Original Article

Factors Affecting Academic Failure in Nursing Students of Qom University of Medical Sciences: A Qualitative Study

Mohammad Abbasi Ph.D.[1], Reza Pourmirza Kalhori M.Sc.[2], Leila Taheri M.Sc.[1], Saeideh Heidari M.Sc.[1], Hakimeh Dehghani M.Sc.[1]•

1. Dept. of Nursing, School of Nursing and Midwifery, Qom University of Medical Sciences, Qom, Iran

2. Dept. of Emergency Medicine, School of Paramedics, Kermanshah University of Medical Sciences, Kermanshah, Iran

•Address for Correspondence: School of Nursing and Midwifery, Qom University of Medical Sciences, Qom, Iran Zip-code: 37158-35155, Tel: +989183622785, Fax: +982537715214, Email: hakimehdehghani@yahoo.com

Abstract

Introduction: Academic failure of students is a major problem of higher education. The aim of this qualitative study was to explore the factors causing academic failure in nursing students of Qom University of Medical Sciences in 2015.

Methods: This qualitative study was carried out via conventional qualitative content analysis approach. A total of 21 nursing students (18 males and 3 females) who had a Grade Point Average (GPA) lower than the previous semester and were conditioned (average 12) were selected through purposive sampling from the School of Nursing and Midwifery at Qom University of Medical Sciences. Data were collected through semi-structured face-to-face interviews conducted with each individual. Interviews were continued until data saturation, taking about 45 to 70 minutes. Data analysis was performed simultaneously with data gathering.
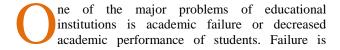
Results: In this study, the mean age of participants was 21.9±4.1 year. Data analysis demonstrated that individual factors, factors related to curriculum, teaching methods of the faculty, large number of students in class, lack of formative assessment of teachers, lack of interaction between the faculty and students, and failure to comply with lesson plans were major causes of academic failure among students.

Conclusion: Based on the results, managers, instructors and counselors can monitor their students' academic achievement by careful planning, active teaching methods and continuous assessment of students, and conduct individual and group counseling sessions to prevent academic failure.

Keywords: Academic failure, Nursing, Student, Qualitative research

Introduction

One of the major problems of educational institutions is academic failure or decreased academic performance of students. Failure is described as probation, unacceptable average and repetition of the course, prolonged education, expulsion or dropout, and changing the course (1). Also UNESCO

has identified academic failure as school dropout and reducing the quality of education in students. The phenomenon of academic failure has many negative consequences such as waste of time, waste of the finance of training centers, being unmotivated, and moral, familial and psychosocial problems of students (2).

Also these students are at a higher risk of crime, drug abuse, physical abuse, and sexual, familial and psychological disorders more than the other students are (3). A study conducted at a university in America showed that the most common cause of suicide among students was their academic performance (4).The exact percentage of academic failure in educational institutions is unknown. According to studies, about 12% of medical students become conditioned at least one semester during their education (2).

In the study by Hesam and Sanagou, academic failure was most frequent in medical students (45.3%), nursing students (17.3%) and healthcare students (10.7%) (5). Bakouei et al. reported the prevalence of academic failure to be 10.5% (6), while Alikhani et al. reported 16.9% (7).

The causes of academic failure have been presented by theories such as the psychological theory, sociological theory, economic theory, and institutional and interactive theory. Generally, most studies have classified the causes of academic failure into internal and external factors. Dante et al. (2013) in a systematic review evaluated the success or failure of nursing students in Europe and concluded that gender, age, type of entrance to the university, group affiliation, students' personality, students' perspective towards nursing discipline and dropping out, family obligations, clinical learning environment and student performance were the variables affecting the success or failure in students (8).

One study reported the psychosocial, educational, developmental, familial, economic, social and organizational factors as causes of academic failure (9). Freudenberg believes that dropping out depends on risk factors such as the individual and family factors, the companionship of friends and relations, educational planning and scientific levels (10).

Also in this regard, several studies have addressed other factors such as the student's mood, intelligence, behavior, motivation and friends, parental occupation, education of parents and students, indigenous, economic and social situation of students, GPA, the admission quota in the exam, the gap between diploma and university admission, employment and marital status as factors influencing student's academic failure (11,12, 13). Azari et al. reported factors influencing the dropping out in medical students as gender, dormitories, occupation, marital status, age, admission quotas, and gap between diploma and university admission (14). Academic failure in medical students is highly important because medical students, as one of the main sources of the health system, will provide, maintain and promote public health in the near future. Due to the importance of their job and its relationship to public health, poor performance will be irreparable. Thus, detection and identification of students' problems to prevent their poor academic performance will increase their social success after graduation and eventually optimize the use of human resources in the country.

According to this introduction, due to the impact of multiple factors, the relatively high incidence of academic failure and controversies over these factors, the need for identifying educational problems as well as limitations of previous research, the researcher conducted a qualitative study to explore the causes of academic failure among nursing students.

Methods

The aim of this qualitative study was to explore the causes of academic failure in undergraduate nursing students of Qom University of Medical Sciences in 2015. To achieve this goal, the conventional qualitative content analysis was used. Conventional qualitative content analysis is a study method for subjective interpretation of texts data obtained via the process of analysis and classification of the themes (15). The study setting was the School of Nursing and Midwifery of Qom University of Medical Sciences. Purposive sampling with maximum variability was performed.

For this purpose, the researcher attended the Department of Education in School of Nursing and Midwifery identified the students with academic failure (GPA<12) and students whose average was decreased compared to the previous semester and invited them to participate in the study. 18 males and 3 females (a total of 21 nursing students) were selected. Interviews continued until data saturation occurred. In order for students to easily speak and to express their dropout risk factors, the interview was conducted face-to-face individually in a private room. First, the researcher stated the aim of the study, obtained the permission to record their voice, and assured the confidentiality and anonymity of the interviewed participants. They received written and oral informed consent from all participants. Students were allowed to withdraw from the research at any stage. The interviews started with general questions about demographic characteristics, educational background and family, how they entered university and if they were interested in nursing or not. Then the students began to explain the

causes of academic failure. The researcher encouraged them with follow-up questions such as "Explain more, please." or "What do you mean?" for more explanation. The interview took 45 to 70 minutes. To increase the reliability of data, all interviews were conducted by one researcher. To immerse into the data and to gain a deep understanding of research, interviews were listened carefully several times. Data were analyzed in 8 steps based on conventional qualitative content analysis to explain the causes of academic failure in nursing students. Researchers first transcribed the interviews word by word. In the next step, the full text of interview was considered as a whole, and the meaning units (highlight words, sentences or paragraphs describing the students about the causes of academic failure) were written in a form. After encoding (transforming the units of meaning into the concept of general statements), the interview texts were then revised and the codes obtained were merged again based on similarities and differences and finally categorized into different classes based on the same criteria.

To ensure the strength of the main themes, the classes were identified. Finally, the findings were compared with other classes carefully. To ensure consistency, accuracy and validity of data obtained in qualitative research, criteria such as credibility, dependability, confirmability and transferability were used (16). In order to increase the credibility of this study, the researcher engaged in the academic failure for a long time. In addition the data derived from the interviews were reviewed by the participants, and they provided some corrective comments. Comments from two Ph.D. colleagues of nursing were also used. Also, to check the reliability of data used in this study, step by step repeating and auditing was done by reporting to the project referee. To confirm the findings, all phases of the study were recorded accurately and confirmed by a person familiar with qualitative research. The researchers also tried to provide participants quotes for the transfer of the findings. Researchers in this field tried to provide the groundwork for other researchers by providing more details about the profile of participants and research environments in order to use in other contexts.

Results

In this study, 21 undergraduate nursing students with an average age of 21.9±4.1 participated; 18 were single and 3 were married. Of them, 3 lived in dormitories and the rest did not. The causes of academic failure of students were categorized into individual factors, factors related to the curriculum, methods of instruction, a large number of students in class, lack of continuous evaluation of

teachers, lack of interaction between faculty members and students, and failure to comply with lesson plans.

Individual factors

All participants in this study stated individual factors as the most important risk factor of academic failure. Participants who had experienced academic failure cited factors such as lack of interest in nursing, lack of motivation, less work, having a part-time job and family problems.

In this context, the participants said: "I think the failure is not others' fault. It is related to me more than 99% "(participant 1).

One of the participants said: "If I want to tell you one sentence about my failure, I say I get bored of studying" (participant 3).

Also, another participant said: "I get bored of reading. The maximum time of studying I could record was 45 minutes; then I got bored after 45 minutes and did another work" (participant 19).

Another participant said: "Yes, of course. If I spend half an hour to read, I win, but I let it down for the exam night" (participant 11).

Participants expressed lack of interest in nursing as another cause of academic failure. In this regard, one participant said: "I am not interested in this field. I could not study medicine, so my GPA decreased. I would have higher scores if I studied. Because I was not interested in it I did not study" (participant 10).

The participants spoke about the impact of incentives on their academic failure. One of them said: "One who is not motivated to study nursing, for example, just to enter university and select a field of study without any purpose, has been accepted in nursing without any motivation" (participant 9).

As for part-time job, one participant said: "Now I am working because I got married, I have to spend my life with it" (participant 7).

Another participant in this regard added: "I am working as a paramedic at the hospital and I do not have time to study" (participant 5).

About family problems, a participant stated: "My mother has been sick for several years, I am a girl and should help her. I do not have time to study" (participant 21).

Factors related to curriculum

This study pointed out the inappropriateness of curriculum and declared that one of the causes of academic failure is due to planning of their curriculum.

One of the participants in this regard stated: "Overload of lessons in this semester, compared to the 20 units of last semester, led to a turbulent schedule; for example, on Sunday we had three heavy lessons until 5 p.m." (participant 7).

One student stated: "We were really afraid of our Sunday because we had to write about three lessons in about only six hours. So, we really got exhausted in the last hours" (participant 11).

About their afternoon classes, another participant said: "We had internal-surgical course as a specialized lesson in the last hours of the day, I just comprehended10% of the issues and only took some notes" (participant 19).

One of the participants mentioned: "The problem was that it was so heavy. All the guys say their lessons are more difficult in the second semester and about 90% of nursing students are upset about the planning" (participant 1).

Teaching methods of instructors

Participants addressed teaching methods of instructors as one of the causes of academic failure. In this context, participants expressed: "The other problem was related to professors. Professor X and Ms. Y read out their hand out and class ended without any question and feedback" (participant 17).

One of the participants reported: "One important thing related to academic failure is booklet and slides. Our instructors told us we do not give this booklet to you and you have to write yourself. I do not know why academic opinion on this is that we learn better when we write. But students have always told professors that when we write we do not have the time to think" (participant 16).

A participant in this regard added: "Some teachers speak very formally, but we enjoy those who speak colloquially. I do not understand the lesson when the instructor speaks formally and do not give any examples" (participant 13).

The large number of students in class

According to the participants, one of the problems that leads to academic failure is large number of students in class. One of the participants said: "Because of class congestion, the teacher also gets tired, there is not enough time for all students to ask their questions" (participant 18). Another participant said in this regard: "The large number of students in class is very important. If the number of students was small, they could ask their

questions, but now if the instructor answers some questions, the time ends" (participant 6).

Another participant said: "Professor should have more energy when the number of students is large. 60 students will exhaust the teacher. If the number of students is low, a professor can communicate more and better with students, students can ask better questions and professor will focus better" (participant 7).

Lack of continues assessment

Participants expressed accumulation of content for the exam night as one of the risk factors of academic failure and believed that if they were assessed during the semester, their academic failure could be prevented. One of the participants said: "If the instructor gives the exam during the term and its score is seriously considered in the final score, the students will be forced to study" (participant 9).

Lack of interaction between the faculty and students

Lack of interaction between the faculty and students was a risk factor that participants talked about. In this context, one of the participants expressed: "Some teachers' behavior motivates the students in class. There are some professors that do not interact with their students" (participant 4). Another added: "Teachers must have a good relationship with students to be accepted better" (participant 4).

Another participant said: "The teacher can change a person's life. He can change a person's lifestyle with a special motivation. But some teachers not only do not motivate us, but also kill our motivation" (participant 17). Another participant said: "We expect a professor to respect us in the class. We come to class to learn something, our subconscious disagrees with disrespect. Respect should be mutual" (participant 19).

Failure to comply with lesson plans

All participants in this study believed that some teachers do not follow their own lesson plans.

In this regard one participant said: "If the teacher follows his lesson plan at the beginning, we know what he wants to teach, and it is better, we study that handout or book. Also, if he told us what kind of exam he would take, multiple choice or descriptive exams, we could plan to study during the semester (participant 3). Another person said: "Lesson plan is like a guiding light for students. Our task and what we have to do would be clear from the beginning. Also, teachers should really follow it" (participant 4).

Discussion

The findings of this research indicated the themes and concepts that caused the academic failure of nursing students of Qom University of Medical Sciences. Data analysis demonstrated that causes of academic failure included individual factors, factors related to curriculum, teaching methods of the faculty, large number of students in class, lack of formative assessment of teachers, lack of interaction between faculty and students, and failure to comply with lesson plans.

All participants in this study regarded individual factors as the main reason for their academic failure. Lack of focus on study time and classroom, lack of patience and motivation for the study were the major causes of academic failure in boys. Lack of interest in nursing and selecting the field compulsively caused educational failure. Lack of interest in this field, dropping out and changing the course by boys have been reported in previous studies, too (2). Students spoke of lack of motivation. Here is a question that must be answered: What is the cause of this lack of motivation? Why have students been experiencing this problem? While one of the causes of academic success is motivation, nursing students are not motivated to continue studying and working in this field. Although nursing has a better job market than other disciplines, perhaps one of the important reasons for lack of motivation on the part of nursing students is comparing nursing with other disciplines such as medicine, dentistry and pharmacy.

Haririan et al. showed that only 30% of students had a favorable opinion about their jobs and 57% of them agreed to leave it. In addition, 52% had decided to change the field and 48.5% wanted to dropout of university. Six reasons for leaving the nursing profession according to the subjects were: Lack of social support, inconsistency of reality with initial impression, the class gap between physicians and nurses, low salaries and wages, negative attitudes of professional medical team, and inappropriate clinical environment (17).

Teachers can help students by increasing the quality of classrooms, respectful and appropriate behavior with students, providing scientific and educational content with new educational methods, use of teaching tools and presenting scientific issues applicably, and getting students to participate in teaching. All participants in this study confessed their low effort and non-study during the semester. Unfortunately, this problem has spread across most disciplines and students do not study during the semester and their study is limited to the exam night. Moniri et al. reported the low concentration in the classroom, unplanned study, and studying less than two

hours a day as the main causes of educational failure in paramedical students of Kashan University of Medical Sciences (18). Students who were accepted to university with health care quota were working in hospital along with education. In addition to hard clinical work and interactions, all of them were married and had to pay all the costs of their lives. These factors caused academic failure. Many studies have reported that part-time job is one of the important causes of educational failure.

In their study, Alikhani et al. noted age, marital status, quota, part-time job and personal income and concluded that part-time job and age were the most effective variables analyzed by linear regression (7). In the study of Motlagh et al., 77% of dropped out students were male and 27% of them were married (1). A 38-year-old health worker expressed that in addition to the routine classes, he had compact shifts in hospital. He said he was not able to study at this age. Many studies have pointed to the relationship between age and academic failure. The study by Motlagh et al. showed that the relationship between age and educational failure was statistically significant, meaning older students experience more academic failure (1). All participants in this study were dissatisfied with the planning of the courses. They believed that one of the causes of school failure was concentrated presentation of courses on some special days. Participants believed that this type of planning destroyed the learning opportunities in the classroom and deprived them of any chance for Q & A and troubleshooting. Most of the nursing and midwifery colleges have problems in lesson planning, which is one of the causes of academic failure, especially for juniors. Ghasemi et al. reported the large number of courses in each semester and concurrent presentation of practical and theoretical courses as factors affecting academic failure (19).

Teaching methods and inappropriate educational tools significantly influence the academic achievement. Hazavei et al. evaluated the teaching methods as teacher's attempt to convey the course content, effectiveness of teaching, effective teaching methods, learner-centeredness, discipline and continuity of content, active learning, and using techniques and training tools (2).

Overcrowding of students in the classroom was reported as another important cause of academic failure. They believed that teachers use PowerPoint too much, and there is no time to teach and have the opportunity to learn and ask questions. Teachers and students´ concentration will be destroyed. Moniri et al. concluded that low concentration in the classroom is one of the causes of academic failure (14). In the case of teacher's constant evaluation, students will be obliged to study during the semester, so their academic failure will be prevented.

Participants emphasized the impact of interaction between the faculty and students. They believed that when teachers have a good behavior with students, they will be motivated to study better. Najimi et al. have pointed out the impact of qualified teachers and their social behavior on students' progress (20). Most of the participants emphasized on lesson plans as a guiding light. They stated that having a lesson plan and teaching accordingly can bring about academic achievement.

Conclusion

The results of this study show that the causes of educational failure of nursing students of Qom University of Medical Sciences were individual factors, curriculum, methods of instruction, overcrowding of students in the class, lack of continuous evaluation of teachers, lack of interaction between the faculty and students and failure to comply with lesson plans. Therefore, it is recommended that university officials and advisors monitor and prevent academic failure through group and individual counseling sessions. Also, managers should plan specialized courses in different days during the week. Instructors are also advised to use different teaching methods according to the students' learning style. Moreover, adequate educational resources should be provided to students and access to these resources in the hospital environment and the various colleges need to be facilitated. In addition, the number of students in class should be adjusted, courses should be held in two separate groups and classes with enough space and light are needed to be used. Teachers can enhance the quality and quantity of learning by strengthening their relations with students as well as student participation in the course. Regular assessment during the semester, regular attendance and teaching according to the lesson plans should be a priority for teachers. Because this study was qualitative and was done on low number of samples, we propose the risk factors of academic failure be investigated in larger groups and other disciplines.

Acknowledgments

References

1. Motlagh ME, Elhampour H, Shakurnia A. Factors affecting students' academic failure in Ahvaz Jundishapur University of Medical Sciences in 2005. IJME. 2008; 8(1): 91-99. [Persian]

2. Hazavei SM, Fathi Y. Student's satisfaction from academic guidance and consultation at Hamadan University of Medical Sciences. Journal of Shahid Sadoughi University of Medical Sciences and Health Services. 2000; 2(8): 56-62. [Persian]

3. Wegner L, Flisher AJ, Chikobvu P, Lombard C, King G. Leisure boredom and high school dropout in Cape Town, South Africa. Journal of Adolescence. 2008; 31(3): 421-431.

4. Meilman PW, Pattis JA, Kraus-Zeilmann D. Suicide attempts and threats on one college campus: Policy and practice. Journal of American College Health. 1994; 42(4): 147-154.

5. Hesam M, Sanagou A. Academic under-achievement and some related factors associated with academic satisfaction in Golestan University of Medical Sciences' students. Journal of Research Development in Nursing & Midwifery. 2013; 9(2): 90-96. [Persian]

6. Bakouei F, Kheirkhah F, Salmalian H, Omidvar S. Effective factors on educational status of midwifery students in Babol University of Medical Sciences. Strides Dev Med Educ. 2012; 7(1): 44-50. [Persian]

7. Alikhani SH, Markazi MN, Zand BM, Broumand S. Evaluation of influencing factors of educational decline of nursing students of Army University of Medical Sciences between 2002-2005. AMHSR. 2006; 4(4): 819-824. [Persian]

8. Dante A, Palese A, Lancia L. Nursing students' academic success or failure, international and national trends: a literature review. L'infermiere. 2011; 48(4): 35-42.

9. Shah K, Naidoo K, Bilotto L, Loughman J. Factors affecting the academic performance of optometry students in Mozambique. Optometry & Vision Science. 2015; 92(6): 719-729.

10. Freudenberg N, Ruglis J. Reframing school dropout as a public health issue. Preventing chronic disease: Public health research, practice, and policy. Centers for Disease Control and Prevention. 2007; 4(4): 1-11.

11. Holt MP. Student retention practices in associate degree, entry-level dental hygiene programs. American Dental Hygienists Association. 2005; 79(3): 6-13.

12. Adams E, Shannon AR, Dworkin PH. The ready-to-learn program: A school-based model of nurse practitioner participation in evaluating school failure. Journal of School Health. 1996; 66(7): 242-246.

13. Smith GH. Intervention strategies for children vulnerable for school failure due to exposure to drugs and alcohol. International Journal of the Addictions. 1993; 28(13): 1435-1470.

14. Fata L, Azari S, Baradaran H, Atlasi R. A systematic review of the evaluation of academic decline in medical students. Strides Dev Med Educ. 2013; 10(2): 150-157. [Persian]

15. Krippendorff K. Content analysis. In Barnouw E, Gerbner G, Schramm W, Worth TL & Gross L (Eds.), International Encyclopedia of Communication. New York, Oxford University Press. 1989; 1: 403-407. Anailable at: http://repository.upenn.edu/asc_papers/226.

16. Speziale HS, Streubert HJ, Carpenter DR. Qualitative research in nursing: Advancing the humanistic imperative. 5th ed. New York, Wolters Kluwer Health, Lippincott Williams & Wilkins. 2011; 1.

17. Haririan HR, Aghajanloo A, Jabari R. Zanjan nursing student's opinions toward nursing and reasons for giving it up. Journal of Medical Education Development. 2010; 2(3): 1-8. [Persian]

18. Moniri R, Ghalebtarash H. The reasons of educational failure among paramedical students in Kashan University of Medical Sciences. IJME. 2006; 6(1): 135-140. [Persian]

19. Ghasemi F, Hasanvand S, Valizadeh F. Frequency of academic failure and its association factors from the viewpoint of students with and without academic failure in the faculty of nursing and midwifery, Khoramabad, Iran. Journal of Nursing Education. 2014; 3(1): 71-79. [Persian]

20. Najimi A, Sharifirad G, Amini MM, Meftagh SD. Academic failure and students' viewpoint: The influence of individual, internal and external organizational factors. JEHP. 2013; 2(1): 22.