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Effective Factors of Professional Ethical Competency in Medical Students: A Qualitative Study

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Abstract

Introduction: Attaining ethical competency for medical practitioners, especially physicians, is one of the critical concerns for the education and management system. The competency related factors rely upon the context and culture physicians live and train in. Therefore, it is necessary to initially identify the factors to improve ethical competency.

Objective: This qualitative research was carried out to study the effective factors of professional ethical competency in medical students through using participants' life experiences.

Methodology: The research was qualitatively conducted. Research data were collected following written informed consent. 14 participants who had experience in teaching medical students were semi-structurally interviewed. Data were analyzed using conventional qualitative content analysis method. Data reliability and validity were verified using Lincoln and Guba criteria.

Results: Three groups were extracted in the study according to participants' experiences, including comprehensive recognition, ethical development supporting climate, and comprehensive role model training.

Discussion: Directing students to know the self, profession, and culture, followed by improved social and economic communications in the organization, as well as enhancing ethics contribution in educational assessment, and emphasizing ethical models may pave the roads to the ethical competency of a physician. It is recommended that policy makers adopt a holistic view in medical instruction.

Key words: Professional Ethical competency, physician, qualitative study

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Introduction

Despite the significance of professional ethical competency in medicine, evidence reveals that medical students' education mainly focuses on technical aspects rather than ethical dimensions(1). Technical capability may not turn an individual into a proficient, influential physician without ethical competency. Ethical competency is indeed the capacity and commitment to protect the rights of patients and the families such that technical and specialized ability is part of the patient's request and rights(2).

Professional ethical competency is often recognized as professionalism; it is also largely emphasized in a prospective physicians' education and institutionalized (3). A professionalism-based act may cause improved relationship between physician and the patient. Ethical competency magnifies a physician's satisfaction and meanwhile improves health care team communication [4]. It is shown that students' professionalism influences patient care. On the other hand, unprofessional behavior and absence of values among students is related to medical students with burnout (5).

Professional ethical competency is defined through two approaches including character-based approach and an approach concentrating on visible performance and professional behaviors [6]. The two are sometimes combined to provide a more comprehensive definition; in better words, professional ethical competency is indeed considered as a professional way of conducting oneself based upon values and commitment [7]. However, the relationship between professionalism and humanism is such that they are interchangeably used. It is generally believed that professional values are prioritized to behavior. But they are typically mixed. However, human values and professional conduct may literally overlap in definition, some believe that human values play the central role and are more important than professional behavior [8].

To operationalize ethical competency of physicians, some clinical instructions are often used containing values and behaviors. A Virtue oriented school asserts that human values must be centrally considered in all professional activities. In other words, freedom, dignity, value, and personal opinions are required to be respected and individuals' difficulties and needs are removed through sympathy and no contempt. Modern medical ethics refers to the significance of human values and virtues and introduces leading virtues of medical ethics [9].

The main message of ethical competency is that the client is ensured of the physician's fair and honest effort, accountability, and correct observance. Therefore, professional conduct and accountability are critical dimensions of professional conduct. According to the present professional ethics, conduct is categorized as behavior to self, behavior to the patient, behavior to colleagues, behavior to the community or social accountability [10]. In this regard, ethical competency is regarded as an institution to organize physician's social behavior. As a result, social development of medical practice is associated with the practitioners' ethical competency.

Improving public health is directly related to the capability and effect of medical practitioners. Since professional ethics competency of health care providers is critically important in enhancing public health; thus, it is of significant interest to experts and scholars in many health affiliated professions by. Current medical students are the future physicians who significantly contribute to public health development; further, profession ethical competency of medical students may result in proper outcomes for patients, society, and the profession; thus, it is largely necessary to pay attention to the development of ethical competency in medical students.

As ethical competency is a social issue, it is viewed differently relying upon various social contexts and variable social values in different cultures and communities [11]. Therefore, research requires that social values of various communities are recognized. Few studies have examined effective factors of ethical competency in the medical profession [2]. Hence, the present qualitative research intended to study how Iranian medical lecturers recognize effective factors of professional ethical competency in medical students. A qualitative study can provide useful information of a community, which is unique regarding any particular community culture and context.

Method

We performed this research to study factors affecting the medical professional ethics from the perspective of clinician teachers. Therefore, 14 clinician teachers with medical ethics teaching experience from two medical faculties of Tehran and Qom, were selected for interview.

All participants were informed about the purpose of the research. The participation was voluntary, and confidentiality and anonymity was maintained at all stages. The main questions were asked focusing on development of professional ethics, their experience of working with students, and their view on factors affecting professional ethics. Each interview was recorded and lasted between 40 to 60 minutes (with an average of 50 minutes), and then transcribed verbatim and analyzed before the next interview. This stage was continued until data saturation was reached.

We used qualitative content analysis in this descriptive study. This approach helps the researcher to explore and interpret the data and explain the great and major themes of the participants' perspectives. (7). Data analysis used in the present study was based on methods described by Graneheim and Lundman (8). In this study, MAXQDA software was applied to improve the classification procedure and continue data comparison.

To establish credibility of data, interaction, close relation and sufficient collaboration were done with participants. Also peer check and continuous comparison were performed. Data dependability was established using experts' review, and revision was done by observation of participants by an outside reviewer. To obtain adequate conformability, the researchers tried to avoid advance judgment and not interfere with previous beliefs. Transferability was prepared by complete explanation of data.

Results

Effective factors of students' ethical competency achievement of research participants in Iranian medical instruction context are as follows:

In Iranian medicine instruction, effective factors of professional ethics are categorized into three major classes: comprehensive recognition, ethical development supporting atmosphere, and a comprehensive model-based educational system.

1. Comprehensive recognition (awareness):

the physician requires recognition to achieve ethical competency. The recognition may result in ethical competency if it is deep and comprehensive. The recognition dimensions based on research participants' experiences are as follows:

Self-awareness

According to the participants' experiences, self-awareness may be an introduction to the professional ethics for medical students. The participant professors named some values and virtues, which may lead to ethical competency through institutionalization. One of the participants with 12 years of work experience claimed that "a student gradually self-recognizes some capacities like high tolerance and the ability to identify and to develop peace, and self-control power in delicate, difficult occasions".

The participants confirmed that a medical student may endeavor to raise the value of professional ethics if he/she considers ethical aspects in treatment and attains self-awareness:

"Medical students must firmly trust in god, be purposive, and seek for spirituality rather than material issues. They are supposed to study and ask questions of experienced teachers in order to remove the ambiguities rather than wasting time. Medical students are disallowed any retreat in studying, burnout and frustration; rather, they are expected to pursue the objective of helping sick patients".

Professional awareness

According to experiences of research participants, recognition of the medical profession values is the introduction to strengthen professional ethics in medical students.

One of the participants believed that "the first step is to recognize and love the profession associated with intrinsic motivation and academic effort for science rather than other objectives such as earn money, position, etc."

Another participant, referring to the significance of profession awareness, expressed professional duties and boundaries, "to be ethically qualified in medicine, a student may require being adequately aware of their profession, what are their duties, and how the profession interacts with various other groups".

Cultural awareness

According to research participants, Iranian cultural awareness with a proud history of civilization and medicine is the requirement of achieving professional ethical competency; additionally, cultural awareness makes the physician respect other nationalities and culture.

One of the professors highlighted the role of medical history in Iran and stated that "physicians were called Hakim in Iranian medical history since they had other necessary requirements in addition to the science".

Another participant indicated that "women in Muslim communities wear the hijab and expect visiting by female physicians (minimal contact with male physicians). Indeed, privacy should be respected".

"The community culture should be preserved in appearance and conduct. Some acts are not accepted in our culture like long hair for men. I think traditional medicine may provide a Hakim who is proficient and preserves social and ethical consideration as well", declared one of the research participants.

Research participants asserted that medical students must consider community culture in social behaviors, way of clothing, and communication, and act according to the common culture. It is necessary to observe way of clothing based on the community in order to prevent any annoyance or surprise for patients and clients.

2. Ethical development supporting climate:

to attain ethical competency, a physician needs to be located in a pro-ethical context. Ethics supporting environment embraces organizational climate and social support, which may lead to professional ethics if properly formed.

Organizational atmosphere

Organizational climate is another effective factor of professional ethics. Ethical atmosphere provides the opportunity for professional ethical conduct. The ethical theme would penetrate social institutions of the organization trying to develop ethics.

One of the participants mentioned the positive role of university and hospital in inspiration "at a university or hospital where professional ethics are valued, the individuals are encouraged to strengthen this feature".

According to another participant, "disordered university schedules and messed up curriculum of medical faculty are transferred to the student-teacher and student (future physician) - patient relationship".

Participants' experiences demonstrated that when an organization is accustomed to unprofessional ethics, the individual may gradually lose ethical sensitivity over time.

One of the teachers reminded of the effect of organizational ethical environment and asserted that, "in case that observed professional ethics or failure to observe the professional ethics is not welcomed by any system reaction; so, does it really matter to observe ethical issues?"

Healthy socioeconomic structure

Social relationships influence professional ethics. Experiences of research participants reveal that the social system may provide the required opportunity to develop professional ethics for different individuals including medical students.

“If the society properly supplies socioeconomic conditions and if politics observes ethics; then, observed professional ethics would be promising”, one of the participants related.

According to the experience of another participant, “a friend of mine with moral and altruism spirit, recently finished surgery residency, and started working at a hospital. He was newly married and was looking for an inexpensive house. As he was unable to afford it, he started receiving a bribe”.

Another participant believed that “proper financial support during study, providing proper training to learn how to interact with others, and transferring ethical and professional experiences, etc. significantly contribute in enhancing professional ethics among students” in addition to the effect of social and economic systems.

The role of family in establishing professional ethics among physicians must also be regarded in social substructures. Of the issues emphasized by participants was the effect of family in child rearing and institutionalizing individual virtue. In fact, family as a model critically contributes in the acquisition of moral virtues and vices. “Moral characteristics such as courage, generosity, honesty, and trust, and the like are inherited from parents. Moral vices like lies and betrayal may be learned from family, which largely influence future professional ethics”.

3. Comprehensive model-based educational system: to train a professional ethically competent student, a facilitative educational system is required. According to the experiences of research participants, an effective educational system is characterized as follows:

A holistic educational system

Almost all participants considered holistic, comprehensive education. Excessive particularism is one of the disadvantages leading to the absence of ethics in different sciences. Medical education not just means learning medicine; rather, a physician needs knowledge of other associated sciences including ethics to develop professional ethical competency. One of the participants thinks that, “according to “Summaries of wisdom”, a physician must be proficient in another 10-12 sciences in addition to medicine, including ethics, wisdom, Jurisprudence and hadith, logic, geometry, astronomy, etc. and the materials taught today at universities are inadequate”.

Another participant believes that “in addition to the medical knowledge and expertise, familiarity with medical philosophy, visiting psychology, and in general, a comprehensive education system is required”.

Continuous and comprehensive evaluation

Development of professional ethics of the current medical students and prospective doctors depends on diagnostic, developmental, and incremental evaluation. The medicine entrance exam does not ensure individual ethical competency; rather, it is permanent evaluation, screening, and sensitivity that create a professional physician from a non-professional individual. One of the participants declared that “medical application just through entrance exam is improper; instead, personal interview is also required to understand how much the individual is ready for this profession. In medicine, the students must be evaluated both at the onset and over the period”.

Evidently, instruction, even ethical instruction, may not suffice in developing ethical competency in medical students. The student must always feel under assessment and surveillance such that the professional ethics are institutionalized. Feedback of permanent assessments may lead to developing professional ethics.

One of the participants experienced that “continuous ethical evaluation with students’ feedback is required in addition to academic effort for professional ethics and using rewarding mechanisms”. Cultural and social foundations of Iranian universities call for team and interdisciplinary assessment of professional ethics in medical students in order to attain a comprehensive evaluation. One of the participants noted in regard to the efforts made to find a proper evaluation approach along with other teams, “there has been much doing on how to evaluate ethical behavior of medical students. Professors and residents are involved. Clinical groups were involved in a workgroup. It is necessary to consider what framework is appropriate for ethical assessment of the students?”

Role modeling

Another existing effective factor in the educational system is teacher (professor) as the student model. What the student learns in the area of profession ethics is largely influenced by teachers. However, teacher also have some negative effects in addition to the positive effects. In other words, teachers’ proper conduct causes professional ethics promotion; while, inappropriate behavior may lead to justified unprofessional behavior in students. Referring to the positive measure that one of the teachers adopted, “for instance, one of the colleagues returned the extra money granted for an approved proposal as it was not used in that project”, one of the participants narrated.

Another person mentioned a humanitarian characteristic of a physician who was known as a perfect model, “an internal medicine doctor visits inpatients at night without any benefit, due to accountability”. One of the participants believes that experienced, qualified physicians may also ignore professional ethics and irritate the patient, “we do not expect the physician to insult the patient”.

Some participants witnessed unethical behaviors of the physician that negatively influenced medical students, for instance, “an orthopedic patient who had paid for a planned surgery was rejected by the surgeon asking for extra

money. The surgeon said that diagnosis and operation requires more than the agreed amount; otherwise, there would be no operation”.

Discussion

The present research studied effective factors of professional ethical competency in medical students and were classified according to the participants' experiences in the Iranian context. In the following, research effective factors are discussed.

1. Comprehensive recognition

Recognition is the first effective factor of professional ethics, which is classified into three subdivisions: self-recognition (self-awareness), professional recognition (profession-awareness), cultural recognition (culture-awareness).

The research highlighted self-recognition. Self-awareness is referred to being aware of motivations, desires, and abilities of the self. It can be stated that self-awareness is the foundation of professional ethics. It is critically significant in accountability and encouraging medical students' motivation [14]. In addition, self-awareness also causes reduced anxiety among students, and finally, patients get better care [15]. The self-awareness dimension has individual features as well as moral values and virtues that significantly contribute to professional ethics. Today ethical character is increasingly of interest. It is of important factors such that a character-oriented approach is created even in medical ethics and professional ethics instruction, which may develop a new acceptance in the students [16].

The second step, after self-awareness, is the profession-awareness emphasized in the research. The medical student should be aware of medicine, its characteristics, and interaction with other health team members. Significance of professional identity is cited in different articles meaning that the student as a prospective doctor must know how to be and how to interact [17]. If the individual achieves that level of awareness and professional identity is formed, it may be expected that professional ethics competency is also attained. That is why numerous articles have highlighted the significance of professional identity in medicine instruction [17-20]. It is worth noting that medical practice in Iran, regarding the history and characteristics, requires it to be introduced by known physicians such as Avicenna introduced to medical students.

The third recognition to reach comprehensive awareness is the society and culture recognition. The finding indicates that professional ethics-based behavior is obtained by cultural awareness and cultural respect. However, different cultures share common features. For instance, values like humility, truth, honesty, patience, and commitment are not merely dedicated to the Jewish or Christianity faiths; rather, are acknowledged in other cultures, too. For example, the holy Quran repeatedly referred to these values. However, cultural differences largely influence professional ethics. Decision-making authorities in European/ American communities versus

east-Asian communities is an important example. Western communities esteem individual autonomy; whereas, family autonomy is dominant [21]. Islamic culture also embraces some values health care crews need to know, the most important of which is to avoid interacting with the opposite sex, especially for women. Female patients are expected to be visited by a female doctor or nurse; or interact with male physicians as little as possible. In addition, Islam forbids alcohol and ham. However, this may be violated in emergency [22]. In Islamic communities, a physician is expected to have other features in addition to professional ethics including faith, conscience, good character, perfect performance, and accountability. Therefore, it is required that medical students achieve cultural competence and behave along the values of community culture, which are largely facilitated by education [23].

2. Ethical development supporting climate

An Ethical supporting climate plays a critical role in founding and development of professional ethics. Some believe that professional behavior not only stems from individual character, but also, more importantly, it originates from the context where the individual is trained. The research categorized ethics atmosphere into two classes of organizational climate and healthy socioeconomic structure.

Organizational climate may lead people to professional ethics. The significance of ethical organization is increasingly cleared in developing professional ethics. A healthy organization significantly contributes in ethical performance of organizational members through preventing or encouraging. Therefore, organizational policies and supporting them may effectively influence a tendency toward professional ethics [24]. A study, conducted on Korean physicians, inferred that the physicians prioritize ethical duties such as accountability and truth over ethical values like honesty and kindness because of government's health system pressure [3]. Context is an effective factor in professional behavior. It consists of three environments of clinical, university, and virtual environment. Clinical context is more important and has a greater impact on professional behavior [25, 26]. It is necessary to note that the organization may have a negative effect, too. At present, public trust in health care institutes is endangered due to health management mechanisms as incentives of some health care institutions have caused some limitations for physicians in terms of care quantity and quality [9].

The present research concluded a healthy socioeconomic structure as a professional ethics factor. Ensured health of social and economic structures may direct all social classes, including physicians, to ethical issues rather than trying to make money because of future uncertainty. Regarding that students undergo financial difficulties or mental distress during long study, guaranteed social and financial support significantly contributes in reducing anxiety and developing professional ethics. Uncertainty may make the individual look for his own interests, ignoring the patient's interest, which leads to violating professional ethics. Therefore, it is recommended that governments increase payment to enhance professionalism in young physicians [2]. On

the other hand, medical students endure lots of stress because of the nature of medical practice. According to a study, fresh students showed increased anxiety, decreased academic motivation, and social life maladjustment [27].

Furthermore, psychological distress increased in medical students comparing other age groups [5]. Different research has discussed the issue using the term well-being. Well-being means that an individual physically, mentally (psychologically), and socially, feels healthy. Students' well-being decreases stress and consequently leads to enhanced professional ethics. Studies demonstrated that mental well-being is largely related to residents' empathy, one of the important dimensions of professional ethics [28]. It seems that adjusting and removing financial relationships between physician and patient as well as a fair structure may improve professional ethics.

3. Comprehensive model-based educational system

If a combination of ethics, technical issues, and medical expertise is considered in the curriculum, it would certainly help in developing medical ethics. The curriculum must consider ethical instruction in addition to the medical knowledge and expertise.

The research explored comprehensive model-based education through continuous comprehensive evaluation and enhancing role model; moreover, it is also provided as a medical students' professional ethics development factor. Education is realized through formal training (classes), informal training (workplace and clinic), and hidden training (models) [29]. Clinical training plays a critical role in students' attitude such that clinical students and pre-clinical students differ in perspectives. Further, universities' approach also influences students' perspectives [1]. Clinical experiences of early years may cause prospective professional responsibilities' awareness for students and encourage ethical values. That is why medical students, around the world, are early exposed to clinical experiences [30].

Comprehensive education is not merely dedicated to the medical students; rather, almost all curriculums are interested in it. However, the education success varies in different centers. Some medical universities in the world teach medical humanities including humanities, social sciences, and art, which develop empathy and improve physician-patient interaction, and constructively influence private and professional values [31]. Medicine associated fields like nursing also refer to comprehensive training for nurses. In addition to nursing knowledge, physiology, and anatomy, virtuousness must be aware of ethics, psychology, economics, as well as sociology [11].

The present research provides targeted and directed evaluations. Students often organize learning relying upon the tested and assessed content. Thus, the present research reveals that if students' assessment considers ethics beside academic and specific issues; then, professional ethics is probably enhanced. Evaluation is important since it gives some knowledge of the current status to the individual or educational authorities; as a

result, it is necessary that medical curriculum concerns professional ethics evaluation [32]. Students' performance is intensified through reliable valid measurements of professional ethics. Different studies suggested various tools and measures to assess professional behavior [33]. Evaluations recently concentrated on behaviors rather than attitudes as behavior and attitude may be irrelevant due to the context effect [29]. However, professional behavior is a complex issue demanding frequent measuring in various learning contexts through a combination of different methods and instrumentations [6].

The issue of teacher role as a model is obviously clear-cut. Teachers (professors) are not only clinical models for students, but also largely influence developing ethical competency in students through ethical knowledge and ethical conduct. Thus, according to many research findings, it is accounted for as an effective factor of professional ethics learning. Role modeling is effective in teaching and learning professional ethics, particularly in the clinical context [26]. In a study conducted on medical students, facing good doctors and negative models caused increased and decreased interest into medical ethics, respectively. In fact, the physicians involved in teaching were viewed as models in medical ethics training, even if they were not teaching medical ethics [34, 35]. In a qualitative study, students indicated role model as the greatest factor of learning professional ethics. The model contained teacher in classroom, peers, and clinical practitioners. The research pointed out peer role as model and teacher role as negative model [36]. However, teachers or peers are not the only models; rather, residents, nurses, and other health team members may act as a model, too [37]. Moreover, model also is the significant factor in establishing students' professional identity [35]. A model aids in forming professional identity for a medical student, in addition to teaching medical knowledge and proficiency, to enter into medical work as a doctor [25]. Other studies also focused on the significance of clinical teachers beside the patient bed in students' professional identity [38]. However, some behaviors of the teachers may influence students as negative models [39]. Therefore, it is recommended that teachers and residents watch carefully how they interact with colleagues as it improves students' behavior [40,41].

Conclusion

The current study uniquely organized effective factors of medical students' professional ethics in Iran, which may be utilized in educational, managerial, and service systems. The factors were classified as awareness, organization role, and comprehensive role-based educational system. Medical professional ethics is facilitated by managing and organizing the aforementioned classes through managerial-educational institutions. However, further studies may explore detailed effective factors and interventions' efficiency.

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