



Exploring Undergraduate Public Health Students' Experiences of Internship Courses: A Qualitative Study

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Abstract

Introduction: Currently, education means providing facilities that enable learners to acquire theoretical information and knowledge and help them put this knowledge into practice. Periodic reviews also serve as a first step required to gain a deeper understanding of problems and access to information and newer solutions. Therefore, to identify the challenges of clinical education, the present study focused on exploring undergraduate public health students' experiences of internship courses.

Methods: This study used the conventional content analysis method. The participants were 11 undergraduate public health students of Qom University of Medical Sciences selected via purposive sampling in 2017. The data were collected through in-depth semi-structured interviews as well as focus group and the data collection process continued until the data were saturated. The content analysis was performed following Graneheim and Lundman's model.

Results: The analysis of the data revealed five main themes. The main themes identified in this study were weak curriculum planning, poor communication between the faculty and health centers, the students' unpreparedness to start the internship course, the staff's lack of cooperation, and students' expectations.

Conclusion: The present study indicated that most students faced many problems during their field internships and they demanded the improvement of the teaching processes of theoretical courses and practical skills. Therefore, officials of the educational system are required to plan more coherent programs, offer both theoretical and practical courses more effectively, and prepare students to start internship courses and establish effective communication.

Keywords: Experience, Student, Health, Qualitative research

Introduction

Currently, education means providing facilities that enable learners to acquire theoretical information and knowledge and help them put this knowledge into practice

(1). The field of public health is one of the branches of health sciences (2). A part of the syllabus for the public health program is field training that helps students acquire skills needed for applying knowledge

in the field and also promotes learners' independence while maintaining and promoting family health. Internship courses provide a context in which students can put what they have learned in ideas into practice (3,4). Health students are active as members of the health team in various areas such as providing health, educational, research, consulting, and prevention services. To fulfill the above responsibilities in the best way, universities need to plan for public health students in different educational domains from the very beginning (2) so that upon the completion of their studies, they can learn professional skills needed for planning, implementing, and assessing health outcomes at the individual, family, or community levels (5). Higher education institutions and universities can perform their function well if they improve the quality of education by planning and developing effective training programs and identifying the strengths and weaknesses of these programs (6). Therefore, educational plans and programs should be developed to fit the health needs and social conditions of each country so that they can provide high-quality health services in the country. Besides, universities must take action to correct and eliminate the challenges in internship and training programs to enhance students' learning and train skilled students (7). Studies have shown that surveying students who are involved in a given experience to more deeply identify educational problems and issues has caused many educational advances in the world (5,8). Moreover, previous studies have highlighted the revisions of educational programs based on feedback and need analysis. Furthermore, following the recommendations of the Medical Education Conference in Edinburgh, engaging students and awareness of their views and opinions

about the development of educational programs can improve students' learning (9). One of the challenges in medical universities is related to problems faced by university planners in their efforts to improve clinical education. Studies conducted in Iran and other countries have mainly focused on the problems of clinical education in other fields of medical sciences (4,10,11). However, there are few studies on students' experiences. As a case in point, Parvizrad and Rezaei conducted a qualitative study to explore undergraduate public health students' experiences in Iran (12). Furthermore, Corlett studied faculty members, nursing students, and clinical educators' perceptions of the gap between theory and practice in nursing education (11) and found that all three groups confirmed the gap between theory and practice. Since gaps in internship programs can deter the development of students' clinical competence, improving the quality of clinical education services requires qualitative studies with in-depth surveys of the current situation. Periodic reviews also serve as a first step required to gain a deeper understanding of problems, access to information, and newer solutions. Therefore, to identify the challenges of clinical education, the present study focused on exploring undergraduate public health students' experiences of internship courses.

Methods

This qualitative study was conducted using a conventional content analysis approach to explore the experiences of undergraduate public health students of Qom University of Medical Sciences and survey their opinions about internship courses in 2017. The university in question offered a 16-credit internship course for students who were

studying in the eighth semester and the students were required to complete the course in diseases, mother and child, vaccination, environmental and occupational health, mental health, and nutrition wards and departments. The participants were selected through purposive sampling from among undergraduate public students who had completed or were completing their internship course. The data were collected through in-depth semi-structured interviews with 11 students individually. Besides, 2 focus group interviews were conducted with 10 students to obtain extensive, in-depth, and rich data. The data collection process continued until the data were saturated. After obtaining permission from the officials of the Faculty of Health, the researcher enrolled the students who wished to participate in the study through invitations containing information about the objectives of the study, a request to participate in the study, and the appointment for the interview. The participants were asked to read the informed consent form and sign if they were willing to attend the study. A coding procedure was used to keep the participants' names and identities confidential. The participants were told that their participation would be voluntary and they could leave the study at any stage if they wished and this could not affect their educational process. They were also ensured that the recorded files of their interviews would be deleted after analyzing the data. Each interview first started with an open-ended question followed by other questions that were asked based on the interview guide and the participants' answers. The open question (Could you describe your positive and negative experiences during the internship?) aimed to identify the factors influencing the internship course. Moreover, if necessary, probing questions (Can you explain more?

or When you say ..., what do you mean?) were asked for further clarification. Each interview lasted from 30 to 45 minutes. The interviews were recorded with the participants' permission and then transcribed word by word. For data validation, the collected data were reviewed and analyzed constantly and the extracted codes were reviewed by the participants (member check). The data analysis process was checked and confirmed by several qualitative research experts. Furthermore, the researchers' continuous and long-term engagement with the data increased the robustness of the data. The researchers have also carefully recorded and described the details of the steps taken to conduct the study to provide the possibility of their evaluation by an outside observer. Content analysis was performed following Graneheim and Lundman's model. In this model, after identifying the unit of analysis, semantic units were extracted from the context that included the direct quotations from the participants (students). Then, the semantic units (the participants' quotations) were summarized to extract the primary codes. Besides, the similar primary codes were classified under the same categories or subcategories. Finally, the main themes were formulated (13).

Results

The participants' mean age was 22 years. Data analysis revealed five main themes, each containing a number of subthemes as shown in Table 1. The main themes identified in this study were weak curriculum planning, poor communication between the faculty and health centers, the students' unpreparedness to start the internship course, the staff's lack of cooperation, and students' expectations. These themes are discussed in more detail below:

Table 1. Themes and subthemes of public health students' experiences of internship courses

Themes	Subthemes
Weak curriculum planning	Ineffective planning of theoretical courses Ineffective planning of practical courses
Poor communication between the faculty and health centers	Lack of coordination between the faculty and health centers Lack of cooperation between health centers and the university
The students' unpreparedness to start the internship course	Lack of theoretical training to start the internship course Lack of practical skills to start the internship course
The staff's lack of cooperation	The staff's unwillingness to cooperate The staff's poor performance
Students' expectations	Students' expectations of the internship course Students' expectations of instructors

Theme 1: Weak curriculum planning

A. Ineffective planning of theoretical courses

Most students were dissatisfied with the ineffective planning of different courses or the omission of family planning courses. For instance, one of the students stated, *"As you know, we have some redundant courses. For example, the Diseases Course covered many redundant topics such as malaria, leishmania, etc., which were discussed many times making the classes boring"* (Participant 4). Another student stated, *"They omitted the family planning course because national policies recommend a rise in the population. Then they replaced it with a course on demography that does not benefit us at all, and we did not learn anything about family planning"* (Participant 1).

Moreover, the students stated that the learning materials were not taught effectively and there was some inconsistency between theoretical and practical courses. They also demanded the inclusion of more practical topics in theoretical courses. Pointing to this issue, one student stated, *"We did not have a good professor in the vaccination course, and we wanted just to be physically present not to miss a two-credit course. We were often sleeping in the classroom and the professor could not teach the materials effectively"* (Participant 3). Concerning the

need for incorporating more practical materials in the courses, one of the students stated, *"The materials covered in the courses were very useless. Perhaps the sections on mother and child and nutrition were a bit beneficial"* (Participant 9).

B. Ineffective planning of practical courses

A majority of the participants stated there was not enough time for internship courses and that there was a gap between theory and practice. They also stated that the internship courses were not based on theoretical instructions. One student said, *"The time assigned to our practical project was too short, and we missed many things due to time restrictions"* (Participant 1). Another student added, *"Our professors are very knowledgeable people and I believe in their scientific abilities and qualifications. But well, they organized our internship course in a separate semester, as if there was a big gap between the things we had learned and the things we wanted to do"* (Participant 3).

Theme 2: Poor communication between the faculty and health centers

A. Lack of coordination between the faculty and health centers

The students complained that there was no coordination between the faculty and the health centers and this did not allow them to perform some practical skills. One of the students stated, *"The faculty officials tell us*

that they had made arrangements with the hospital to train us how to do injections and first aids. But when we go to the hospital, they say that they do not teach things and deny it” (Participant 9).

B. Lack of cooperation between health centers and the university

According to the students, many health centers were not willing to cooperate with the university and this disrupted their learning. One student stated, “There are many health centers, but only three of them are willing to cooperate with the university and thus there are many trainees in these centers and they don’t learn well” (Participant 10).

Theme 3: The students’ unpreparedness to start the internship course

A. Lack of theoretical training to start the internship course

The students stated that their orientation course was not effective to prepare them for the internship course and they did not receive enough theoretical training to start the internship course. One of the students stated, “Our orientation course lasted only 3 days, not a week and it was not taken seriously at all. The course was just a repetition of theoretical materials we had already studied” (Participant 11). Besides, concerning the lack of sufficient theoretical training to start the internship course, one of the students stated, “My main problem was with the theoretical courses offered by the university. One of the theoretical issues that was not effectively covered was vaccination” (Participant 4).

B. Lack of practical skills to start the internship course

The students complained about the lack of practical skills training, such as practical

instructions on vaccine injections, as well as the lack of sufficient facilities and equipment, such as a practice room to do practical work. One of the students said, “We did not know how to measure the blood pressure. They even did not teach us how to administer vaccination which is an important task to be done frequently” (Participant 9). Another student stated, “We had no place like a practice room on campus to do practical work, so we did not do any practical work before starting the internship course” (Participant 11).

Theme 4: The staff’s lack of cooperation

A. The staff’s unwillingness to cooperate

Most of the students stated that the staff in some centers, especially the staff of some units, did not cooperate and did not treat them properly. One of the students said, “We were 24 students who were divided into smaller groups and assigned to different wards. Some started working in the health center but they were not taken seriously at all and they did not administer vaccinations because their manager did not allow them to do so and stated that they had to only look at the way the medical staffs were doing things” (Participant 1). Another student said, “The medical staffs think we are trespassing on their territory” (Participant 8).

B. The staff’s poor performance

The students believed that some of the theoretical points instructed were not performed by the staff in the real clinical setting. One of the students stated, “The thermometer in the vaccination refrigerator did not work and the trimester contraceptive ampoules were placed next to opened cheese boxes, and to make it worse, the vaccination carrier box was not very clean” (Participant 1). Another student stated, “The staffs are not very professional, they act mainly based

on experience” (Participant 2).

Theme 5: Students’ expectations

A. Students’ expectations of the internship course

The students stated that they expected to have more independence in practice in addition to having the right to be absent more frequently from health centers. One student said, “For example, if we wanted to have a Pap smear or a breast exam, the staff would not trust us and would not let us do it” (Participant 2). Another student said, “We were not allowed to be absent and we had to attend the medical center all the time” (Participant 7).

B. Students’ expectations of instructors

The students expected the instructor to be present frequently in the internship place and the instructor’s field of study fit the interns. One of the students stated, “We don’t have an instructor and they do hardly instruct us. But if you have an instructor, he/she will teach you everything” (Participant 6). Another student suggested, “The internship instructor should have studied the same field as the students” (Participant 8).

Discussion

The results of this study revealed five main themes including weak curriculum planning, poor communication between the faculty and health centers, the students’ unpreparedness to start the internship course, the staff’s lack of cooperation, and students’ expectations.

The analysis of the participants’ statements regarding weak curriculum planning showed that theoretical and practical courses were not effectively planned by the university officials. According to students, the time assigned to practical courses was not enough

for them to perform practical activities, as indicated in a study by Kogan et al. (14). The students also stated that there were several other problems in the planning of theoretical courses. For instance, some materials previously covered in theoretical courses were repeated in other courses. This finding was in line with a study by Momayyezi et al. (15). Therefore, professors in the field are required to make some arrangements and effective planning to prevent the repetition of materials and topics in different courses. Moreover, most students pointed to the lack of integration of theoretical and practical topics in internship programs as a major problem in practical planning because, according to the students, the gap between theory and practice had disrupted their learning. The same observation was found in several studies (16-22). A survey of the students’ experiences of the poor communication between the faculty and health centers showed that the interns faced some problems such as the absence of coordination between the faculty and health centers and the medical staff’s unwillingness to cooperate due to a large number of students in the centers. The same finding was also highlighted in a study by Aein et al. (3). In addition, the students’ unpreparedness to start the internship course was another problem of internships because the students had not learned practical skills well during the internship and they had not gained good practical experience. This finding was in line with observations made on other studies (22,23). Therefore, the adequate practice of preclinical skills, holding basic pre-internship sessions effectively, providing facilities for practical work, and sufficient theoretical training to start the internship course can play an effective role in students’ mental and practical preparation. Likewise, in Hemmati Maslakkpak and Habibzadeh’s

study, students stated that a suitable and modern educational environment and equipment can be effective in increasing their learning (23), which prepares students to attend the internship course. Furthermore, the staff's unwillingness to cooperate with the students and their poor performance were other problems pointed out by the students. This finding is consistent with the studies by Aein et al. and Valizadeh et al. (3,16).

Given that the clinical setting is one of the factors affecting students' learning and also as students' education depends on the staff's cooperation and performance, favorable atmosphere, staff's effective treatment of students and acceptance of students as a colleague, and shortcomings in the clinical setting can affect students' performance and clinical skills, and consequently community health. The students also pointed to their expectations from the instructor and the internship conditions, as highlighted in a study by Parvizrad and Rezaei (12). The students also stated the instructor's presence was necessary because the instructor's supervision was considered as a support for students. This implies that instructors' presence when performing the procedures can reduce the stress of clinical experiences in students. Besides, instructors can provide effective corrective feedback for students. These findings were in line with studies conducted by Joolae et al. and Alavi and Abedi (24,25). Following a study by Aein et al., the present study showed that students expected to improve their skills through the internship course and to be able to perform different tasks independently (3).

One of the limitations of the present study was the impossibility of interviewing graduate students because it was not possible to access them. Moreover, as the data were collected through qualitative interviews, the

findings of the study cannot be generalized to other settings. Therefore, the findings of this study can be used to develop a questionnaire to be used in a large-scale study and be administered to larger samples of students in other universities.

Conclusion

The present study showed most students faced many problems during their field internships and they demanded the improvement of the teaching processes of theoretical courses and especially learning practical skills during their studies. Therefore, officials of the educational system are required to plan more coherent programs, offer both theoretical and practical courses more effectively, prepare students to start internship courses and establish effective communication with health centers and medical staff, and increase students' efficiency and performance.

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Conflict of Interest:

The authors declared no conflict of interest in the present study.

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