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Factors and barriers influencing practice of health education among nursing students in Jordan

Abdullah M. Khamaiseh, Falah Z. Altarawneh

Abstract:

BACKGROUND: Health education or client teaching is an aspect of nursing care recognized as a vital and professional nursing role. As a part of the nursing community, nursing students learn the importance of health education during the study period and are trained to make use of the principles of health education during their encounters with clients and their families. Aim: This article aims to examine the factors and barriers influencing health education practices among third- and fourth-year nursing students in Southern Jordan.

MATERIALS AND METHODS: Cross-sectional approach is used with a study sample of 286 nursing students enrolled in the undergraduate program. A self-reported questionnaire as an instrument to collate data. The questionnaire consists of two sections. The first section is related to the demographic data of the participants. The second section comprises the participant's responses to the items related to health education barriers. Descriptive statistics, including mean, standard deviation, and frequencies are utilized to analyze the demographic characteristics and questionnaire items.

RESULTS: The majority of nursing students report that they have not engaged in health education with patients. The first three factors identified by the students as barriers to health education are (Little time is given to patient health education due to paperwork and other assignments) (M = 4.22 and SD = 1.11), (Discharging patients from the hospital at a short time interrupts health education) (M = 4.15 and SD = 1.39), and (Evaluation of health education outcome is inapplicable due to intermittent days of training) (M = 4.05 and SD = 1.39).

CONCLUSION: The findings indicate that various barriers are suggested to explain the disparity between the expectation and practice of student nurses in health education. Identifying these barriers undermining health education is a positive step toward furnishing better health education for nurses in the future. Nursing students shall be fully supported to be independent and responsible professionals working within the nursing professional practices.

Keywords:

Factors and barriers, health education, Jordan, nursing students

Faculty of
Nursing - Community
and Mental Health
Nursing Department,
Mutah University, Mutah,
Al-Karak, Jordan

Address for correspondence:

Dr. Abdullah M.
Khamaiseh,
Associate Prof. Faculty of
Nursing - Community and
Mental Health Nursing
Department, Mutah
University, P.O. Box 7,
Al-Karak - 61710, Jordan.
E-mail: akhamaiseh@
mutah.edu.jo

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Introduction

Patient health education is among the main aspects of nursing education where nursing students are enabled to use the theoretical foundations' findings for patients.^[1] Health education refers to "The communication of health-related information and development of the attitudes, skills, and confidence necessary

to enable people to take action to improve their health."^[2] Patient education is "A major aspect of patient care and is gradually more recognized as a necessary function and one of the professional criteria in nursing practice."^[3] It aims to make the patients and their families take the responsibility for self-care along with transferring them to independence during self-care management.^[4] Though broad consensus and research findings are increasingly available on the significance of patient

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education, several barriers are faced by nurses and their efforts and capacities to furnish effective patient education.^[3]

Nursing students as a part of the nursing community learn about the importance of health education through their education and are trained to make use of the principles of health education during their encounters with the clients and their families. However, they still face many barriers and challenges, making the practice of health education misrecognized in their interaction with clients in training settings. Also, the lack of employing health education as a caring behavior among nursing students may refer to many factors, such as their perception of health education, their role as health educators,^[5] and lack of time and educational facilities.^[6]

The determinants of health education to clients among graduated nurses can be classified into four main categories.^[7,8] The first category is the barriers related to nurses themselves such as lack of confidence and knowledge, work experience, and complexity of patient conditions.^[9,10] The second category includes the barriers related to patients themselves such as issues of privacy and lack of time.^[11] The third category consists of the barriers related to a managerial status such as low priorities, weak policies, and work overload for health education.^[5]

Regarding the final category, it is related to environmental barriers which are the context in which health education takes place like seating, lighting, and distraction.^[12] In the same context, as nursing students feel incompetent in performing effective health education for their clients due to a lack of adequate skills and knowledge,^[13] extra training in clinical communication is required, and it is the mean for health education,^[14-16] as well as enhancing self-efficacy for nursing students to be confident to perform health education.^[17] Furthermore, in the management domain, the most significant obstacles against clinical education rest in the disparity between the expectations of the hospital workforce, the objectives of clinical education, and the scarcity of time.^[18]

Along with these courses, students are taught theoretical courses such as health education and communication skills to practice the principles of health education adequately. More importantly, as gleaned from the related nursing field, it is noted that there is a lack of engagement from the nursing students in patient health education, requiring exploration as a part of the nursing program's evaluation to identify barriers that stand behind this lack of engagement. In light of the previous studies and analysis, it is shown that the performance of the nurses in patient education is of a low level of satisfaction.^[6] Therefore, the problem study lies in

exploring the perceived factors and barriers influencing the practice of health education among third- and fourth-year nursing students in southern Jordan.

Research Questions

Given the problem study, the research question is:

What are the perceived factors and barriers influencing the practice of health education among third- and fourth-year nursing students in southern Jordan?

Research Objectives

The following study objective is articulated to answer the study question.

Explore the perceived factors and barriers influencing the practice of health education among third- and fourth-year nursing students in southern Jordan.

Material and Methods

Study design and setting

To achieve the study objectives, the cross-sectional approach is adopted. This study is conducted by the faculty of nursing to meet the Jordanian community's needs in the Hashemite Kingdom of Jordan, particularly in the southern part of the country. The graduates of the faculty of nursing are awarded a bachelor's degree in general nursing science after completing one hundred and forty credit hours. Along with the Bachelor of Science in Nursing, the faculty offers a master's program in maternal and newborn health for one decade. Various robust collaborative bonds and relationships combine the faculty with other Jordanian public and private health centers, hospitals, and universities, the Jordanian Ministry of Health, alongside the Royal Medical Services. These supportive relationships provide various training locations for the students, especially at Al-Karak hospital, Prince Ali hospital, and health centers in the southern part of Jordan.

Study participants and sampling

The study sample consists of 286 nursing students enrolled in the undergraduate program at Mutah University, one of the Jordanian public universities. All eligible participants completing the questionnaires are included in the study. Inclusion criteria are the male and female undergraduate nursing students currently enrolled in an undergraduate nursing program studying in their third and fourth academic years. First- and second-year nursing students have been excluded thanks to their weak level of training in medical settings. The sample size is calculated using G-Power. Considering the confidence interval (CI) of 95% and statistical power

of 80% with α of 0.05, at least 255 students are randomly recruited from the selected faculty.

Study instrument

The nature of the research work necessitates using a self-reported questionnaire as an instrument to collate data. The questionnaire consists of two sections. The first section developed by the researchers is related to the demographic data of the participants including gender and academic year. The second section comprises the participant's responses to the items related to health education barriers. A thorough literature review yields to develop of a 24-item questionnaire used as an instrument assessing the perception of nursing students regarding the factors and barriers influencing the practice of patient health education. The answers to each question have followed a five-level Likert scale: (1) strongly disagree, (2) disagree, (3) not sure, (4) agree, and (5) strongly agree. In getting the total score, the subcategories are computed by summing the items, and the total possible score is 100. Face validity is done by revising the questionnaire from five experts in nursing education to ensure the clarity and relevance of the items to the intended measurement. A pilot study with 30 students is conducted to verify the clarity. The results of pilot testing are excluded from this study. The questionnaire's reliability is measured by Cronbach's α of 0.88.

Ethical consideration

Ethical permission is attained from the Institutional Review Board (IRB) of the Nursing faculty at Mutah University. Written and informed consent is obtained from all students enrolling in the study. The anonymity and confidentiality of participating students are ensured by assigning identification numbers to participants restricted to the research team.

Data collection process

Having obtained ethical approval from the institutional review board, permission from the Faculty of Nursing is obtained to distribute the questionnaire to the students. Importantly, the participating students are informed about the study objectives and that their participation in the study will be only used for scientific research without any consequences on their academic achievements, and their participation will be innominate. The questionnaires are distributed to the students in their classrooms in the presence of the researchers, and 15–30 minutes is given to fill the questionnaire, and then the questionnaires are collected by the researchers.

Data analysis

SPSS Statistics for Windows, V25.0 (IBM, Armonk, NY, USA) is used to perform the descriptive Data analysis. Descriptive statistics, including mean, standard

deviation, and frequencies are utilized to analyze the demographic characteristics and questionnaire items.

Results

Results related to the research question "What are the perceived factors and barriers influencing the practice of health education among third- and fourth-year nursing students?"

Section 1: Demographic characteristics

Table 1 displays the demographic characteristics of the 286 students. The majority (82.5%) of the participants are female students. Of all participants, the fourth academic year students are (50.7%), and the third academic year students are (49.3%).

Section 2: Patient health education and barriers

Regarding health education, almost two-thirds (64%) of nursing students report that they did not engage in health education with patients as shown in Table 2. Concerning the factors and barriers faced by students during health education as shown in Table 3, the first three factors mostly identified by the students as barriers to health education are 1. Little time is given to patient health education due to paperwork and other assignments ($M = 4.22$, $SD = 1.11$), 2. Discharging patients from the hospital in a short time interrupts health education ($M = 4.15$, $SD = 1.39$), and 3. Evaluation of health education outcome is inapplicable due to intermittent days of training ($M = 4.05$, $SD = 1.39$).

Altogether, the lowest agreement obtained from students is for the following three barriers:

1. My clinical instructor emphasizes patient health education as a priority in my clinical training) ($M = 3.87$, $SD = 1.29$),
2. There are clear policies and guidelines at the hospital to practice patient health education ($M = 2.12$, $SD = 1.14$), and
3. There is support and encouragement from hospital administration to practice patient health education ($M = 2.20$, $SD = 1.44$). With that, the findings

Table 1: Participants and demographic characteristics

Measure	<i>n</i>	%
Gender		
Male	50	17.5
Female	236	82.5
Students' Academic Year		
Third Year	141	49.3
Fourth Year	145	50.7

Table 2: Performed patient health education at last semester

Performed Patient Health Education	<i>n</i>	%
Yes	104	36
No	182	64

Table 3: Rank order of barriers to health education as perceived by nursing students

No.	Text of Item	Mean	SD
1	Little time is given to patient health education due to paperwork and other assignments.	4.22	1.11
2	Discharging patient from the hospital in a short time interrupts health education.	4.15	1.39
3	Evaluation of health education outcomes is inapplicable due to intermittent days of training.	4.05	1.39
4	Patients' lack of privacy is an obstacle to health education.	4.02	1.41
5	There is a lack of patient readiness for health education.	3.96	1.44
6	I have the time to practice patient health education to my patient during my clinical training.	3.96	1.36
7	During my education at the faculty of nursing, I have had adequate theoretical courses in the communication process	3.9	1.47
8	My clinical instructor emphasizes patient health education as a priority in my clinical training.	3.87	1.29
9	During my education at the faculty of nursing, I have had adequate theoretical courses in the teaching process.	3.87	1.34
10	Patients do not show interest and cooperation when performing health education for them.	3.86	1.31
11	I find time to collect information about the patient to do health education.	3.84	1.44
12	I can teach my patient without any disturbance.	3.63	1.41
13	There is appropriate supervision and evaluation for the patient health education activities by my clinical instructor.	3.36	1.40
14	There are special documentation papers or spaces for patient health education on the patient record.	3.28	1.21
15	I feel confident to do patient health education.	3.28	1.09
16	I have support from my clinical instructor in practicing patient health education.	3.25	1.02
17	I feel competent and qualified to do patient health education.	3.22	1.44
18	I can easily find teaching materials like books, pamphlets, pictures, and others at the hospital.	2.92	1.31
19	During my education at the faculty of nursing, I have had adequate training in the teaching process.	2.57	1.31
20	During my education at the faculty of nursing, I have had adequate training in the communication process.	2.56	1.34
21	I can find the appropriate place at the hospital to practice patient health education.	2.20	1.07
22	There is support and encouragement from hospital administration to practice patient health education.	2.20	1.44
23	There are clear policies and guidelines at the hospital to practice patient health education.	2.12	1.14
24	My clinical instructor emphasizes patient health education as a priority in my clinical training.	2.03	1.34

indicate no statistically significant differences between male and female students' perceptions of barriers to patient health education. See Table 3.

Discussion

In clinical and medical practices, patient education as a continuous and active process is completed once the patient is discharged from the hospital.^[6] This article aims to examine perceived factors and barriers influencing client health education among the third and fourth years of the bachelor of nursing program in clinical settings, where the basic knowledge and skills in health education are taught during previous academic years. The study findings reveal low utilization of patient health education among nursing students in which inadequate time was the most identified factor reported by the student's responses.

In the same context, nursing students are trained in hospitals and health centers according to the nature of the theoretical subjects and the syllabus for these subjects. Another problem faced by teachers and students is that students are not given the required time for training, as this time according to the credit hours is often between 8 am and 2 pm. However, in practice, the students arrive at their training places after nine am and return at about noon due to the obligations of student transport buses to transport school students on the university campus. In this short time, the students have other tasks other than

health education that they focus on such as distributing them to the training places as well as filling out forms for these materials as basic requirements against which they are evaluated.

To put it in simple English, the shortage of time is mentioned in various studies and research as a barrier to health education. The first area of practice indicates the lack of time expressed by the participants on the item (Little time is given to patient health education due to paperwork and required assignments which I must accomplish as a nursing student) (4.22 ± 1.11). This result is consistent with two different studies conducted in Egypt,^[19,20] demonstrating that the majority of participants (78.4% and 71.8%, respectively) indicated that the insufficient time is the reason for their inability to give health education in the clinical settings during their training times.

Another supporting study is conducted in Iran aiming at describing the attitudes of students and nurses toward facilitators and barriers to the process of patient education. Findings indicate that the majority (87.3%) of the participants mention that they have implemented patient education, but they demonstrate that heavy workload, insufficient time, and lack of educational conveniences are the key barriers to executing patient education.^[6] This is also in line with previous studies in other countries like Iran and Turkey.^[6,21,22] Lacking time is not only considered one barrier to health education

by nursing students but also for professional nurses, as it is a source of stress to those who are supposed to provide an aspect of psychosocial care like patient health education.^[23] In the dimensions of time constraints, time constraints are among the most central obstacles to nurses' learning.^[24]

Concerning the second area of practice, it is shown that the shortage of time for health education is concluded while considering the setting where the student's clinical training takes place. The clinical training takes place at two public hospitals where the admission rate and discharge of patients from hospitals are high, and the days of training for the student are arranged to be two inconsecutive days per week such as each Sunday and Tuesday. Thus, lack of time has multifaceted forms, and the first form is the lacking of time thanks to competing priorities of care due to high admission rates and overcrowded patient rooms. The second is the high patient discharge rates from hospitals accompanied by intermittent days of training for students, shortening the time allowed to collect adequate information about the patients to determine their learning needs to shorten the time to build a trustful relationship with patients to conduct meaningful health education. Within this situation, the students are asked to fulfill their different assignments of paperwork like writing daily logs, nursing care plans, and other reports. Finally, they find themselves busy to practice in health education, and this is consistent with^[25,26] suggesting that care and idealism about nursing are decreased among nursing students once they engage in nursing education.

Regarding the third area of practice, it is demonstrated that the shortage of time for health education is derived from the student's response on the item (My clinical instructor emphasizes patient health education as a priority in my clinical training) (2.03 ± 1.34). In other words, the low rating for this item reflects the competition of priorities from the clinical instructor's standpoint related to time. Likewise, this finding highlights the vital role of clinical instructor and his/her attributes in enhancing student's experience as he/she acts as a facilitator, a stimulator, and a team player,^[27-31] as he can play a role in associating the theory and practice in health education.

In the same context, the lowest mean scores are reported for items (4, 5, 8, 10, 12, 16, and 19), as these findings related to the teaching and learning component and learning environment, including physical space are considered major factors affecting students learning experiences.^[32] These findings are predictable in that the participant's experience is limited to public hospitals where overcrowded patient rooms and full capacity of admissions are present all the time. Besides, sharing

rooms with more than four patients in which privacy and physical space shortage are sometimes unsuitable for patient health education.

What is more, many barriers are suggested to explain the difference between the practice and expectation of student nurses in health education. Identifying these barriers discouraging health education is a positive step to help future nurses provide improved health education. These barriers mostly take place before, during, and after offering teachings such as lack of clear expectations, objectives, educational resources, and time, nurses' weak knowledge, shift rotation, difficulty to teach, and the frequent occurrence of unanticipated events. Other barriers are also seen in the unwillingness of the patient to participate in a teaching meeting, insufficient preparation among nurses to teach the physical roles, and the barriers of the clinical environment.

In this give-and-take discussion, a study conducted to measure the satisfaction of the nursing students with their experiences of the clinical placement indicates that the degree of their experiences is positive at the faculty of nursing in the eastern part of the Kingdom of Saudi Arabia. The result indicates that students do recommend the role of the clinical faculty and clinical instructor. Students show that the role of the instructor mainly rests in evaluation which is stress itself more than support in the clinical domain. Besides, the students prefer the instructor to focus on the teaching more willingly than the evaluation.^[33]

Limitation and Recommendations

The study was conducted in one of the nursing faculties in one public university, and this limited the generalizability of the results to the rest of the nursing faculties in other public universities.

In light of the results and related discussion, this study recommends selecting the clinical environment carefully by nurse tutors. Another recommendation is to wisely prearrange and prepare to transform nursing students into nursing practitioners with a high level of competence. Additionally, the study recommends supporting and guiding nursing students so that they can be independent and responsible specialists and professionals who can work within the domain of professional practice. Finally, conducting further studies on all nursing students in all Jordanian universities is highly recommended.

Conclusion

In a nutshell, this article aims to examine the factors and barriers influencing health education practices among

third- and fourth-year nursing students in Southern Jordan. The majority of nursing students report that they have not engaged in health education with patients. The findings indicate that various barriers are suggested to explain the disparity between the expectation and practice of student nurses in health education. Identifying these barriers undermining health education is a positive step toward furnishing better health education for nurses in the future. Nursing students shall be fully supported to be independent and responsible professionals working within the nursing professional practices.

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Conflicts of interest

There are no conflicts of interest.

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