful, teachers are probably going to require just as much assistance as pupils do in this regard.

3. Death education that is introduced early in medical education can be easily developed and nourished in a range of courses and programmes later. Teachers who confront and discuss their own mortality are most suited to develop the subject in a long-term, multidisciplinary manner.

4. Professional and institutional assistance for students' self-discovery might include death education as a key component. Students' capacity to assist patients and themselves in coping with mortality will be improved as a result.

For most students, the time spent dissecting a human body is undoubtedly one of fascinating discovery and unbiased investigation. Without a doubt, though, many people find these workouts challenging due to other factors. In the past, this journal has done a commendable job of articulating the concerns of both students and faculty regarding the teaching of anatomy and death (Bertman and Marks, 1989; Finkelstein and Mathers, 1990; Miles, 1991; Rodning, 1989; Druce and Johnson, 1992; Evans and Fitzgibbon, 1992; Weeks et al., 1995).

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By presenting initiatives to connect our students' worries with available local resources, our goal is to add to this legacy. The difference in support provided by the university administration is a major factor in why the Dalhousie programme is significantly more thorough than the University of Massachusetts'. In both instances, however, it was the students' positive vigour and enthusiasm as well as the faculty members' desire to go beyond their level of professional training that served as the primary impeti. There will be differences, but they should be controllable, in what other anatomists discover at their universities and departments. Beginning small is recommended, according to our experience. Identify resource personnel in the humanities and clinical medicine, and include students as early as possible. The finest medical school curricula for death education start early, are focused on experiential learning, and are linked to a range of subsequent supportive options (Mermann et al., 1991; Hill, 1995). Consumer demand, the popularity of alternative resources like Death and Dying in Medicine 121, and the Women's Health Initiative have all contributed to the increased emphasis on death education that is currently occurring in medicine.

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