Original Article

Shiraz Pharmaceutical Students' Knowledge about Pharmacy Professional Ethics

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Abstract

Introduction: In the medical community, ethics is important in this profession and pharmacy, like other branches of medical sciences, and requires attention. We aimed to examine the level of students' knowledge of the Pharmacy Faculty of Shiraz University of Medical Sciences from the principles of professional ethics recommended by the American Pharmacy Association in their ethical codes, especially the principles of patient rights.

Methods: This was a descriptive-observational cross-sectional study. The study population consisted of 162 Pharmacy students from the 7, 8, 9, 10, 11 and final semesters of the Faculty of Pharmacy, Shiraz University of Medical Sciences who were willing to participate in the study. To collect data, a questionnaire containing 18 questions was used. The validity and reliability of this questionnaire was confirmed by expert faculty members of the Medical Ethics Department and the Faculty of Pharmacy, as well as the statistics expert. Data analysis was performed using SPSS software (version 23).

Results: According to Pearson test, there was a significant relationship between knowledge level and academic semester and year of entrance ($P<0.05$). 87 (53.7%) students participated in the workshop and 75 (46.3%) did not participate in the workshop. According to the K^2 test, there was a significant relationship between knowledge and participation in the workshop ($P<0.05$). 14 (8.6%) students had moderate knowledge level, 68 (42%) had good knowledge level and 80 (49.4%) had very good knowledge.

Conclusion: Because of the necessity and importance of observing ethics and behavior in their professional and job scopes, pharmacy service providers, especially pharmacists, should be aware of the principles of professional ethics and patient rights, and adhere to it. Accordingly, in addition to the necessity of quantitative and qualitative improvement of continuing education in the PhD degree course in pharmacy, the training framework should be arranged and planned in a way that, in addition to transferring knowledge to students, leads to the creation of a positive attitude and, ultimately, an increase in their skills.

Keywords: PROFESSIONAL ETHICS, MEDICAL ETHICS, ETHICS IN PHARMACY

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Introduction

One of the main concerns of efficient managers at different levels is how to create a suitable platform for human factors working in all professions so that they work with the sense of responsibility and commitment to issues in their community and profession, and observe the ethical principles governing their occupation and profession (1). Professional ethics is a discipline of ethical knowledge that studies

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occupational relations. It is a kind of moral commitment and conscientiousness to any kind of work, duty, and responsibility. Morality in profession is the result of knowledge, will, ability, and attitude. Pharmacy Ethics is a branch of medical ethics that has been influenced by the developments in this field. The developments in the current world include the properties that have undeniably required the need for an ethical approach in professions related to medical disciplines (2).

Because ethics is distinguishing good from bad, professional ethical competence can be considered equivalent to professional competence. That is, if the pharmacist, based on the virtues of professional ethics, obtained this merit and virtue that, when confronted with the conditions of the work, would identify good from evil and commit himself to do good work and avoid bad work, his actions will lead to the development of virtues in health care work (3). Pharmacists enhance their knowledge of ethical issues via the necessary training, but given the fact that pharmacists are in a changing and complex environment, what is more important is the need to increase the ability of pharmacists to make ethical decisions. Therefore, it is necessary to pay more attention to the implementation of training and to pay more attention to the localization of training methods and their field of study (4). Despite books, magazines and numerous sources on professional ethics, ethics teaching is not so much that students have a good picture of the subject of ethical reasoning and achieve a sufficient competence in the subject (5).

How pharmacists react to any situation not only from an emotional aspect but also from a scientific aspect, makes them moral pharmacists. In past years in the field of knowledge, Iranian pharmacists have been studying professional rules and regulations, and have pointed out the lack of such knowledge, but these studies have limited examples and they have been able to encourage authorities to take practical measures for improving the situation as they deserve. On the other hand, the results and effectiveness of the limited measures conducted through holding workshops on pharmacists' awareness of professional rules and regulations have not been investigated (5). For this reason, and also due to the progressive advancement of pharmacists' call to legal associations, the aim of this study was to examine the level of knowledge of fourth to sixth year students of Shiraz University of Medical Sciences about ethics in the pharmacy profession.

Evidence-based prescription, clinical guidelines, drug budgets, and the availability of medications all show well that medical and pharmaceutical decisions are fully associated with general public health. These issues confront pharmacists with problems that were previously unknown (6), and indicates that complex decisions are part of the daily professional practice of any pharmacist.

A study conducted in Karachi-Pakistan showed that 49% of Pakistani physicians had poor knowledge of professional ethics (7). Another study carried out in Spain in 1998 on 1014 members of the medical group showed that 84.4% of them were aware of these patient rights, but only 64.4% of them were observing these rights (8). A study by Hariharan and colleagues in Barbados showed that physicians and nurses had a poor knowledge of ethics (9). In a study conducted by Lopez, the Mexican physicians' knowledge of patient rights was low (10).

The importance of conducting studies in the field of pharmacy ethics is evident, as we observe, there are very few articles in this field. On the other hand, pharmaceutical students in Iran have a limited course in this field. This has made pharmacists after post-graduation not to have any familiarity with the principles of pharmacy ethics and the rules that they should adhere to in their professional activities, and their only knowledge of these principles is the provisions of sworn statement that is read upon graduation. This can lead to irreparable damage to the country's health system. Therefore, new research has tried to

address some of the ethical principles that a pharmacist must adhere to. Therefore, the main objective of this study was to determine the students' knowledge level of the Shiraz Pharmaceutical Faculty from the principles of professional pharmacy ethics.

Methods

This was a descriptive-analytical cross-sectional study. The statistical population consisted of all the students from 2011-2014 who were eligible for participation in the project. Subsequently, by comparing similar studies and taking into account the opinion of the statistical adviser of the university, the statistical sample of this study was 162 students of pharmacy from 7 to 12 semesters in Shiraz University of Medical Sciences by simple random sampling method based on random number table from the list of all the intended students. Inclusion criteria respond to the questionnaire, and the exclusion criteria were unwillingness to participate in study or student graduating.

Data collection tools consisted of a two-part questionnaire of individual information (5 questions) and the second part of the main questionnaire, containing 18 items of professional ethics (classified into three general areas of truthfulness, professional commitment, respect for patients' rights and confidentiality of patient information) in Likert's five-point scale (totally correct, correct, no idea, false, and totally false) that measured the level of knowledge. Validity and reliability of the questionnaire in a separate study on the validity and reliability of the ethics questionnaire in the pharmacy profession was verified as content validity by expert faculty members of the Medical Ethics Department and the Faculty of Pharmacy, as well as an expert in medical statistics in Shiraz University of Medical Sciences and the reliability of the questionnaire was confirmed with Cronbach's alpha 0.74. The questions were answered by the Ethics Charter of Pharmacy, as well as by the Ethics Code of Pharmacy adopted in 2011 and the standards of pharmacy profession (7). Then the score obtained by each participant and the total scores were calculated and the level of knowledge was calculated based on it. In the analysis of the research findings, division of knowledge consisted of five categories: very poor knowledge (scores 0-5), poor knowledge (scores 5-8), moderate knowledge (scores 9-14), good knowledge (scores 15-18), and very good knowledge (scores 19-36). Data collected were analyzed using SPSS software (version 23), descriptive and inferential statistics including independent Chi square and T tests.

Results

111 (68.5%) of the participants were women and 51 (31.5%) were men. The age range of the participants was 20-35 years and their mean age was 24±0.14349. 21 (13%) students entered the university in 2011, 57 (35.2%) in 2012, 49 (30.2%) in 2013, and 35 (21.6%) in 2014. 87 (53.7%) students participated in the workshop, and 75 (46.3%) did not participate in the workshop (Table 1).

There was no significant relationship between

Table 1: Frequency (percentage) of correct answers to each question

Row	Totally agree	Agree	No idea	Disagree	Totally disagree
Truthfulness	46 (27.1)	58 (40.3)	34 (8.8)	28 (15.8)	8 (4.6)
Professional commitment	17 (16.4)	44 (27.15)	18 (11.1)	55 (34.1)	18 (10.9)
Respect for patient's rights	41 (15.3)	37 (28.5)	28 (17.26)	41 (25.21)	15 (13.5)
Confidentiality of patient information	96 (59)	56 (34.25)	4 (2.8)	4 (2.8)	5 (3.1)

gender and knowledge level (P=0.564) and this knowledge level was greater in women. There was no significant relationship between age and knowledge level (P=0.153). According to Pearson's test, there was a significant relationship between knowledge level and educational semester (P=0.01). According to Pearson's test, there was a significant relationship between knowledge level and entrance year (P=0.007). According to chi square test, there was a significant relationship between knowledge level and participation in the workshop (P=0.031).

14 (8.6%) of people had a moderate knowledge level, 68 (42%) had good knowledge level and 80 (49.4%) had very good knowledge level (Figure 1).

Discussion

The spread of using mass communication tools and enhancing the education level of people in today's societies and many other factors have increased the knowledge level of patients and their attitude change, which can be due to the emergence of new ethical issues. Moreover, the advancement of science and the provision of new therapeutic approaches in pharmacy are effective in the development of ethical problems. Therefore, attention to practical teaching of ethical principles seems to be necessary (11).

In a research carried out by Garbin and colleagues in Brazil, although 98.43% of the surveyed dentists had very good knowledge level of principles of professional ethics (12) in this study, 14 (8.6%) pharmacists had moderate knowledge level, 68 (42%) had good knowledge level and 80 (49.4%) had a very good knowledge level (Chart 4-1). Perhaps the reason for this difference is in the manner and type of holding workshops and the importance of medical and dentistry fields.

With respect to the right to confidentiality, information such as avoiding the disclosure of patient file information, except in special circumstances, 32.7% of students of medical interns had necessary knowledge level of this in Rangbar and co-workers' study (13). In our study, all students had sufficient knowledge in this regard.

In their research, Dargahi and colleagues identified 29 components of the Patients' Rights Charter in the selected countries, and the right to confidentiality of patient records was the only component in the Patients' Rights Charter of all countries (14).

Salimi and co-workers found that the average of physicians 'and nurses' knowledge of the patient rights charter was higher than the moderate level (15). The results of the mentioned study are consistent with the current study.

Zarei and colleagues found that 23% of managers had good knowledge level (16), which is consistent with the present study. Perhaps

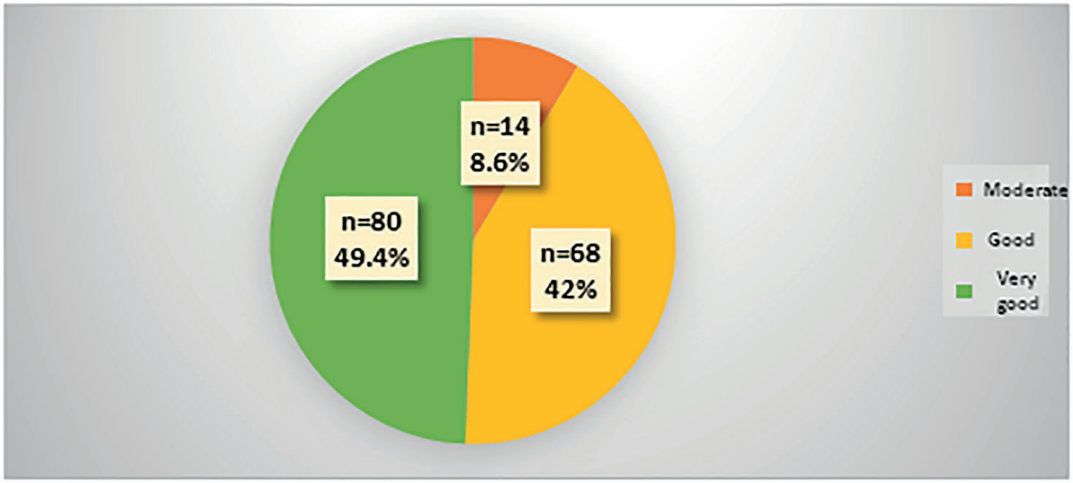

Figure 1: Frequency of pharmacy students' knowledge level

the reason for the difference between the knowledge of pharmacists is less contact with patients and less involved with their problems, and also the expectations and demands that patients have towards the medical staff, and therefore they do not consider themselves required to be aware of this.

In another study by Haghi, the results indicated that there was not a significant difference between the scores of nurses' knowledge about the principles of prescribing psychological drugs and the factors of age and marital status, but there was a significant relationship with the work experience in the psychiatric ward (17). In terms of gender, we found a significant difference, indicating that female nurses had more knowledge level. In this study, there was a significant difference between the level of knowledge in the nurses 'and the caregivers' groups and the passing of in-service training, and those who had completed in-service training had more knowledge level (18, 19). In this study, female pharmacy students also had the highest degree of knowledge about professional pharmacy ethics.

Conclusion

According to the results of this study, it is necessary to focus on the development of plans and policies required for improving the process of communication between the pharmacist and patients and to promote the existing communication between colleagues and to perform macro planning for the teaching of pharmacy ethics to enhance the pharmacist's ethics in the professional practice of pharmacists.

This knowledge level cannot reflect the performance of pharmacists in this area. It should be noted that knowing the rules is usually a prerequisite for its implementation, and to enforce it, there is a need for a performance guarantee that one of the guaranteeing methods is the awareness of the right holders of their rights. Patients' awareness of their rights requires public participation and policy making by the government, and media can play an important role in this regard. Also, the reduction of work pressure and socioeconomic problems of pharmaceutical service providers so that the group is aware of their rights in this area and improving professional ethics training in pharmacy faculties can play a major role in increasing the rights of patients. On the other hand, the institutionalization of ethics education at the faculties of pharmacy needs change, in addition to the necessity of quantitative and qualitative improvement of continuing education in General Ph.D. course of pharmacy education, the training framework should be designed and arranged in a way that, in addition to transferring knowledge to students, leads to the creation of a positive attitude and, ultimately, an increase in their skills.

Suggestions

Health care providers should work to reduce the number of errors, identify the causes and find solutions, and enhance the success of the efforts made to improve the situation. Because the highest percentage of research units had undesirable performance in consultation, it is suggested that educational managers make necessary plans to increase the performance of pharmacists with in-service training programs and the provision of posters and training manuals.

The importance of pharmacists' satisfaction in terms of job satisfaction, facilities and technical and human resources programs based on the average bed occupancy in the ward that should be sufficiently considered.

Because the plenty of things, such as reports and follow-ups in wards, are tangible, it seems this causes the pharmacist's lack of attention. Researchers suggest that managers and planners plan at the macro level for the pharmacy profession.

Monitoring on the practitioner's performance of the pharmacy professional Ethics requires an appropriate program that increases the confidence level of creating a professional

manner in them.
Therefore, it is desirable to review the training program and improve its level of quality for achieving educational goals in all three areas of knowledge, attitude and skill.

Limitations

There are obstacles to observing patients' rights charter in treatment centers. The major barriers mentioned in this study were economic, social, and work-related pressures of care providers. Also, specific limitations on the work environment, including work hours and communication environments, were also a deterrent to patient's rights.
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Conflict of Interest: None Declared.

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