

# Medical student education in the ICU and the need for a philosophical practitioner

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## Abstract

Medical students rotating through an intensive care unit are part of a multidisciplinary team consisting of physicians, nurses, allied health professionals, and students. The intensive care unit is a stressful and bewildering environment for medical students. A philosophical practitioner would be an invaluable asset to such a team, especially to the medical students. Philosophical interventions that equip students to use or develop processes to make judgments or accept consequences of their own making or those of others, regarding themselves or their patients, would be highly valued in undergraduate medical education.

## BACKGROUND

The critical care specialist's perspective of philosophical practice is from the vantage point of critical illness and how such an adjunct could assist those who are involved with patient care, especially medical students. So, what is philosophical practice?

"Philosophical practice is an umbrella term that entails the application of philosophical insights, techniques and methods to the resolution or management of human problems, and to the amelioration of human estates. Most philosophical practitioners hold advanced degrees in philosophy, and many are instructors or professors of philosophy in institutions of higher learning. Philosophical practitioners are distinguished from purely academic philosophers by their additional dimensions of professional practice: they utilize philosophy to serve individual clients, groups, and organizations outside the groves of academe. The three main areas of philosophical practice are client counseling, group facilitation, and organizational consulting" [1].

The intensive care unit (ICU) is a stressful and bewildering environment for the undergraduate medical student. The dynamics and relationships of the ICU are complex. These relationships involve patients, families, physicians, residents (physicians in specialty training), nurses, allied health professionals (e.g., respiratory therapists), administrators, social workers and last, but not least, medical students. The rotation is offered as an elective in the third year at our

institution. The students may opt to take it again as a senior (4th year). In effect, the third year students leave the cozy confines of their books and classrooms and enter the world of miracles and disasters with little preparation. They bring with them the "baggage" of their upbringing, i.e., their prejudices, beliefs, and mores, to a situation that is taxing both physically and emotionally. It is imperative to "foster critical thinking and empathy combining cognitive and affective elements...in students" before they enter their clinical years [2]. This rotation is the medical students' first interaction with those who have a critical illness, the families of such patients, and the complicated technology involved in delivering critical care.

Emotion theory and its application to medical ethics and the emotions of medical students have been championed [3]. Philosophical interventions that equip students to use or develop processes to make judgments or accept consequences (death, morbidity, grief, failure) of their own making or those of others, regarding themselves or their patients, would be highly valued in undergraduate medical education. Specifically, the circumstances of medical students in regard to philosophical practice and the reasons for the intervention of such a philosopher are addressed here. To this end the field of philosophical practice would have much to offer undergraduate medical education.

Much of philosophical practice is derived from rational emotive behavior therapy (REBT) and its stoic roots [4],

“Rational emotive behavior therapy views human beings as ‘responsibly hedonistic’ in the sense that they strive to remain alive and to achieve some degree of happiness. However, it also holds that humans are prone to adopting irrational beliefs and behaviors which stand in the way of their achieving their goals and purposes. Often, these irrational attitudes or philosophies take the form of extreme or dogmatic ‘musts’, ‘shoulds’, or ‘oughts’; they contrast with rational and flexible desires, wishes, preferences and wants. The presence of extreme philosophies can make all the difference between healthy negative emotions (such as sadness or regret or concern) and unhealthy negative emotions (such as depression or guilt or anxiety) [5].”

It should be noted that these “musts”, “shoulds”, and “oughts” mentioned above in a philosophical context are also applied to ‘irrational’ medical dogma that may not be evidence-based. Such medical dogma not only applies to patient care, but also to how medical students are viewed and supported.

It is interesting that just as critical care medicine uses an ABC framework (airway, breathing, and circulation) as its first response to a person in physiologic extremis, so does REBT (activating events, beliefs about such activating events, and the cognitive consequences of these beliefs) in its response to “soul-saving” in cognitive and social despair [3]. Although the ABC acronym represents a different process in each respective field of study, medical students need schooling in what both of these acronyms represent. The first acronym can be applied to saving a patient's life while the other may preserve the medical student's cognitive well being in order to maintain a healthy mental capacity to perform under stressful circumstances to save those lives.

## **DISCUSSION**

### **THE ENVIRONMENT**

The ICU is a difficult environment to navigate, especially for a young medical student. The pitfalls of the ICU may leave emotional strains (not permanent) and scars (permanent). Lessons can be learned and behavior adjusted through these strains or scars, and none of these lessons should be fatal, although sometimes students do commit suicide or decide to discontinue their pursuit of a medical degree [6, 7]. There are at least four general areas of hazard (physical and emotional) that may befall students in the ICU that may cause a decrement in their professional performance and emotional health in which a philosophical practitioner could be of assistance. These hazard categories include: (1)

personal/personnel interactions; (2) physical and biological hazards; (3) monitors/monitoring, invasive device placement, and prescribing; and (4) patient and family interactions.

### **PERSONAL/PERSONNEL INTERACTIONS**

This category involves the lack of sleep, lack of food, and interactions with staff (as opposed to patients or families). Also included here are the emotional and physiologic stresses of medical students [8, 9, 10].

Sleep is important to all humans. In their third year of medical education the medical student will first encounter forced sleep deprivation [11] in that: (1) they are required to stay awake for longer than many of them have been accustomed in order to participate in the care of the critically ill patient or (2) they feel an obligation not to rest in order to care for the patient. They are continually reminded that there are three orders that they should never disobey: go to sleep, go and eat, and go home. The students are advised that there will be plenty of time for punishing conditions during their residency training. Physiologic exhaustion occurs with overwork. When this happens the student maybe considered ‘weak’ and this could potentially lead to ‘mocking’ of the student. A hostile environment may be created for the medical student and a decrement in performance and well-being may become noticeable. It is important for the attending physician to step in and address the situation, not only for the emotional health of student, but also to rescue the learning situation so that the student may acquire the necessary skills and confidence required to complete the rotation. This is the ideal, but most medical students are under the control of residents who may exhibit little sympathy.

Personnel interactions are of great interest. The medical student is an inexperienced and poorly functioning appendage of the critical care team. The students have great enthusiasm, but do not have the skills to match this enthusiasm. The nursing staff and allied health staff (e.g., respiratory therapists) may at first ignore the students, but if the student exhibits humbleness and displays respect for other health professionals (another facet of professionalism that can be role-modeled) toward the staff, the student will find himself or herself in a position to learn much from the non-physician staff. If the student exhibits arrogance toward the nurses or allied health staff then their learning experience may be hampered. The students are counseled on the matter of their attitude before the start of their ICU rotation.

Furthermore, there is the potential pitfalls of emotional abuse, ethnic insensitivity, and sexual harassment [12].

### **PHYSICAL AND BIOLOGICAL HAZARDS**

The students are physically at risk in the ICU environment because they are unfamiliar with the general environment: the location of supplies in the various storage areas, the tripping hazards of cords or tubing below knee height, and the proper use and disposal of sharps (needles, glass and scalpels). Sharps are probably the physical hazard that most concerns the medical staff and students in that human immunodeficiency virus (HIV) and hepatitis B and C, etc. are very real biological threats, although immunizations are available for some infectious agents [13]. Situational awareness is of paramount importance.

### **MONITORS/MONITORING, DEVICE PLACEMENT, AND PRESCRIBING**

Locating the necessary equipment for monitoring patients, setting up or using the equipment, and the interpretation of the values displayed or provided by such monitors is stressful [14]. Monitor interpretation requires a dynamic grasp of physiology, anatomy, biochemistry, and mathematics. Sometimes calculators are needed to solve equations that assist with the interpretation of data, but there are times the students are required to quickly solve the equations mentally and this can distress them during the critical patient event. Furthermore, mere sounds can be startling and confusing in the ICU [15, 16]. ICUs can be very loud because of monitors, loud talking, performance of procedures, and the lack of sound insulation. The sound of alarms and the search for the particular monitor involved or the particular patient bed can be disconcerting and distracting to students. The students, at times, struggle with the significance of each alarm because they realize that some of the alarms are false and some indicate outright danger.

Placement of invasive devices in vital organs, arteries, and other major vessels can be extremely taxing [17]. The placement of invasive monitors requires dexterity, judgment, insight, and an ability to interpret dynamically changing clinical situations. The students may face errors in the placement of the device and errors in the interpretation of the device data. Hand-eye coordination and grasp of a three-dimensional understanding of the pertinent anatomy is necessary for insertion of invasive devices.

Complications may occur such as pneumothoraces, emboli/thrombi, bleeding, limb ischemia, cardiac arrest, and

obstruction of airways. These are fearful consequences of invasive monitoring device placement. Complications nearly always require intervention and correction by a senior resident or an attending physician because students do not have the necessary skill set to intervene. This may make the student feel powerless. During the training process students may fear hurting the patient with device placement. The student needs to suppress fear and anxiety to successfully place invasive devices while at the same time the teaching staff needs to express support and confidence in the student's abilities.

The proper use of drugs in the critical care settings is paramount [18]. The proper use of these drugs will be difficult for the beginner, and in most institutions they are not allowed to prescribe drugs, thus frustrating the student. Furthermore, any error the medical student does make is magnified by today's medical malpractice climate. A mentor who is a philosophical practitioner would intervene on behalf of the students in support of their psyche in the aforementioned situations.

### **FAMILY AND PATIENT INTERACTIONS**

The critically ill patient may be dying or severely disabled. Some medical students have experienced death or disability on a personal level and this may help them with family and patient interactions in that it may create empathy more quickly. Others have little or not experience with tragedy. The students must learn to deal with the family's reaction to the tragedy. Additionally, students must understand their own response to the family's reactions, the family's interactions with each other, and the patient's needs. These needs may or may not be recognized by family members, such as the patient's right to die [19]. The considerable amount of patient suffering to which the medical student is exposed, and the randomness and/or the malignancy with which some acts of trauma are perpetrated upon fellow humans, leaves many students in discomfort. The response of most students to the ICU patients and their families can be easily recognized; in others their stoicism prevents their responsible mentors from identifying any maladaptive responses. A philosophical practitioner would be of particular value in these situations.

### **THE NEED FOR THE EMOTIONAL CONFLICT RESOLUTION OF MEDICAL STUDENTS**

Why the term emotional conflict resolution? This term was selected because it refers to the medical student's emotional response to the conflicts in the ICU. Examples include the

conflicts involving contradictory diagnoses, different modes of therapy, conflicts among staff workers regarding patient care, family discussions or arguments over the end-of-life wishes of their loved ones, terminating life support, and organ donation. The students frequently ask questions such as, “Why are we doing this to the patient?” The question is not just a reference to the academic exercise of patient care, but it is more of a philosophical query as to “Why can't we stop doing this to the patient?” or “Can we not provide anything better than this?” The students need to be nurtured and supported and mentors must exhibit patience during such interrogatives. This is also noteworthy from another perspective, attending physicians make their living by “doing things to patients”. Medical students may be more insightful because they have no financial gain at stake and are not yet desensitized.

Critical care rounds are made by a team consisting of an attending physician, residents, medical students, a pharmacist, a nutritionist, a social worker, respiratory therapists, and the nursing staff in which there is a medical and scientific discussion regarding the patient's condition and the dynamics/emotional health of the patient's family, but nobody identifies and deals with the emotional needs of the interdisciplinary critical care team. Of course the medical school and its accompanying university medical center have psychosocial services available, but they are nearly never brought to bear in support the health care providers. Why? Most probably because (1) the healthcare providers consider it an act of weakness and (2) it is a topic completely overlooked out of ignorance. Nonetheless, there is support available through Departments of Psychiatry. However, there continues to be stigmatization to psychiatric treatment [20, 21], although less so to psychotherapy than to medications [22]. Furthermore, since many young people are moviegoers (including medical students), the unflattering image of psychiatrists in commercial American movies that has been recently documented in the medical literature (a review of 106 movies with psychiatrist roles) may leave medical students shy as to seeking help from psychiatrists [23]. Thus, an opportunity has been created for philosophical practitioners to work with students in the today's environment, along side the disciplines of psychology and psychiatry.

The comments of Gerd B. Achenbach are appropriate in addressing philosophical practice in the context of medical students in these circumstances:

“In Philosophical Practice, people show up who don't just want to live or to get through but rather want to give account of their lives and who want to clarify about their lives' shape, the from-where, in-what, where-to. Their demand quite often is to reflect upon the special circumstances, the peculiar entanglements and the somehow ambivalent course of their lives. In short: They visit a Philosophical Practice in order to understand and to be understood. It is almost never the Kantian question ‘how shall I live’ which moves them, but more often the question of Montaigne: ‘What am I actually doing [24]?’”

This is a fair question. This question is not being asked by a person who is insane. It is not asked entirely out of ignorance. It is a question asked by the student in an attempt to find “the way”, his or her very own special and individual way of coping and understanding the critical care environment. Each student will choose a manner in which to cope with this “front line” conflict with nature. The student's questions, thoughts, and views must be respected and they must not receive harsh judgment, but should be reflected back to them without reproach. Perhaps their questions should be answered with more questions thus helping them become introspective, self-examining future physicians.

It is here, at this juncture, where the student enters into an open dialogue with the physician mentor where the student is not judged, that a philosophical practitioner would be helpful. Nearly twenty years ago physicians recognized that merely having the occasional ethics case conference or ethics consultation was not enough exposure for medical students and provided too narrow a view of medical ethics [25]. Today, in a multidisciplinary role, philosophical practitioners would find that they have contributed significantly to the training of physicians by enabling these students to enter society as self-examined moral agents. Furthermore, they will likely enhance patient outcomes through their counseling and guidance to healthcare providers. Even though this philosophical interaction is of value for the medical students (because they can truly become the most forlorn of the critical care team) there is no reason why practical philosophers could not turn their attention to the entire multi-disciplinary team.

## **THE PHILOSOPHICAL PRACTITIONER AS PART OF A MULTI-DISCIPLINARY TEAM**

The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) has made the performance of critical care patient rounds by an interdisciplinary team an

indicator of excellence in the management of the ICU, specifically as it relates to communication among care givers [26]. This interdisciplinary team does not have the requirement of a philosophical practitioner, but the addition of such a member could only enhance the performance of the ICU team.

A university medical center may not want to hire someone to provide philosophical support only to the ICU, but such a person could provide considerable input across a broad spectrum of client services, thus generating income or a course of support by an institution. For example, a philosophical practitioner could serve on the ethics committee and the ethics consultation service. A philosophical practice also lends itself usefully as an addition to the curriculum in the preclinical years to prepare the students for their clinical encounters and dilemmas. As a faculty member such a philosopher could use their insights by serving as an interviewer for medical school candidates and serve on the admissions committee, or other institutional committees.

The issues of transplantation services and stem cell research are legion [27, 28, 29], especially with issues such as the ethics of paired-kidney-exchange programs [30]. Many feel that the donors in such programs will need an advocate to represent them and their concerns, specifically someone that has no vested interest in the success of the transplant program. Philosophical practitioners could also serve on the numerous research and institutional review boards (IRBs). It is noteworthy that the National Science Foundation (NSF) has issued announcements for grant applications regarding the introduction of an ethics curriculum in graduate engineering and science curricula. This is an attempt by a prestigious national scientific organization to instill ethics through philosophy into American graduate scientific education.

Most medical/research institutions will need employment of multiple

“philosopher” full time equivalents (FTEs) to fill their mission profiles. Philosophical practitioners with an undergraduate background in a science may find themselves sought after, just as patent lawyers with science degrees are particularly sought out by corporate entities. For instance, in the United States, transplant coordinators (Human Donation Science specialists) traditionally have been nurses, but nurses have become very difficult to recruit to such positions because of their declining numbers and the emotional intensity of the work. The University of Toledo College of

Medicine has recently started a twelve-month curriculum leading to a certificate in Human Donation Science for non-medical personnel; it was the first of its kind in the country. To qualify for entry into the program a philosopher would need just one year of college biology and one term of organic chemistry. Would this not be a natural fit for a philosophical practitioner? The philosophical practitioner, with a minimum of cross-training in another subject or field, will be an invaluable asset in many venues.

I have just enumerated many ways in which a philosophical practitioner can be of value to an organization and support themselves, but I feel their primary value is to the medical students, or any health professional in a learning or training mode, in that philosophical counselors:

“...engage in one-on-one dialogues with individual clients whose problems lie within the scope of philosophical counseling. That scope includes issues of meaning, value, purpose, fulfillment, moral dilemmas, ethical quandaries, conflicts of interest, existential crises, interpersonal relations, and other situations in which philosophical advice conduces to constructive adjustment to change. The main premise of philosophical counseling is that not every problem or process encountered in life is a ‘mental illness’ or a symptom of ‘mental illness.’ In the ancient world, philosophy was a guide to the art of living; contemporary philosophical counselors recapture the original spirit of philosophy as ‘the cure of souls’ or ‘therapy for the sane.’ Philosophical counseling does not replace psychiatry or psychology; rather, complements them as a profession of personal counsel [1].”

## **CONCLUSION**

A philosophical practitioner would be a great asset to medical student education and support in the intensive care setting. Such a person would be a welcome addition to the multidisciplinary critical care team. Their value will extend beyond the ICU to other facets of medical education, such as ethics consultations, transplantation medicine, designing undergraduate and graduate medical curriculum, institutional committees, general student and faculty counseling, organizational counseling, and community programs.

There is a hope and an intention to create a philosophical practice aspect to our critical care effort and then to nurture this relationship so that it prospers throughout the institution. The application of philosophical practice to the healthcare system and its associated research in medicine, biotechnology, and engineering will enhance the delivery of

high quality decisions and efforts by the institution. However, this will only be possible by first delivering philosophical guidance to its future medical practitioners.

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