ABSTRACT

Background: Students tend to internalize and perpetuate the patterns of behavior and the values surrounding them. Review of literature showed that there are several student learning sources through the hidden curriculum, but they have not been identified in nursing yet. Hence, the purpose of this study is explanation of learning resources in the hidden curriculum in the view of baccalaureate nursing students. Materials and Methods: This qualitative study was carried out in 2012 with the participation of 32 baccalaureate nursing students in Nursing and Midwifery College of Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran by purposeful sampling strategies. Data were collected by semi-structured interviews and continued to the level of data saturation and themes’ emergence. Data analysis was performed through inductive content analysis method. Result: “Instructor as the unique learning element,” “various learning resources in the clinical setting,” and “instructive nature of the education environment” were extracted as the main themes, each of which incorporated some categories. Conclusion: Baccalaureate undergraduate nursing students learnt the hidden curriculum by the resources such as instructors, resources existing in the clinical setting, and the university campus. Therefore, more research is recommended for the identification of other resources. In order to promote positive messages and reduce the negative messages of the hidden curricula running at academic and clinical settings, nursing educators and nurses need to learn more about this issue in the nursing profession.

Key words: Baccalaureate nursing students, hidden curriculum, nursing education, qualitative study, resources of learning

INTRODUCTION

The concept of the hidden curriculum has been discussed in areas of education connected with training health and social care professionals, and refers to the fact that a critical determinant of how students practice nursing operates not within the formal curriculum but in a more subtle and less recognized hidden curriculum.[1]

Although a considerable literature exists on the hidden curriculum; most of it belongs to educational and curriculum theories, not to medical education. The hidden curriculum can be transmitted through human behaviors as well as the
structures and practices of institutions. The unwritten rules, habits, codes, and rituals within the hidden curriculum may prove to be keys to successful survival within the workplace. Hidden curriculum aims to the unplanned transmission of values and behaviors, as opposed to the planned teaching of knowledge and skills. It is made of the implicit values held by the teaching institutions, and can be transmitted through both verbal and nonverbal messages.

As a powerful educational tool, the hidden curriculum can change even the most confident and altruistic individuals. Learning through this kind of curriculum is a common experience among students. The values and messages transmitted by the hidden curriculum are influenced culturally. It seems that relatively less attention has so far been paid to the hidden curriculum, though the effect of which influences both students and faculty most concerned about health care professions.

As compared with Western countries, there are reportedly deep social bonds among students in Asian countries; hence, the influence of the hidden curriculum on Asian students is expectedly more than on those in the West. Iranian students can study nursing across all higher education levels from BSc to PhD. In Iran, the nursing education program lasts 4 years, leading to a bachelor degree in nursing. The students start clinical training from the second semester, which is run concurrently with theoretical courses until the end of the 3rd year. The 4th year is allocated exclusively to clinical placement training. Student nurses are trained in the university hospitals; within the clinical field, they work with patients with different cultures and from various ethnic groups. In addition, students from other disciplines such as medicine and physiotherapy are also trained concurrently in the clinical field. Nursing faculties train an important part of healthcare professionals.

Students tend to internalize and perpetuate the patterns of behavior and the values that surround them. Review of literature showed that there are several student learning sources through the hidden curriculum but, to the best of our knowledge, they have not been identified in nursing yet.

Hidden curriculum is among the phenomena, which their representation with narrative data gives a much more natural and realistic picture than with numerical data. A review of literature on the hidden curriculum also shows that most research in this field is carried out by a qualitative approach, and qualitative research approaches are the most effective methods for discovering different dimensions of the hidden curriculum. However, the domain of hidden curriculum in nursing education is ignored in educational researches in the world including Iran.

The results of one of rare studies in this field by Salehi in Nursing and Midwifery College of Isfahan in 2002 showed that all students had experienced the hidden curriculum and considered it to be more important than the formal curriculum in the most cases. It is worth mentioning that this research has been carried out through a phenomenology approach with the involvement of nursing and midwifery students in their eighth semester. In addition, it investigated just the hidden curriculum in the clinical setting.

The researcher due to her background in education and teaching in the nursing profession and continuous involvement with the nursing student intended to conduct this study with the aim of explaining the learning resources through the hidden curriculum in baccalaureate nursing students.

**MATERIALS AND METHODS**

The participants in this qualitative content analysis research were selected by purposeful sampling strategies, and the sampling was continued until the achievement of data saturation and the emergence of the themes. The participants’ characteristics with respect to the research objectives in this study are: Nursing students studying for the baccalaureate degree who were willing to participate in the research and state their experiences. The interviews were administered by the first author. Student sampling was performed with the maximum variety in age, gender, year of nursing education, grade point average (GPA), and the place of residence. Thirty-two baccalaureate undergraduate nursing students studying in the 1st to 4th years of their education in Nursing and Midwifery School of University of Medical Sciences in 2012 were deeply interviewed. The interviews administered were face-to-face and semi-structured. They lasted 60–90 min, and were held in a quiet room in the nursing school that was convenient to the participants. The interviews began with the question: “Please express your experiences of learning beyond the formal curriculum.” The answers given to this question led to probing questions such as “What things did you learn in academic settings?” “What things did you learn in clinical settings?” and “How did you learn them?” The interviews were tape recorded and transcribed verbatim at the first opportunity.

Data were analyzed through inductive content analysis. First, the entire interview transcript was read completely and then it was read line by line. The meaning units were identified, and labeled by appropriate codes after condensation and abstraction. The codes with similar concepts were placed at the same category. Finally, the themes were extracted from among the categories.

For example, after the interviews were transcribed and the whole text was read through, the meaning units and the initial codes were determined and the similar initial codes were divided into more comprehensive categories. To complete their education, the nursing students were required to spend the majority of their time in the clinical setting. According to the participants, students not only learn the prevalent nursing procedures from the nurses who comprise the majority of the staff in the clinical setting, but also they
internalize to a great degree the nurses’ behaviors in providing care for the patients’ behaviors, which are not necessarily always desirable. Moreover, by observing the interactions and the way the nursing managers in different ranks or clinical nursing managers such as head nurse, supervisor and even the head of nursing services of the hospital perform their duties, students learn some behaviors like the way they interact with their colleagues and with patients, and responsibility for assigned tasks. In addition, since physicians are the main members of the healthcare team for patients and have a salient presence in the clinical environments, they have the potential of influence ability on the students and students learn and reinforce in themselves behaviors such as humility toward patients and responsibility for them. In addition, by observing the emotional and psychological conditions of some bad patients and their hope and reliance to God in difficulties, students are influenced, and it functions as a guideline for them in their personal and professional lives and in encountering the problems. Furthermore, some students used the experiences of patients in encountering a special disease and shared it with other students. In general, the clinical setting has had positive and negative influences on the students. At the end, the above subthemes showed that there are various sources that influence students in the clinical setting, which form the main content of the themes (i.e., the various sources in clinical learning).

Data collection was continued until achieving data saturation and themes’ emergence. Saturation refers to the repetition of discovered information and confirmation of the previously collected data.\cite{14}

In order to investigate the credibility of data, the participants were interviewed and visited for a long time, the interviews were read repeatedly, data were contemplated on, and colleagues were consulted to confirm and modify the codes and the extracted categories. Maximum variation of the sampling enhanced the confirmability and credibility of the data. Data were analyzed independently by researchers in order to identify and categorize the initial codes. Then the codes and themes were compared. Data credibility was established through both peer checking and member checking. The interviews were returned to the participants after coding in order to investigate the agreement on the codes between researchers and the participants. Peer checking was done by the authors and two doctoral nursing students, which resulted in similar findings. Moreover, expert reviews were used. That is, the interviews, findings, analyses and conclusions were handed to another researcher who was familiar with both nursing education and qualitative research, and the work procedure was confirmed.

Research administration was approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences, and the relevant official permits were issued by the Nursing and Midwifery School to perform the sampling and to conduct research. All participants were informed of the research goals and the interviews were recorded upon achieving the written and informed consent from the participants. Furthermore, they were ensured that all information will remain private and that the audio files will be deleted later after usage.

**RESULTS**

The participants in this research were 32 nursing students with the mean age of 22.5 and the standard deviation of 1.21. 65.6% of the participants were women, 46.9% were juniors, their GPA mean was 59.16 and their GPA standard deviation was 4.1. Moreover, 13.75% of them were dormitory residents [Table 1].

The learning resources for nursing students through the hidden curriculum included 3 themes and 13 categories. The main themes were “instructor as the unique learning element,” “various learning resources in the clinical setting” and “instructive nature of the education environment” [Table 2].

| Variable                      | Value n (%)          |
|-------------------------------|----------------------|
| Age (year)                    | 22.25±1.21           |
| Gender                        |                      |
| Male                          | 11 (34.4)            |
| Female                        | 21 (65.6)            |
| Year of nursing education     |                      |
| 1                             | 2 (6.3)              |
| 2                             | 3 (9.4)              |
| 3                             | 15 (46.9)            |
| 4                             | 12 (37.5)            |
| GPA of the student’s scores   |                      |
| Mean±SD                       | 16.59±1.4            |
| Place of residence            |                      |
| Dormitory                     | 27 (75.13)           |
| Nondormitory                  | 5 (24.87)            |

GPA=Grade point average, SD=Standard deviation

**Table 2: Summary of the findings**

| Categories                                      | Themes                                  |
|------------------------------------------------|-----------------------------------------|
| Learning from the instructor’s behavior         | Instructor as the unique learning element |
| Modeling the instructor                         |                                          |
| Instructor’s inappropriate behavior             |                                          |
| Negative influence of the instructor            |                                          |
| Learning from nurses                            |                                          |
| Learning from nursing clinical managers         | Various learning resources in the clinical setting |
| Physician as a learning resource                |                                          |
| Patient as a learning resource                  |                                          |
| Learning from the clinical setting              |                                          |
| Learning from the physical setting of the classroom |                                          |
| University campus as a learning resource        |                                          |
| Learning from the school administrators         |                                          |
| Learning from peers                             |                                          |
| Learning from the university staff              |                                          |
Instructor as the unique learning element
This theme includes the 4 categories of “learning from the instructor’s behavior,” “modeling the instructor,” “instructor’s inappropriate behavior” and “negative influence of the instructor.”

Learning from the instructor’s behavior
This category shows that both in the university campus and the clinical setting, students had the most influence ability to the instructor’s behavior from the very beginning of entering these environments. For example:

“I learnt much in the university campus. From the 1st day up to now, I’m learning from our instructors’ behaviors” (Participant 15).

Another student added:

“In the hospital I saw how the instructor communicated with the family of the patient or with her colleagues. Some behaviors are really good and can be highly influential” (Participant 12).

Modeling the instructor
This category shows that the high importance of the instructor in the perspective of students is the reason why he/she is so influential in the students’ learning and is considered a model for them:

“In the bedside, the instructor is much more important than other existing items. That is, instructor is more important than nurses and classmates. The instructor is more influential than any other thing. So, the instructor is my model. I do whatever the instructor does” (Participant 9).

Another participant said:

“One of our instructors was a good model for us because of his neat and appropriate appearance besides his high degree of information and good communication. Instructor selection should be considered important because they are our models and we have our eyes on them” (Participant 5).

Instructor’s inappropriate behavior
The students expressed some of the instructors’ inappropriate behaviors they had discovered through the hidden curriculum. Examples of their statements are as below:

“This instructor didn’t respect students’ rights, and students get score by flattery” (Participant 11).

One of the participants said:

“The same instructor that taught well in the classroom and told us how to behave and to be kind in the clinical setting, when the family of a patient asked him a question, he told them: ‘We don’t know. We are not in this ward.’ He didn’t pay any attention to the family of patients. They weren’t important for him” (Participant 9).

Negative influence of the instructor
Because of the inattention of the instructor to the students and to the family of the patients, the students were also ignorant and discouraged towards the care:

“The 1st day I entered this hospital, I went to the patient’s bedside. I read his document, and asked my instructor about the medicines. But, he was so cold to answer. He neither asked me about the nursing care of the patient, nor about the nursing diagnosis of the patient. I became cold too and sat in the nursing station next to those with the instructor. Indifference, yes I become indifferent too” (Participant 13).

Another participant said:

“In the early days of entering the clinical setting, I thought that I should answer everybody. But later I learnt something negative. I learnt that I can avoid answering and I can hand it to someone else. I learnt it when I saw that the instructor answers ambiguously the questions that the patient’s family asks. And if they asked a question, he told them: “Go, you will see her. Go there.” Somehow I permitted myself to be easier, not to look for trouble and to be rather indifferent” (Participant 9).

Various learning resources in the clinical setting
There are various resources in the clinical setting for learning through the hidden curriculum for nursing students. This theme includes 5 categories as: “Learning from nurses” and “learning from nursing clinical managers,” “physician as a learning resource,” “patient as a learning resource,” and “learning from the clinical setting.”

Learning from nurses
This category indicates many positive and negative items that the nursing students in this study have learnt from nurses in the clinical setting. One of the participants said:

“A patient asked: “Just that nurse should do the needle insertion for venipuncture.” Why? I saw that this nurse communicated very well with patients. She respected patients. I learnt too that later in my nursing care, the most important item to be considered by me should be the patient” (Participant 24).

Another participant said:

“Lack of work ethic should not be taught to the students by the nurses. But they do so. You learn that when an instrument is unsterile, when the patient’s test answer is lost, and the patient is annoyed and gets upset, the nurses while doing a procedure, tell you: “It doesn’t matter, never mind” (Participant 9).

Learning from nursing clinical managers
Besides nurses, nursing clinical managers also play considerable roles in the education of nursing students. In this respect, the students had learnt items such as altruism, consideration of others’ time, etc., from nursing clinical managers in the clinical environment. For example, a participant said:
Another participant said:

“Another participant said: “In the hospital, a new ward was to set open. One of the nursing clinical managers was in the hospital from 8 am to 8 pm. She could go because her working hour was over. But she didn’t. She worked for people not for herself. I was pleased to see that. She’d accepted her job. I usually recall cases that are desirable. If I am in a position in the future, I will definitely do so” (Participant 18).

Another participant said:

“To get my score, I went to the head nurse of a hospital ward. But, every time she asked me to wait, and she didn’t do my job. After several hours, I went to that ward again and saw that the head nurse is sitting there, waiting for a phone call from a colleague. A very bad feeling struck me. I told to myself that if I’m a nurse in the future, I won’t do so. Time is gold. I won’t tell my patient that go, I’ll come later and do your job while I won’t go and I won’t do his/her job later” (Participant 10).

Physician as a learning resource
In this category, the nursing students had learnt different items such as humility and accountability from the physicians. For example, a student said:

“It was at the beginning of my entrance to the neurosurgery ward. A patient who had undergone a Laminectomy forced me to ask one of the physicians about his postoperative care. I went to one of the neurosurgeon physicians and asked him the question. There in the nursing station, he gave me enough explanations while he was investigating the documents of his patient. And even I learnt items beyond postoperative care. His humble behavior influenced you. Here, I can just say that I learnt humility. You know, sometimes, the personnel in the ward feel that they are superior to others. Even the physicians who instructed us in the college, hardly answered us” (Participant 6).

Another participant said:

“I was in the orthopedic ward. I asked a question from one of the physicians over there. He hung down his head and went without answering my question. I learnt to answer the questions others ask, even as much as I can because it’s very annoying to be indifferent to their questions. That is, you don’t allow yourself to ask a question and your relationship with others is destroyed” (Participant 2).

Patient as a learning resource
Patients were one of the other learning resources through the hidden curriculum for the participants of this study. The students had learnt the concepts of hope and resort to God from them. One of the participants said:

“Hope was great in patients with chronic diseases. They didn’t get disappointed and tried. I learnt from the patients to be hopeful in my life and not to get disappointed and to use my abilities at any situation in life. This was something positive I learnt from my patients” (Participant 4).

Another student said:

“In the hospital, I saw that some patients have tranquility; they were busy talking to God and resorting to Him. I learnt this from a patient and went to another patient who was so agitated; I suggested him to say similar divine citations too to get tranquil. I always say these divine citations and my stress reduces, and I get tranquil. If I have a pain, it will vanish. Well, hereby I learn something from a patient and transfer it to another patient” (Participant 3).

Learning from the clinical setting
This category shows new and useful learning in facing different people and also learning by students from behaviors in the clinical environment. For example, one of the students said:

“In the clinical setting, I learn a new lesson in my encounter with anybody; I learn something, which is helpful. For example, I learnt that I shouldn’t expect so much from others and that I should try to get everything by my own” (Participant 12).

Another student mentioned:

“The behaviors I observed in the clinical setting have influenced me. If they were negative, I wasn’t influenced by them, but when they were positive behaviors; I tried to learn from them” (Participant 17).

Instructive nature of the education environment
Apart from the clinical setting, the students had learnt many things from the presence in the university campus. This theme includes 4 categories: “Learning from the physical setting of the classroom,” “university campus as a learning resource,” “learning from the school administrators,” “learning from peers” and “learning from the university staff.”

Learning from the physical setting of the classroom
This category shows the influence of formal classrooms on the student’s behavior and the influence of the instructor’s status in the classroom on the creation of a greater sense of respect to him/her and a greater sense of learning from the instructor:

“The 1st day you enter the classroom in the university, the formal environment of the classroom tells you something. It separates you from your childhood world. You have to behave differently” (Participant 9).

The same student said:

“In the classroom, this is the high status of the instructor that gives you a great sense of respect, as if it wants to teach you many things. There are long rows of chairs, but a big and tall one on the middle of the scene; then you have to be careful of that by all your senses” (Participant 9).

University campus as a learning resource
This category indicates the social promotion and independence acquisition of students in the university environment. In this respect, one of the students said:

“Entering the university and educating in it opens a door to you. It creates an opening before your eyes, and I think that it can grow you” (Participant 6).
Another participant stated:

“Before entering the university, we were more dependent on the family. Family did many of our works, but it no longer does that. When they’re not present, we should do all our works by our own. We found independence in the university” (Participant 14).

Learning from the school administrators
This category shows that the students have learnt the solution of others’ problems and cooperation with people from the school administrators. For example:

“I encountered an educational problem. I referred to one of the school administrators and he could solve my problem while there are many people who say that’s your problem as soon as you talk about your problem. Well, this matter influenced me a lot so that I decided to solve others’ problems as much as I can” (Participant 1).

Another student says:

“Whenever I entered his office and asked him something, he reminded me of his high job preoccupation. If someday I’m in such a position, I will have a state of cooperation with others” (Participant 6).

Learning from peers
The statements by the participant students in this study show learning from the classmates’ experiences and the expansion of their perspectives due to familiarity with different cultures that the classmates may have:

“I told my own experience to my friends or my friends told me about their experiences” (Participant 5).

Another student says:

“Familiarity with different cultures of our classmates expanded our perspectives” (Participant 14).

One of the students explained the negative influence ability from classmates as:

“At the exam night, one of our boy classmates repeatedly sent me SMS or called me and talked to me for an hour to convince me to cheat in the exam in the next day. Well, in the beginning, it seemed ugly to me, but gradually it became kind of transaction. He helped me sometimes for some tasks. Gradually, I began to cheat in the exams myself. Now, in the words, I just do the works for not being criticized by the physician. That is, it is somehow the very cheating” (Participant 3).

Learning from the university staff
“Learning from the official staff of the college” is another subtheme in the instructive nature of the education environment based on which the student interaction with the official staff resulted in the learning of altruism and lack of indifference to problems that others encounter.

“When I encountered a problem because of which I couldn’t attend the classes, or even couldn’t come to the university, I referred to the college instruction section and told them that because of some problem, I may not attend my classes. They considered it and accepted that. The instruction section could cooperate with me with respect to classes and curriculum. But they cooperated with me beyond that. They advised me on my problem. I saw a kind of a support environment. They had favor on me. I knew that I could be simply omitted according to the rules and regulations, but they really helped me and actually taught me altruism” (Participant 3).

And another student said:

“An institution like a university is built just for students, just like a hospital is built just for patients. But, I didn’t feel that so much in the university. For example, their behavior with me as a student was so bad in the instruction section of the university. The instruction section never addressed our problems in the first referral. That is, they always either referred me to somewhere else or they didn’t answer me clearly or their answer was with derision. It was good for me to learn here to respect anything in its own status, to solve problems as much as possible, and not to be indifferent towards others’ problems to the best of ourselves” (Participant 5).

DISCUSSION

Instructor as the unique learning element was one of the main themes of this study, which many of the participants considered it as an important learning resource through the hidden curriculum. The nursing students were influenced by the positive and negative behaviors that the instructors showed in the classroom and in the bedside. Furthermore, instructors were one of the important role models for students in this study. Faculty members, due to enjoying exclusive and unique individual standards of excellence, rigor, values, beliefs, biases, expectations, relationship style, and passion for the profession, can easily convey hidden curriculum in interactions with the students. The can also influence students via role modeling; students usually learn what they perceive as the norms and expectations for their profession through observing their professors and instructors, as they are extremely important models of professional behavior, especially within the hidden curriculum. Similarly, in the study of Murakami et al., on the perception of the hidden curriculum on medical education, one of the main themes emerged was the prevalence of positive/negative role models.

Various learning resources in the clinical environment was among the other themes of the present study, in which the resources of the hidden curriculum included nurses, nursing clinical managers, physicians, peers and clinical setting.

Nurses and nursing clinical managers were of the most important hidden curriculum resources in the clinical environment in this work. According to Perry, learning in the clinical setting is a crucial element in the education of nursing students. The actions and interactions of nurses
working in clinical settings are often watched by students. As role models, these nurses are potentially influencing the behaviors and attitudes of others, either positively or negatively, such that their words and actions become living lessons.\[17\] Thereby, unlike experiences that lack integration for both students and their mentors, the formal and hidden curricula are constructed in practice. Unilateral survival strategies are learned through clinical role modeling that socializes the novice students into professional practice. Most importantly, in contrast to university, clinical role modeling validates the nursing students’ experiences in practice.\[18\]

Physicians were found to be among the other sources of learning in the present work. Stern and Papadakis believe that the concept of teaching must include not only lectures in the classroom, small group discussions, exercises in the laboratory and care for patients in the clinic, but also conversations held in the hallway, jokes told in the cafeteria, and stories exchanged about a great case on our way to the parking lot. Each rotation brings a new set of rules, a new set of behavioral norms, and a new community of physicians and health care professionals with whom to engage. Teaching in the hidden curriculum happens through role modeling and the telling of parables as well as through the framework of the educational environment itself. Faculty often perceive themselves as role models for students and claim that this is one of the primary means through which they teach professionalism. However, a role model is someone who, in the performance of a role, is taken as a model by others. Role modeling is in the eye of the beholder—the student, not the teacher. Individuals who are seen as mentors may not realize that they are teaching professional values, and those not seen as mentors may believe that they are.\[19\] Patients were also considered as a learning resource through the hidden curriculum in the present study. Bennett and Baikie (quoting from Lyons and Ziviani) express that students may gain valuable learning in clinical settings through exposure to patients, which are often unplanned outcome of education practices referred to as the hidden curriculum. Students can be influenced by their learning goals, expectations, attitudes, values, and previous socialization experiences; in other words, involving the patients in nursing education can potentially turn into a transformative learning process for both students and nurse educators.\[20\] The other learning resource, as mentioned by the participants in this study, was clinical setting. Learning in clinical practice provides up to half of the educational experience for students undertaking preregistration nurse education programs.\[21\] The clinical learning environment has been defined as an interactive network of forces within clinical settings. Clinical education takes place in a complex social context with many formal and informal learning opportunities. The environment provides students with the opportunity to observe role models, practice in action and reflect on what is seen, heard, and done. Studies showed that many factors, including the formal and hidden curricula, in the clinical learning environment shape the trainees’ learning achievements.\[22\] The most powerful influence of the hidden curriculum is usually in the clinical setting; as it can convey strongest messages about the application of clinical knowledge and skills in the context of real patients, real physicians, real diseases, real resources, and real social limitations.\[23\]

Among the other main themes emerged in the present work was instructive nature of the education environment, and its learning resources, according to the participating nursing students, were: The physical environment of the classroom, the university campus, the school administrators, and peers.

The physical setting of the classroom was one of the learning resources of the nursing students in this study. Each day every student encounters at least three different aspects of the school environment: The physical environment (which is all-encompassing and consistent in its influence); the social environment, and the cognitive environment. Each of these has a sort of association with the hidden curriculum.\[24\] University campus was considered by the participants in this study as another source of learning through the hidden curriculum. The hidden curriculum can be assumed as entire informal demands of study achievements to be met for students to complete their study units in the university. The educators’ informal demands are made both consciously and unconsciously. The students at first have no idea at all, and are not explicitly taught how to meet these demands; however, they find out about them during the course of time, e.g. by feeling, trial-and-error and failing exams.\[25\] Aspects around the hidden curriculum, though not taught explicitly, are assumedly developed as the natural by-product of tertiary education, mainly through meaningful exchanges with different individuals and different environments.\[26\] School administrators were also mentioned by the participants in this study as one of their learning sources through the hidden curriculum. There is a growing understanding and awareness of the hidden curriculum in the education environment; the learning students may gain either from the nature and organizational design or from the behaviors and attitudes of educators and administrators.\[27\] Peers were considered as another learning resource of the nursing students in the present work. Similarly, Masella suggested that student-to-student interaction is among the main learning sources of students through the hidden curriculum.\[28\]

“Learning from the university staff” was one of the other learning sources of the nursing students in the present study through the hidden curriculum. The practices of school staff are complex and often contradictory, sometimes reinforcing and sometimes undermining social divisions and larger patterns of inequality.\[29\]

**CONCLUSION**

In general, nursing students learn the hidden curriculum from resources such as instructor, various resources in the clinical setting and in the university campus. Given the role of the hidden curriculum in the transfer of conduct patterns, ethical values, wrong beliefs, etc., in educational environments, further studies are suggested for identification
of other learning resources through the hidden curriculum. In order to promote positive messages and reduce the negative messages of the hidden curriculum running at the university and clinical settings, nurses and educators need to increase their knowledge and awareness in this regard. Similar to other qualitative studies, caution should be exercised in generalization of the findings of this study for the limitations inherent in it.

ACKNOWLEDGMENT

This paper is part of the first author’s PhD dissertation. We thankfully acknowledge the financial support of the Deputy of Research Affairs (Ahvaz Jundishapur University of Medical Sciences, Iran) for this research (Grant No: U-91069). We also highly appreciate the cooperation by the authorities of the above Nursing and Midwifery School and sincerely thank all of the participating students in this research.

REFERENCES

1. Aled J. Putting practice into teaching: An exploratory study of nursing undergraduates’ interpersonal skills and the effects of using empirical data as a teaching and learning resource. J Clin Nurs 2007;16:2297-307.
2. Wear D, Skillcorn J. Hidden in plain sight: The formal, informal, and hidden curricula of a psychiatry clerkship. Acad Med 2009;84:451-8.
3. van Mook WN, van Luijk SJ, de Grave W, O’Sullivan H, Wass V, Schuwirth LW, et al. Teaching and learning professional behavior in practice. Eur J Intern Med 2009;20:e105-11.
4. Masson C, Brazeau-Lamontagne L. Paradigms, emperor’s clothes syndrome, and hidden curriculum: How do they affect joint, bone, and spine diseases? Joint Bone Spine 2006;73:581-3.
5. Mahood SC. Medical education: Beware the hidden curriculum. Can Fam Physician 2011;57:983-5.
6. Lamiani G, Leone D, Meyer EC, Moja EA. How Italian students learn to become physicians: A qualitative study of the hidden curriculum. Med Teach 2011;33:989-96.
7. Murakami M, Kawabata H, Maezawa M. The perception of the hidden curriculum on medical education: An exploratory study. Asia Pac Fam Med 2009;8:9.
8. Kommalage M. Hidden and informal curricula in medical schools: Impact on the medical profession in Sri Lanka. Ceylon Med J 2011;56:29-30.
9. Tabari Khoseirian R, Deans C. Nursing education in Iran: Past, present, and future. Nurse Educ Today 2007;27:708-14.
10. Payrovi H, Yadavar-Nikravesh M, Oskouie SF, Berterö C. Iranian student nurses’ experiences of clinical placement. Int Nurs Rev 2005;52:134-41.
11. Masella RS. The hidden curriculum: Value added in dental education. J Dent Educ 2006;70:279-83.
12. Balmer DF, Master CL, Richards B, Giardino AP. Implicit versus explicit curricula in general pediatrics education: Is there a convergence? Pediatrics 2009;124:e347-54.
13. Salehi S. Students’ experience with the hidden curriculum in the faculty of Nursing and Midwifery of Isfahan University of Medical Science. J Med Educ 2006;9:79-84.
14. Speziale HJ, Carpenter DR. Qualitative Research in Nursing Advancing the Humanistic Imperative. 4th ed. Philadelphia: Lippincott Williams and Wilkins; 2011.
15. Van Puymbroec M, Austin DR, McCormick BP. Beyond curriculum reform: Therapeutic recreation’s hidden curriculum. Ther Recreation J 2010;44:213-22.
16. Cruess SR, Cruess RL, Steinert Y. Role modelling – Making the most of a powerful teaching strategy. BMJ 2008;336:718-21.
17. Perry RN. Role modeling excellence in clinical nursing practice. Nurse Educ Pract 2009;9:36-44.
18. Allan HT, Smith P, O’Driscoll M. Experiences of supernumerary status and the hidden curriculum in nursing: A new twist in the theory-practice gap? J Clin Nurs 2011;20:847-55.
19. Stern DT, Papadakis M. The developing physician – Becoming a professional. N Engl J Med 2006;355:1794-9.
20. Bennett L, Balkie K. The client as educator: Learning about mental illness through the eyes of the expert. Nurse Educ Today 2003;23:104-11.
21. Warne T, Johansson UB, Papastavrou E, Tichelaar E, Tomietto M, Van den Bossche K, et al. An exploration of the clinical learning experience of nursing students in nine European countries. Nurse Educ Today 2010;30:809-15.
22. Brown T, Williams B, McKenna L, Palermo C, McCall L, Roller L, et al. Practice education learning environments: The mismatch between perceived and preferred expectations of undergraduate health science students. Nurse Educ Today 2011;31:e22-8.
23. Chuang AW, Nathalapaty FS, Casey PM, Kaczmarczyk JM, Cullimore AJ, Dalrymple JL, et al. To the point: Reviews in medical education-taking control of the hidden curriculum. Am J Obstet Gynecol 2010;203:316-e1-6.
24. Gordon D. The concept of the hidden curriculum. Journal of Philosophy of Education 1982;16:187-98.
25. Bergenhengouwen G. Hidden curriculum in the university. Higher Educ 1987;16:535-43.
26. Tsang AK. Students as evolving professionals: Turning the hidden curriculum around through the threshold concept pedagogy. Transformative Dialogues 2011;4:1-11.
27. D’Eon M, Lear N, Turner M, Jones C, Canadian Association of Medical Education. Perils of the hidden curriculum revisited. Med Teach 2007;29:295-6.
28. Margolis E. The Hidden Curriculum in Higher Education. New York, London: Routledge; 2001.

Source of Support: Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, Conflict of Interest: None declared