Knowledge and attitude toward professional ethics: A study among Iranian medical and nursing students’

Poria Hoseinialiabadi, Ali Omidi¹, Mansour Arab², Zohreh Makarem², Mojtaba Jafari²

Abstract:
BACKGROUND: Professional ethics is a set of principles and standards of human behavior that affect individual behavior and leads to improve care that provided by medical staff. The present study examined the knowledge and attitude of medical and nursing students toward professional ethics in Iran.

MATERIALS AND METHODS: This descriptive-analytic study was carried out on 176 medical and nursing students in Bam University of Medical Science, Iran in 2019. In this study, students were selected by census sampling. Data collected using two researcher-made questionnaires related to knowledge and attitude toward professional ethics. Data were analyzed in SPSS software.

RESULTS: The mean scores of knowledge among nursing and medical students were 86.56 (8.76) and 85.10 (12.19), respectively. The mean score of attitude among nursing and medical students was 127.06 (12.45) and 129.9 (11.88), respectively. Results of the Pearson correlation test showed a positive and significant associated between the score of knowledge and attitude nursing and medical students’ \((P < 0.001), (r = 0.76) (r = 0.66)\). Among the demographics characteristics, student age was associated to their attitude and knowledge significantly \((P = 0.03)\).

CONCLUSION: Iranian nursing and medical students have a positive attitude and a high level of knowledge about professional ethics. A high level of knowledge was related to the most positive attitude.

Keywords: Attitude, Iran, knowledge, medical, nurse, professional ethics

Introduction

Professional ethics is a set of principles and standards of human conduct that specify the behavior of individuals and groups and is a process of rational thinking to realize the type of values and the time they should be maintained and promoted in the organization.⁴ Professional ethics has become a pivotal point in clinical and medical sciences for > 25 years and the focus of medical education studies in the past two decades.⁵ Medicine has ethical laws that explain the principles of its personnel performance.⁶ The main principle of ethics in health care that must be endorsed in all situations is beneficence, nonmaleficence, respect for autonomy, and justice.⁶ It has been many years that the code of ethics (privacy, respecting patient rights, honesty, and so on) have been developed in the world, which shows the significance of ethics as one of the key elements of nursing.⁶ Experts believe that ethics are well integrated within health-care delivery, and physicians, nurses, and health-care professionals, in general, must apply ethical standards and professional principles that are essential to a therapeutic relationship.

In Iran, there is no codified code of ethics for health-care workers; thus, occupation

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therapy does not follow a uniform code of ethics. They usually observe ethics according to their sociocultural beliefs or contexts or rely on international statements such as the International Ethics Association’s professional ethics, which results in the variety of their reactions against a single issue.[7] Most medical students view medical ethics only as a requirement for passing their exams. They do not consider medical ethics as a compulsory term and legal regulation that can protect physicians and their patients.[6] One of the most significant ethical principles and human rights important in professional and medical ethics is heeding patients’ rights. Accordingly, it is essential for medical practitioners to be efficiently aware of it and obtain the necessary skills in meeting patients’ rights.[9]

Iranian health-care providers, including nurses, often face various ethical challenges for different reasons.[10-11] It is necessary to be provided health services for patients by nurses, according to ethical principles.[12] The nursing profession is one of the sciences that has many significant moral aspects in all its dimensions. Due to being important Ethical principles in providing care, nurses should consider these principles. Commitment to ethics in the care provided by nurses and nursing students is considered as the core of nursing values and demonstrates the amount of concern and respect for the patient.[6]

As the medical and nursing students are involved in ethical concepts in their professional lifestyles, they spend many hours with their clients and the medical profession, given their knowledge and attitudes in the field. Communication and legal professional ethics have a significant role in the quality of health-care services. Moreover, they spend many hours with clients and the medical profession and as that their knowledge and attitude in the areas of communication and legal ethics of professional ethics have a significant role in the quality of medical and nursing services, and researchers’ experiences show that clients’ dissatisfaction has increased. As medical and nursing students are involved in ethical concepts in their professional lifestyles, they spend many hours with clients and the medical profession. As their knowledge and attitude in the communication and legal domains of professional ethics have a significant role in the quality of health-care services, the experiences of the researchers show the dissatisfactions in this regard, and as no such studies have been conducted in Bam, the researchers decided to measure the knowledge and attitude of medical and nursing students toward professional ethics in communication and law areas at Bam University of Medical Sciences. This was done so that, based on the results, effective steps can be taken to think about reforming education in future, and in the next stage, some steps may be taken to provide high-quality services and make the clients satisfied.

Materials and Methods

Study design and setting
This cross-sectional study was conducted in Bam, Iran, from June to July 2019. Proposal of the study approved by research deputy of Bam University of Medical Sciences. All medical and nursing students at Bam University of Medical Sciences were invited to participate in our study.

Study participants and sampling
The census sampling method was used for sample selection. Inclusion and exclusion criteria were all the students studying at one of these departments in Bam University of Medical Sciences, Iran, were included in the present study. All the questionnaires, which were not answered thoroughly, were excluded.

Data collection tool and technique
Data collected, after obtaining permission from the research deputy of Bam University of Medical Sciences. The researchers went to the School of Medicine and Nursing and received a list of students’ names from the college’s vice-chancellor. Then, in coordination with the faculty officials, the questionnaires were distributed among the students during class hours. Students requested to read and fulfill the questionnaires. Researchers remained in the setting for giving questionnaires.

Data were collected with a demographics checklist and two researcher-made questionnaires related to knowledge and attitude toward professional ethics. Demographics checklist includes students’ age, gender, marital status, accommodation, academic year, and major.

The knowledge questionnaire contains twenty questions. The answer to questions was in the form of a five-point Likert scale from “strongly agree 5” to “strongly disagree 1.” The score on this questionnaire ranged from 20 to 100. A higher score indicates a higher level of knowledge about professional ethics. The content validity of the questionnaire was approved using the opinions of ten faculty members, and its reliability was confirmed using Cronbach’s alpha. Validity and reliability of the questionnaire were determined, respectively (0.96 and 0.92).

The attitude questionnaire contains 35 questions. The answer to questions was in the form of a five-point Likert scale from “strongly agree 5” to “strongly disagree 1.” The score of the questionnaire ranged from 35 to 175. A higher score indicates more positive about professional
ethics. The validity and reliability of this questionnaire were determined (0.92).

**Ethical consideration**
Proposal for the present study approved by the ethics committee of Bam University of Medical Sciences (ethics code: IR.MUBAM.REC.1398.031). In all stage of the study, ethical principles considered by researchers.

**Statistical analysis**
The data were entered into the SPSS statistical software version 22 (SPSS Inc., Chicago, Illinois, USA). In order to analyze the data analysis, the Pearson correlation test, independent t-test, and one-way analysis of variance were used. *P* <0.05 considered statistically significant in all tests.

**Results**

**Demographics characteristics**
Overall, 176 students participated in the study (response rate: 0.88). The mean age of the samples was 21.13 ± 2.03 and 60.8% of the students were female. Table 1 shows students’ demographic characteristics in detail.

**Knowledge of professional ethics**
The mean score of the knowledge of professional ethics in nursing and medical students was 86.56 (8.76) and 85.10 (12.19), respectively. Nursing students obtained higher score in some items compared to medical students. The results of data analysis showed that the score of knowledge of professional ethics was significantly different in terms of different age groups (*P* = 0.03). Tukey’s test showed that people between the ages of 21 and 23 had significantly higher levels of professional ethics than those between the ages of 18 and 20 (*P* = 0.02). Table 2 shows this.

**Attitude toward professional ethics**
The mean scores of attitude toward professional ethics among nursing and medical students were 127.06 (12.45) and 129.9 (11.88), respectively. Medical students obtained higher score in some items compared to nursing students. Results of the Pearson correlation test showed a positive and significant relationship between the score of knowledge and attitude (*P* < 0.001).

Attitudes toward professional ethics did not differ significantly from demographic variables (*P* > 0.05) [Table 3].

**Discussion**
Attention to ethics in clinical practice is very important. The present study examined the knowledge and attitude of medical and nursing students toward professional ethics in Iran. Results revealed that Iranian nursing and medical students have a positive attitude and a high level of knowledge about professional ethics.

### Table 1: Demographic characteristics of the samples

| Variable         | Frequency (%) |
|------------------|---------------|
| Gender           |               |
| Female           | 107 (60.8)    |
| Male             | 69 (39.2)     |
| Marital status   |               |
| Single           | 155 (88.1)    |
| Married          | 21 (11.9)     |
| Accommodation    |               |
| Dormitory        | 106 (60.2)    |
| Private home     | 65 (36.9)     |
| Leased house     | 5 (2.8)       |
| Academic year    |               |
| First            | 54 (30.7)     |
| Second           | 39 (22.2)     |
| Third            | 51 (29)       |
| Fourth           | 18 (10.2)     |
| Fifth            | 4 (2.3)       |
| Sixth            | 7 (4)         |
| Seventh          | 3 (1.7)       |
| Major            |               |
| Nursing          | 70 (39.8)     |
| Medical          | 106 (60.2)    |

### Table 2: Knowledge of professional ethics and participants’ demographics characteristics

| Variables               | Knowledge of professional ethics, mean±SD | Statistical test | P   |
|-------------------------|-------------------------------------------|------------------|-----|
| Age                     |                                           |                  |     |
| 18-20                   | 83.41±10.32                               | F=3.71           | 0.03|
| 21-23                   | 88.07±11.85                               |                  |     |
| Over 23                 | 85.11±7.12                                |                  |     |
| Gender                  |                                           |                  |     |
| Female                  | 85.95±11.85                               | t=−0.41          | 0.68|
| Male                    | 85.26±9.48                                |                  |     |
| Marital status          |                                           |                  |     |
| Single                  | 85.6±11.25                                | t=−0.25          | 0.8 |
| Married                 | 85.24±8.7                                 |                  |     |
| Type of residence       |                                           |                  |     |
| Dormitory               | 85.16±11.94                               | F=0.92           | 0.4 |
| Permanent home          | 86.88±9.32                                |                  |     |
| Rental house            | 81.2±7.85                                 |                  |     |
| Educational semester    |                                           |                  |     |
| First                   | 83.35±10.16                               | F=0.76           | 0.6 |
| Second                  | 86.56±14.42                               |                  |     |
| Third                   | 86.65±9.95                                |                  |     |
| Fourth                  | 87.22±7.64                                |                  |     |
| Fifth                   | 90.50±11.00                               |                  |     |
| Six                     | 83.86±9.12                                |                  |     |
| Seven                   | 88.33±11.50                               |                  |     |

SD=Standard deviation
Previous studies in this regard are limited. In one study in Iran in 2019, Jafari et al. examined the attitude of nursing and midwifery students toward medical ethics using different instruments. They assessed the attitude of 76 undergraduate nursing and midwifery students. Similar to the finding of the present study, Jafari et al. reported that undergraduate nursing and midwifery students have a positive attitude toward medical ethics.[13] In another study Yousefzadeh et al., examined the attitude and knowledge of midwifery students about ethical and legal standards of patients’ rights. Similar to the finding of the present study, Yousefzadeh et al. reported that midwifery students have a positive attitude toward ethical and legal standards of patients’ rights.[14] However, in the knowledge section, students in our study reported a higher level of knowledge compared to students in Yousefzadeh et al.’s study. Dashti and Shahmari examined professional ethics awareness among nurses and nursing students. Results of Dashti and Shahmari showed that nursing students have a moderate level of awareness about professional ethics.[15] Difference between results of the present study with results of Yousefzadeh et al. and Dashti and Shahmari could be related to differences in the questionnaire used for examining professional ethics in our study and these studies. Furthermore, in recent years, several ethics workshops and congresses in medical sciences hold in Bam University of Medical Sciences. Previous studies showed that participate in workshops and congresses related to medical ethics can affect knowledge and awareness of medical sciences students in this regard.[16‑18]

Results of the present study also showed a positive and significant relationship between the mean score of knowledge and attitude. In one study in Ethiopia in 2019, Tiruneh et al. examined attitude and knowledge about medical ethics in medical doctors. Similar to the finding of the present study, Tiruneh et al. reported that medical doctors with a more positive attitude have more level of knowledge about medical ethics.[19] We recommended that, in future studies, its relationship examined with more details.

This research demonstrates that older students have a higher level of knowledge about medical ethics. Previous studies by Ghaljeh et al. and Negarandeh and Gobady also showed similar findings.[20,21] It seems that, with an increase in students age, responding and dealing with ethical issues among student’s increases; thereby, their knowledge increases through different ways such as classroom instruction, magazines, and other resources.

### Table 3: Attitude toward professional ethics and participants’ demographics characteristics

| Variables                  | Attitude of professional ethics, mean±SD | Statistical test | P  |
|----------------------------|----------------------------------------|-----------------|----|
| Age                        |                                        |                 |    |
| 18-20                      | 126.93±12.93                           | F=1.78          | 0.17|
| 21-23                      | 130.57±11.98                           |                 |    |
| Over 23                    | 128.89±0.03                            |                 |    |
| Gender                     |                                        |                 |    |
| Male                       | 129.58±10.86                           | t=0.70          | 0.49|
| Female                     | 128.25±12.95                           |                 |    |
| Marital status             |                                        |                 |    |
| Single                     | 129.00±12.15                           | t=0.69          | 0.49|
| Married                    | 127.04±12.40                           |                 |    |
| Type of residence          |                                        |                 |    |
| Dormitory                  | 128.20±12.78                           | F=1.25          | 0.29|
| Permanent home             | 130.18±0.71                            |                 |    |
| Rental house               | 122.40±13.83                           |                 |    |
| Educational semester       |                                        |                 |    |
| First                      | 128.81±13.39                           | F=1.10          | 0.36|
| Second                     | 127.97±11.89                           |                 |    |
| Third                      | 130.70±10.92                           |                 |    |
| Forth                      | 127.83±11.20                           |                 |    |
| Fifth                      | 140.25±15.48                           |                 |    |
| Six                        | 129.28±12.49                           |                 |    |
| Seven                      | 130.33±11.37                           |                 |    |

SD=Standard deviation

Professional ethics is one of the important issues in medical sciences and nursing and midwifery students should be prepared well in this regard. Medical and nursing students in our study have a positive attitude and a high level of knowledge about professional ethics. We recommended that, in future study, the practice of
students about professional ethics and its relationship with their attitude and knowledge examined.

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Conflicts of interest
There are no conflicts of interest.

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