ORIGINAL ARTICLE

Mechanisms of Learning through the Hidden Curriculum in the Perspective of Iranian Nursing Students

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Background: Human beings use different approaches to learning. Thus the aim of this study is to explore the mechanisms of learning through the hidden curriculum in the perspective of baccalaureate undergraduate nursing students.

Methods: This qualitative study, involving 24 baccalaureate undergraduate nursing students, was done by purposeful sampling strategies. The data were collected using semi-structured interviews and continued until data saturation and emerging categories. Content analysis approach was used for data analysis.

Results: As a result of data analysis, eight categories emerged including learning from observation, auditory learning, learning from feedback, experiential learning, inverse learning, learning through explaining one's experiences, modeling, and passive learning.

Conclusions: Nursing students learnt the hidden curriculum through different mechanisms. It is recommended that other mechanisms of the running hidden curricula are identified.

keywords: Hidden curriculum, Mechanisms of learning, Nursing education, Baccalaureate nursing students

اسلول التعلم عبر برنامج الدراسی الخفی من خلال روئية طلاب التمريض ؟؟؟؟

التمهيد و الهدف: يتبع الانسان اساليب متعدده فی التعليم . إن الهدف من هذه الدراسه هو تبين اسلوب التعلم عبر البرنامج الدراسی الخفی عند طلاب التمريض.

الأسلوب: تم اجراء هذه الدراسه علی 24 عدد من طلبة كليه التمريض و تم تجميع المعلومات عبر اسئله شفهيه و استمر تجميع المعلومات حتی الحصول علی الطبقات و تم تحليل المعطيات عبر معادلات احصائيه.

النتائج: تم الحصول فی هذه الدراسه علی 8 طبقات كالتالی :

- التعلم الشهودی
- التعلم السمعی
- التعلم التلقينی
- التعلم التجربی
- التعليم المعكوس
- التعلم النموذجی
- التعلم الانفعالی
- التعلم من خلال بيان التجارب

الأستنتاج: قد تعلم طلاب المتريض البرنامج الدراسی الخفی عبر عدة طرق . لذا نوصی باجراء دراسات علی أساليب اخری .

الكلمات الرئيسيه: البرنامج الدراسی الخفی، اساليب التعلم، تعلم التمريض، طلاب التخصص.

ساز و کارهای یادگیری از طریق برنامه درسی پنهان از دیدگاه دانشجویان پرستاری ایرانی

زمینه و هدف: انسان ها رویکردهای متفاوتی را برای یادگیری به کار می برند، بنابراین هدف از این مطالعه تبیین ساز و کارهای یادگیری برنامه درسی پنهان در دانشجویان کارشناسی پرستاری می باشد.

روش: این مطالعه کیفی با مشارکت ۲۴ دانشجوی کارشناسی پرستاری با روش نمونه گیری مبتنی بر هدف انجام گرفت. اطلاعات با استفاده از مصاحبه نیمه ساختار یافته گردآوری و تا زمان رسیدن به اشباع داده ها و ظهور طبقات ادامه داشت. شیوه تحلیل داده ها نیز تحلیل محتوا بود.

یافته ها: در این مطالعه هشت طبقه یادگیری مشاهده ای، یادگیری شنیداری، یادگیری از بازخوردها، یادگیری تجربی، یادگیری معکوس، یادگیری از بیان تجربیات، الگوگیری و یادگیری انفعالی به دست آمد.

نتیجه‌گیری: دانشجویان پرستاری برنامه درسی پنهان را از طریق ساز و کارهای مختلف آموخته بودند، بنابراین شناسایی سایر ساز و کارهای یادگیری برنامه های درسی پنهان در حال اجراء توصیه می شود.

واژه های کلیدی: برنامه درسی پنهان، ساز و کارهای یادگیری، آموزش پرستاری، دانشجوی کارشناسی

نرسنگ طلباء کی نظر میں غیر محسوس تعلیمی طریقوں سے تعلیم حاصل کرنا

بیک گراونڈ: انسان مختلف طریقوں سے سیکھتا ہے۔اس تحقیق کا ھدف غیر محسوس طریقوں سے سیکھنے کی روشوں کوبیان کرنا ہے۔ اس تحقیق میں نرسنگ طلباء شریک ہیں۔

روش: اس تحقیق میں چوبیس نرسنگ طلباء نے شرکت کی اور اس وقت تک طلباء سے انٹرویو کی شکل میں سوالات پوچھے جاتے رہے جب تک ڈیٹا مکمل نہ ہوگیا۔ ڈیٹا کا تجزیہ متن کے تجزیے کی صورت میں کیا گیا۔

نتیجے: اس تحقیق سے پتہ چلا ہےکہ طلباء سن کر، ملنے جلنے،تجربوں، الٹی روش سے، تجربوں کی وضاحت اور بیان سے نیز رول ماڈل سے اور انفعالی طریقے سےبہت سی چیزیں سیکھتے ہیں۔

سفارش: نرسنگ اسٹوڈنٹس نے مختلف طریقون سے غیر محسوس طریقہ تعلیم سے استفادہ کیا ہے لھذا غیر محسوس طریقہ تعلیم کے دیگر طریقوں کا سمجھنا مفید واقع ہوسکتا ہے۔

کلیدی الفاظ: غیر محسوس تعلیم ،عمل درامد،کارکردگي ۔

INTRODUCTION

Nurse educators struggle to develop a curriculum capable of building students' professional knowledge and skills in order that graduates will be able to fully practice nursing in a changing healthcare environment, and thus contribute to the health and quality of life of caretakers (1). Such curriculum will cover not only what is taught but also how it is taught and learned. It further will deal with how learning is managed, as well as the overall learning environment. One may assume a curriculum like what students learn in the university may include the hidden curriculum as well (2), because behaviors, interactions, and overall norms observed in the training environments are powerful in shaping the values and attitudes of future health professionals (3).

The hidden curriculum can be both human and structural; in other words, it can be transmitted through human behaviors and/or the structures and practices of institutions. Some educational historians believe that the concept of hidden curriculum dates back to the early 20th century when philosopher John Dewey referred to the "collateral learning" in educational settings that may have stronger effect on learners than the formal curriculum does. However, most would agree that this concept was first used by scholar Philip Jackson in 1968. It was then brought to academic medicine by Hafferty and Franks in 1994 (4).

The results of a study about socialization in medical education showed that virtues and vices reflect a desired direction for professional socialization during the medical training and the professional performance. They also provide useful indicators of what has been described as medicine's hidden curriculum (5). A qualitative study in China regarding the baccalaureate nursing students' perspectives on learning about caring revealed that the hidden curriculum plays an important role in the learning about caring (6). Another research indicated how physicians in training are not simply passive recipients of the hidden curriculum; rather they also actively resist judging patients based on perceptions of worth. They even learn to 4 operate within a moral economy of care (7). Hence, the significance of the hidden curriculum should not be undervalued (8).

The learning processes identified for the hidden curriculum are: loss of idealism, adoption of a ritualized professional identity, emotional neutralization, change of ethical integrity, and acceptance of hierarchy (9).

As an interactive process, learning is the product of student and teacher activity within a learning environment (10). It has been shown that people differ in their approach to learning, and there is no single strategy or approach that will result in optimal learning conditions for all individuals (11). On the other hand, although qualitative study in medical education is a valid and acceptable way of conducting research, in such a situation, it would not only be a valid alternative but also the methodology of choice (12). Therefore, this study aims to explore the learning mechanisms through the hidden curriculum in the perspective of baccalaureate undergraduate nursing students.

METHODS

Accordingly, this study has been designed to explore the mechanisms of learning through the hidden curriculum in the perspective of baccalaureate undergraduate nursing students. This qualitative study was conducted by using content analysis approach in 2012.

The participants were 24 baccalaureate undergraduate nursing students from the School of Nursing and Midwifery, in Ahvaz Jundishapur University of Medical Sciences. The participants, who were in the first-fourth grade of nursing program, volunteers and those willing to participate in the interview, were selected through purposeful sampling strategies. The sampling continued until data saturation. 5

The study was first approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences, and official permissions were received from the Nursing and Midwifery School to access the participants. All participants in the study were informed of the research purposes, and the interviews were recorded based on their informed consent. Meanwhile, they were assured that all information will remain confidential and that the audio files will be deleted after use.

Data were collected through semi-structured and face-to-face interviews. There was first this question to ask: "Please tell us about your experiences of learning materials beyond the formal curriculum" and then probing questions like "What did you learn in clinical setting?" and "How have you learnt these things?" were asked, based on the participants' answers, to gain more information and to make clear all the things students said. The average duration of the interviews was 75 minutes. Soon after interviews, the audio files were listened to accurately several times and transcribed verbatim.

Data analysis simultaneously began with data collection. Content analysis was used for data analysis. In this research, the content of each interview formed an analysis unit. After reading each interview text several times, meaning units were specified and, after condensation and abstraction, they were labeled with appropriate codes. The codes were reviewed several times so that they were categorized based on their semantic similarity regarding certain categories and sub-categories.

To ensure data credibility, prolonged engagement was assured by simultaneously allocating 12 months to sampling and data analysis. Moreover, comments of colleagues were used to approve modification of the extracted categories. The extracted codes were returned to the participants and they approved of them. Eventually, expert review was also used. 6

RESULTS

The 24 students participating in the study included 15 women and 9 men, aged 21-26, who were studying in the first to the fourth years of baccalaureate nursing program.

Comprehensive descriptions of the participants revealed 8 categories, including learning from observation, auditory learning, learning from feedback, experiential learning, inverse learning, learning through explaining one's experiences, modeling, and passive learning:

1. Learning from observation

The students, upon entering the clinical setting, had witnessed several behaviors that affected them. They first witness behaviors and then keep them in their minds. In this study, one of the major mechanisms of learning was learning from observation through the hidden curriculum that was referred to by all 24 participating students:

"I've used graphics memory in the clinical setting, that is I tried to see as much as possible; when a person sees something, that thing sticks in his/her mind" (Participant 17).

"I learned about honesty from the others' behavior in the hospital. This was, in fact, objective and I kept them in my mind. In any ward, if I saw good manners, I chose them accurately; then I told myself this behavior is good so I have to do the same" (Participant 11).

2. Auditory learning

Learning through listening to others' conversations or listening to friends is another learning mechanism through the hidden curriculum: 7

*"As a third party, I listened to conversations of different people. Wherever I was, there was a client and a service provider" (*Participant 2).

*"I heard from a friend saying that a student went to his educator to solve his problem. But the educator left the room because his work time has been up. I learned that if I enter the hospital from the campus, I understand my patient better and I would be more patient in communicating with him/her" (*Participant 10).

3. Learning from feedback

When a nursing student observes other people's way and the results of treating patients in the clinical settings, this works as a feedback for him/her:

*"When I saw the results of behaviors like serving others and flexibility in a clinical setting, they stuck in my mind unintentionally. Like a test, which is performed, you see the result; the results are recorded, and the hypothesis is confirmed. You learn these things when you see the result of their feedback. When you see the result of that, it sticks in your mind unintentionally" (*Participant 19).

"When I saw the behavior of that nurse, I began to analyze that behavior; if I behaved like him/her, what would be the outcome?" (Participant 7)

4. Experiential Learning

Learning some items through interacting with others in the clinical setting results in students' experiencing them: 8

"When I got into the ward, I learned about responsibility by the interactions I had with the supervisors and head nurses. Responsibility is important for everyone, and it is great work. My learning was more experiential. Lots of things that we learn have now been removed from the theoretical lessons; nursing ethics, for example" (Participant 7).

"In the first stage, I looked at how my educators, nurses and doctors behave and how they interact. But this soon changed; first I looked at them, then I behaved myself" (Participant 1).

In some cases, the student has used his/her experience as a source of learning through the hidden curriculum:

"I am a nursing student in the third grade, I saw the effect of patience in the hospital; as a result, I can, for sure, say that experience can be very useful, and I can draw on my own experience" (Participant 12).

5. Inverse learning

This category represents learning from unpleasant behaviors, as well as insufficient and improper characteristics of others, according to the learning mechanisms through the hidden curriculum:

*"This nurse can't stand talking to patients; she always talks to patients aggressively. I hate to be the same in the clinic setting in future. So upon seeing such a negative behavior, I realized that I have to behave and do something totally different" (*Participant 11). 9

*"When I see some staff, I learn not to be like them because they hurt patients, I learn from others' weak points not to be like them" (*Participant 1).

6. Learning through explaining one's experiences

Experiences of educators and discussing them in the classroom can be one of the mechanisms for students to learn through the hidden curriculum. Regarding the learning relationship between patient and nurse at bedside, and expressing the educators' experiences, one of the participants said:

*"One of the educators said that in the past his personal problems had affected his behaviors toward the patients. Then he expressed his regret for how he had behaved and he expressed his wish to be in the same situation again so that he could modify his behavior. I concluded that I should and will not let my personal problems influence my behavior toward the patient who needs my help and care. I am not allowed to misbehave or to be inattentive to my patient" (*Participant 2).

*"My educator once said in the classroom: 'A patient had a serious operation with high expenses in a hospital, but due to the nurse's carelessness, he fell down off the bed and all the things done and expenses paid were gone in vain'. With this example, now I feel that my sense of responsibility concerning my job has increases" (*Participant 5).

7. Modeling

The participants said that many of the things they have learned were not in their textbooks; rather they have learned through modeling others' behavior: 10

*"Often most of the things we learn are not found in our textbooks; then we have to model others' behavior" (*Participant 6).

"I learned responsibility and respecting others through what my educators did. When they show a good behavior, as a student, I try to be like them" (Participant 13).

*"I have especially fond of this educator; I can say that because of some of her good manners, she is like a role model for me" (*Participant 7).

"I see others' behavior , I think about it and all these become models. Hospital is also a small sample of our surrounding society" (Participant 14).

8. Passive learning

The participants said that they have learnt some items passively during their courses through the hidden curriculum:

"I have not learnt anything beyond the formal curriculum actively; rather I've learnt them implicitly during my education course" (Participant 3).

"That doctor used to respect all his colleagues. Although he is not my professor, as a nursing student, I chose his behavior among other things and keep in mind that if I want to communicate with someone, I should do the same" (Participant 4). 11

DISCUSSION

One of the main learning mechanisms through the hidden curriculum in the present study was learning from observation. The findings of a study on nurses' learning styles suggest that staff often prefer a visual learning style (13). It is worth mentioning that style of learning, which is applied in the clinical setting for learning new skills, is also used as a learning mechanism through the hidden curriculum. For instance, in defining the hidden curriculum, Ferguson believes that the hidden curriculum, in general, refers to learning outside the classroom, and in medical education, it mainly deals with the behavior often observed by students in the form of honesty, respect, and professional values or their absence (14). Students closely observe what the instructors do and how they behave in academic health centers; they also actively witness what faculty members think, say and how they behave in their interactions with students on a daily basis (15).

Another mechanism employed in this study by the nursing students through the hidden curriculum was auditory learning. In this learning style, topics are discussed with the students (16) with auditory preferences, who learn best while listening to verbal instruction (17).

Learning from feedbacks was another learning mechanism used by the nursing students in this study through the hidden curriculum. Many definitions have been so far presented for feedback, all sharing common characteristics. They suggest that feedback is an interactive process with the aim to provide the students with insight into their performance. Feedback is an essential element of every learning process (18), which is often sought by students as a way of measuring improvement in their performance, and also gaining insight into which other areas they may need to work on (19). Koh, quoting Orsmond et al., mentions that students use feedback mainly to improve their motivation and learning, to encourage reflection and to clarify understanding (20). 12

Among other mechanisms of learning applied by the nursing students through the hidden curriculum in this study was experiential learning. According to the experiential learning theory, learning is often most effective when it is based on experience (21). This theory is important in understanding adult education activities, in continuing life-long education, and many of the implicit learning affairs we are engaged in. It further focuses on chronological evolution of experimentation, observation and reflection, development of general principles, and examining the values in new conditions. Experiential learning is applicable to improving both teaching and learning (12). The educational philosophy behind the experiential learning is that learners are actively involved in the learning process (22).

Inverse learning was among mechanisms of learning through the hidden curriculum in this study. Learning is considered positive if a student can learn from a negative experience. Upon demoralizing the student through a negative experience, the focus on learning is lost as his/her mind-set becomes dominant. Students have shown their ability to adopt strategies to counter negative experiences (23).

Some researchers focused on the nature of the hidden curriculum, whereas others examined students' responses to it. In these studies, students were initially portrayed as passive recipients of oppressive lessons. However, Apple points that students are not as flexible as malleable balls of clay; instead they are active agents who challenge curriculum through cultures of resistance (24).

Another mechanism of learning through the hidden curriculum in this study was learning through explaining one's experiences. Sharing or explaining one's personal stories about real life experiences, challenges of taking new profession, or unexpected circumstances can have teaching significance (16). 13

Teaching in the hidden curriculum takes place through parables, which are powerful means for transmission of cultural values as the norms of professional behavior. The tradition of storytelling is instructive for students; however, making use of it in the formal curriculum is challenging (25).

In this study, modeling was the next learning mechanism adopted by the nursing students through the hidden curriculum. Teachers may perform different roles concurrently; these include modeling skills, knowledge, values and attitudes that learners observe, together with how these actions are acknowledged by the public (26). Nurse educators are provided with several opportunities to display behaviors they would like to inspire in students, patients, family members, or nursing staff. *"Actions speak louder than words"* (17). According to social learning theory, many behaviors are learned by observation via modeling because individuals are used to pay attention to a behavior, remember it as an example, and practice in other circumstances (27).

One of the themes extracted in studying the formal, informal and hidden curricula of a psychiatry clerkship was the "hidden curriculum as role modeling". Medical students and residents offered negative values arising from the informal and hidden curricula while attention put more emphasis on the more positive values to promote through the hidden and informal curricula (28). Role modeling was also was among the major themes in the study of Gaufberg et al. (29).

Another learning mechanism applied by the nursing students through the hidden curriculum in this study was passive learning, which is the type of learning usually encountered in lecture halls. In spite of the growing knowledge about the hidden curriculum, many within the medical community take it as something, which is passively absorbed from others' ambient behavior (30). 14

In this study, the baccalaureate undergraduate nursing students mentioned that they have learnt the hidden curriculum through adopting some learning mechanisms including learning from observation, auditory learning, learning from feedback, experiential learning, inverse

learning, learning through explaining one's experiences, modeling, and passive learning. Therefore, we recommend the identification of other learning mechanisms of the hidden curricula being administered. This study is a qualitative one; thus, caution should be made in generalization of its findings for limitations inherent in it.

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