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Students' perception of problems and benefits of night shift nursing internship: A qualitative study

Farhad Bahramirad, Narjes Heshmatifar¹, Mostafa Rad²

Abstract:

INTRODUCTION: Recently, the night shift is included in the curriculum of nursing internship students. However, this shift is associated with some problems and benefits for students, which have been assessed in limited studies. This study aimed to discover and describe the problems and benefits of the night shift for nursing internship students.

METHODOLOGY: This qualitative method was carried out with the conventional content-analysis method. In total, 15 seventh-semester and eighth-semester nursing students at Sabzevar University of Medical Sciences, Iran, were selected by purposeful sampling. Data were collected using in-depth semi-structured interviews about students' perceptions of night shift problems and benefits. In addition, data analysis was performed applying the conventional content-analysis technique.

RESULTS: In this study, seven main categories were extracted, five of which included problems such as exploitations, being an outsider, moral distress, learning deficits, and annoyance. The other two categories were benefits including gaining new experiences and independence.

CONCLUSION: The problems related to the students were the nursing personnel and the educational system of hospitals, which can be dealt with through the interaction of the educational system with hospitals managers in order to clarifying the role of students, fair division of work, and making educational resources available. Moreover, gaining new experiences and independence are among the benefits of the night shift for students, the continuation of which is in favor of nursing education.

Keywords:

Internship and residency, nursing, shift work schedule, students

Department of Nursing,
Student Research
Committee, School of
Nursing and Midwifery,
Sabzevar University
of Medical Sciences,
Sabzevar, Iran,
¹Department of Nursing,
School of Nursing
and Midwifery, Iranian
Research Center on
Healthy Aging, Sabzevar
University of Medical
Sciences, Sabzevar, Iran,
²Department of Nursing,
Nursing and Midwifery
School, Iranian Research
Center on Healthy Aging,
Sabzevar University
of Medical Sciences,
Sabzevar, Iran

Address for correspondence:

Dr. Mostafa Rad,
Department of Nursing,
Nursing and Midwifery
School, Iranian Research
Center on Healthy
Aging, Sabzevar
University of Medical
Sciences, Sabzevar, Iran.
E-mail: [mostafarad633@
yahoo.com](mailto:mostafarad633@yahoo.com)

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Introduction

Nurses are responsible for caring for patients at night shift.^[1] In the last few years, nursing authorities have paid heed to night shift due to unique properties to gain the necessary skills in this regard.^[2] Given the possibility of difference between morning and night shifts in terms of clinical learning and experiences, night shifts have unique features,^[3] including darkness and a quiet environment and having more time for better cooperation and care by nurses, compared to day shift.^[4] Moreover, the quality of nursing care is higher in the

night shift due to more time. Moreover, an opportunity is made for students to read articles, guidelines, and patients' medical files. As such, students can have different experiences at night shifts.^[5] Today, some countries (e.g., Croatia, United Kingdom, Italy, Spain, and America) consider night shifts for students.^[6] In Iran, night shifts have been included in students' schedules only recently. The night shift causes problems for nurses, including physical and emotional disorders.^[7,8] In a study by Palese *et al.*, a low satisfaction level was reported for night shift nursing students, compared to those working in day shifts. In addition, the level of fatigue was significantly higher in night shift students, compared to morning shift

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students. Furthermore, clinical learning was lower in night shift students, compared to other students.^[9]

Limited studies have been conducted on night shift students and their problems, and most studies have focused on nurses, in a way that nurses and assistants at healthcare centers and hospitals deal with a high level of mental risks that threaten their health.^[10,11] On the other hand, sleep disorders due to night shift reduce work efficiency of nurses, increase the level of incidents in their work, and decrease their cognitive performance.^[9] A new study has shown that sleep deprivation and circadian disorders have been associated with metabolic problems and might play a role in weight gain or onset of obesity and type 2 diabetes due to improper timing and amount of food intake and impaired energy balance.^[10] In general, 12-h nurses complain of fatigue and inadequate or poor sleep.^[12,13]

Consequences of sleep deprivation play a role in decreasing cognitive functions, such as attention, reaction time, and memory, and can affect vision, judgment, and verbal performance in the long run. These functional consequences negatively affect life quality and worsen performance at the workplace.^[14,15] Nursing night shifts lead to change in the time of meals and long-term gastrointestinal problems, which disrupt one's physical health and well-being.^[16] A study has shown that the longer the length of care, the lower the quality of care provided by the nurse.^[17] However, working shift is critical for many public organizations as well as private and service organizations; only 10% of the people working the night shift enjoy it and the rest just tolerate it.^[18] Nonetheless, working in the night shift has benefits as well. In this regard, Nasrabadi *et al.* marked that active interaction between nurses and patients is greater in night shifts, and they feel more responsible regarding their duties. In addition, knowledge and work quality of the nurses improve in night shifts.^[7] Existing studies have evaluated the effects of night shifts on nurses, and few studies have been performed on the internship of students, which include a course in nursing education. For instance, Faseleh Jahromi *et al.* determined novice nurses' experience of night shifts using qualitative research methods. In the end, their results demonstrated the importance of five main topics, including value system, mental and physical problems, social relations, organizational problems, and proper opportunity.^[19]

In qualitative research entitled the experiences of night shift work in Iranian nurses, Nasrabadi *et al.* reported that three main topics constituted three themes: including (a) sociocultural effects of night work, (b) effects related to the health of night work, and (c) night work as an opportunity to achieve more clinical experiences and learning.^[7] Considering the aforementioned issues

related to night shifts in nursing students' personal lives, research should be carried out to minimize the problems and complications of the night shift for students. Reducing night shift problems can have beneficial effects on students' physical, mental, and social well-being, quality of service, patient satisfaction, and employer satisfaction. Since qualitative research is based on the naturalistic paradigm, which evaluates human phenomenon rooted in social sciences, it is the best method to describe life experiences. Given the fact that no qualitative and quantitative research has been conducted on night shift experiences of the students, this qualitative research was performed to determine the nursing students' perspective of night shift problems and benefits.

Methodology

This qualitative research included content analysis, and the participants were among the seventh- and eighth-semester students of nursing school in Sabzevar, Iran. First, 15 students were entered into the study by purposeful sampling. In addition, in-depth semi-structured interviews were conducted to collect data. For maximum diversity, the subjects were selected from seventh-semester and eighth-semester nursing students with the live experience of night shift problems and benefits, both genders, and different grade point averages (GPAs). In addition, sampling was carried out among skilled and non-skilled students with different performance levels and among those working in clinics' or treatment institutions' part-time and willing to share their experience. Sampling continued until data saturation, which means that no new information would be obtained from interviews to develop a new category of internship problems and benefits. In fact, sampling ended when no new information was obtained in the last three interviews of 15. The research continued from January to February 2020, and the age range of the participants was 22–30 years.

First, the research objectives were explained to the participants, and the subjects entered the study after being ensured of adherence to ethical considerations. The interviews started with warming questions such as introduction questions (age, place of residence, level of education, marital status, occupational status of the spouse, GPA, level of skill in nursing procedures, and interaction with professors and personnel), followed by a general question about experiences of night shift internship. After that, more detailed questions such as the person's feelings in the mentioned situations and their reaction to workplace tensions were asked, followed by questions about the way these feelings are managed and the way these individuals continue learning at night shifts. More exploration questions would be asked in case

of need, such as what happened next, what occupied your mind, or how did you feel to more explain the experience.

Each interview session ended with two questions of "Are there any other questions I should ask you? and Do you have a question for me?" Data collection was carried out using in-depth semi-structured interviews about students' experiences of night shift problems and their management and how they learn at night shift. Each interview continued for 60–90 min, and a new interview was initiated with another participant after listening to the previous interview several times, as well as transcribing and analyzing it. Notably, the interviews were conducted in the workplace of students, either in the wards and educational classes of the hospital or any place that would be convenient for the person. The interviews were recorded with the permission of the subjects, which were then transcribed and analyzed before the next interview. Data analysis was performed using qualitative–content analysis, which is used for the subjective interpretation of textual data. In this way, in addition to extracting objective text content, hidden themes and patterns are extracted from participants' data.^[20] After several listening, data mining, reading, and drowning in the data, meanings were extracted, key ideas were highlighted, and codes were categorized based on their relationship with each other.

Different strategies such as peer check and member check techniques were used to validate the data. During the assessment of the participants, the interview codes were returned to five of the subjects, who confirmed the codes extracted by the researcher. In the colleague check technique, two researchers coded and categorized the codes independently, and lack of consensus of the codes and/or their categorization would lead to discussion and clarification of the issue. In addition, data analysis was performed in MAXQDA10 to maintain and better organize the qualitative data. This research was approved by the Ethics Committee of Sabzevar University of Medical Sciences, with the ethical code of IR.MEDSAB.REC.1398.113. The research objectives were explained to the participants, and they were allowed to withdraw from the research at any time. Moreover, the subjects were ensured of the confidentiality terms regarding their personal information, and written informed consent was obtained before the research.

Results

Among 15 students participating in the research, eight were male and seven were female, and their age range was 22–30 years. Moreover, the mean GPA of the students was 16.1 ± 0.78 . While two of the students were working in a private clinic, another participant had a job in a nursing home. Data analysis led to the

extraction of 450 primary codes, 22 subcategories, and seven main categories. Five out of the seven categories included student exploitation, being an outsider, moral distress, learning deficits, and annoyance. The two benefit categories were a new business and gaining independence. In addition, each category involved subcategories, as shown in Table 1.

Exploitation

The exploitation of labor and bullying were among the subcategories of this category, which are explained below:

Exploitation of labor

Students' experiences indicated that they felt they were being exploited by staff, in a way that as the students enter the ward, the nursing staff become very happy and delegate all the work to these individuals. After that, the personnel would just sit at the nursing station and complete the profiles and students would do all the work.

"They would assign the whole ward to students. Each student might have to care for 10 patients." (7th participant).

"When they (nurses) see the students, they think that the worker has entered the hospital ward." (8th participant).

Bullying

Students mentioned that bullying and forcing students to work at high volume occur at night shifts due to staff

Table 1: Students' perception of problems and benefits of night shift nursing internship

Categories	Sub categories
Student exploitation	Exploitation of labor
	Bullying
Being an outsider	Distrust of staff for students
	Lack of support of students by the personnel
	Allocation of an improper sleeping and rest place
	Misbehavior and inappropriate treatment of personnel
	Failure to notify students of risks
Moral distress	Observing the wrong decisions of doctors and nurses
	Inconsistency of theory and practice
	Possibility of unintended errors
Learning deficits	Inadequate education facilities
	Routine night shifts
	Learning failure due to lack of an instructor
Annoyance	Psychological disturbance
	Physical problem
	Emotional problem
Gaining new experiences	Obtaining the ability of critical-thinking and clinical decision-making
	How to deal with new clinical situations
	Socialization
	Gaining the ability to manage time
	Being independent of the instructor
Gaining independence	Independent decision-making and gaining self-confidence

shortages. From the perspective of these individuals, blaming students for mistakes and forcing them to carry out unfamiliar tasks are the instances of bullying.

"... and they would blame us for their own mistakes." (1st participant).

Being an outsider

Distrust of staff for students, lack of support of students by the personnel, allocation of an improper sleeping and resting place, treating students inappropriately, and lack of informing students of risks are among the subcategories of this category.

Distrust of staff for students

Students believed that the staff considered them as outsiders, which led to failure to trust them and delegating them important tasks such as file writing, cardiopulmonary resuscitation, and invasive procedures.

"They always assign us the basic works and do not trust us with new tasks, such as report writing, which is something we want to learn." (5th participant).

Lack of support of students by the personnel

Nursing personnel does not support students in night shifts, which leads to students' dependence on their professors to receive support in scientific and practical problems.

"...It is better to have a professor in night shifts... They do not support students." (7th participant).

Allocation of an improper sleeping and rest place

One of the issues pointed out by the participants, which showed that students are considered outsiders in hospitals, was allocating an improper rest place to these individuals, in a way that students are forced to rest on patients' beds. In addition, students are forbidden to sit at the nursing station and must be either in the drug or personnel restrooms and will be called to carry out tasks.

"Another problem is the rest and sleep place. For instance, we would rest on the bed of patient." (6th participant).

Misbehavior and inappropriate treatment of personnel

Another indicator of the students being outsiders in hospitals is misbehavior and inappropriate treatment of personnel, which makes the night shift a nightmare for students since it is extremely difficult to tolerate a shift when the personnel do not respect your rights and do not acknowledge your presence. In such shifts, students cannot wait for the shift to be over. Meanwhile, the personnel do not properly answer students' questions or provide them with humiliating answers.

"When the personnel of the ward treated me bad, I would count the hours to pass the night... I hate to work in these shifts and I wish I did not have to go through it." (4th participant).

Failure to notify students of risks

Nursing students must be informed of the admission of patients with infectious problems so that they could keep themselves safe during patient care. However, some nurses do not notify students of this issue, which shows that they do not consider students as their peers and colleagues. On the other hand, students feel that they would be assigned responsibilities if they were not considered as outsiders by the personnel.

"Nurses do not inform us of patients' diseases... for instance, they should inform us whether a patient has a contagious disease or not so that we would be cautious. In using gloves, they advise us to use nylon gloves instead of latex gloves." (3th participant).

Moral distress

Observing the wrong decisions of doctors and nurses, the inconsistency of theory and practice, and the possibility of unintended errors were experiences indicating students' moral distress.

Observing the wrong decisions of doctors and nurses

Nursing students at night shifts may observe the staff's slacking and may feel bad about it. In addition, nurses may delay in dealing with patients' problems or make medical decisions that might be considered morally inconsiderate, which has mental and ethical pressures on students, and might make conflicts in this regard.

"Some things upset me...they would deal with patients in pain very late." (11th participant).

Inconsistency of theory and practice

Another issue that causes moral distress in students is the inconsistency of theory and practice. Nursing work is not done scientifically since students believe that there is inconsistency in what they have learned from books and what is put into practice in hospitals.

"When there is a high workload, practical work requires getting up at 4:30 in the morning to check the vital signs of all patients... which is not done in the wards." (13th participant).

Possibility of unintended errors

Learning tasks from the personnel incorrectly, not checking up on patients, and decreased concentration due to fatigue and sleepiness are among the issues that increase the occurrence of unwanted errors and moral distress in nursing students.

"Their method of drug administration is not practical. I mean, they would combine any drug with another." (7th participant).

Learning deficits

Inadequate education facilities, routine night shift, and learning deficiency due to lack of presence of the professor are among the subcategories of learning deficits.

Inadequate education facilities

Students reported that they had difficulty finding answers for their questions due to lack of access to facilities such as books, access to the ward library, the internet system, and other educational facilities such as a pamphlet, which led to learning deficits during their education.

"The library is closed at nights and the head nurse has its key..." (9th participant).

Routine night shifts

In addition, working at night shifts as a routine and lack of presence of professors or anyone to ask questions lead to learning deficits. Without the help of professors, students cannot learn how to write reports and follow-up pieces of advice. Moreover, they lack the knowledge of some procedures and need learning in scientific situations.

"All we do in the wards is receiving V/C, administrating drugs and other practical works." (2nd participant).

Learning failure due to lack of an instructor

While students were content with the lack of presence of their professor, since it gave them room to work independently, they felt a need for the presence of their instructor at some points to learn more practically.

"...there was no one to teach us how to take blood samples from the femoral vein." (14th participant).

Annoyance

Psychological disturbance

According to students, stressful nature of night shifts, high concern due to high workload before entering the ward, possible misbehavior of personnel, unclean wards, and inappropriate environmental conditions, fear of infection, fear of staff's ill-treatment, fear of possible errors and ignorance, decreased level of concentration, boring job, and lack of excitement of night shifts lead to psychological disturbance.

"...One night, we checked one of the patients. Unbeknownst to us, she/he had meningitis; therefore, we checked the patient without any special equipment. Then, we were concerned about whether we caught the disease or not." (9th participant).

Physical problem

In addition, students believed that prolonged night shifts could be tiresome for students and lead to tiredness in the next shift. Physical complications such as insomnia,

headache, dizziness, nausea, loss of function in the next day, and boredom have been recognized as the disadvantages of a night shift.

"...After the night shift, I had a headache, nausea, and very bad vertigo..." (4th participant).

Emotional problem

The personnel misbehave with internship students, often disrespect them, and call them with a bad tone and refuse to use their own names. On the other hand, students think that they are used by the personnel as forced labor, which emotionally disturbs them.

"We have problems with the way the staff communicates with us. They generally disrespect students." (8th participant).

Gaining new experiences

The subcategories of "gaining new experiences" include obtaining the ability of critical thinking and clinical decision-making, learning how to deal with new clinical situations, socialization, and gaining the ability to manage time.

Obtaining the ability of critical thinking and clinical decision-making

Students learn how to decide in critical situations in night shifts. In addition, their decision-making and autonomy increase in this type of shift. Moreover, they think about the issues related to patients in the clinic before taking measures, and learning occurs by observing the personnel's performance in special situations.

"...when you encounter a problem and deal with a new challenge, you do your best to solve it..." (8th participant).

How to deal with new clinical situations

Students learn about the hardship of working in a hospital and understand patients after interacting with them for a long time. In addition, they gain more experience, ask their questions from the personnel and physicians, and have more learning opportunities in interaction with patients. Moreover, they experience things that they did not learn from their instructors, such as writing reports, and gain new experiences in cardiopulmonary resuscitation and dealing with critical situations. Since working independently is exciting, students attempt to deal with different patients. During their spare time and in case of low workload, they can study patients' reports and take medical histories from patients with their consent. All of these practices lead to gaining new experiences.

"In one of the cases, Paroxysmal supraventricular tachycardia (PSVT) came on the display every few seconds. I have never seen such arrhythmia. We took an ECG and showed it to the emergency physician..." (Second participant).

Socialization

Nurses can encourage students to work with proper communication. The feeling of being supported by some nurses in night shifts, the need to learn from nurses, and considering them as role models strengthen positive socialization among students. On the other hand, learning mistakes from nurses, misbehavior with patients, lack of checking patients regularly, and observing nurses' mistakes were among the negative socialization experiences of nursing students. The way nurses interact with each other and other hospital staff can be learned by students. In addition, students learn about social interactions, interacting with other staff, working with their peers, and even interacting with students from the personnel.

"However, the personnel of some wards are good people and cooperate with us. I like to work in such wards and such people." (3rd participant).

Gaining the ability to manage time

Students learn how to manage time in dealing with critical and noncritical situations in night shifts. They learn the importance of time management when patients have a critical situation or when they have to administer medicine for all patients in the ward without the help of others.

"One issue is time management; it takes a lot of time to administer drugs for all patients..." (participant number 1).

Gaining independence

Being independent of the instructor, making independent decisions, and gaining self-confidence were subcategories of gaining independence.

Being independent of the instructor

In night shifts, students work independently and without the supervision of an instructor. Working in this shift provides them an opportunity for independent work, which makes them feel good, and they can see the result of their work.

"You feel like you always have support when an instructor supervises your work, which is not always good and you must learn how to work independently." (8th participant).

Independent decision-making and gaining self-confidence

Students mentioned that they can make clinical decisions independently, which increased their self-confidence in handling issues alone.

"Another point is that we were able to decide independently like a real staff..." (2nd participant).

Discussion

According to the results of the present study, internship nurses in night shifts are exploited and bullied by the

personnel. In addition, they think that they are alienated by the staff since the personnel does not trust or support them. In addition, proper rest and sleep place, similar to the one provided to the personnel, are not allocated to students. Moreover, the personnel misbehave with the students and do not inform them of the risks in the wards when dealing with patients. Furthermore, students experienced moral distress due to observing the mistakes of the medical and nursing team, inconsistency between theory and practice in the clinic, and the possibility of unwanted errors at work. Another problem in the night shift was learning deficits. However, there were some advantages such as gaining new experiences and the ability of critical-thinking and clinical decision-making, learning how to deal with new clinical situations, socialization, and gaining the ability to manage time. In fact, students gained independence by working and deciding alone.

In a study, Faseleh Jahromi *et al.* assessed the experiences of novice nurses in night shifts, reporting five main issues including the value system, mental and physical problems, social relations, organizational problems, and a good opportunity,^[19] which is consistent with our findings in terms of physical and mental problems and social relations. This similarity could be justified based on the fact that internship students are similar to novice nurses in terms of the level of experience. Assessing the experiences of night shift Iranian nurses, Nasrabadi *et al.* concluded that the three main issues related to this shift were sociocultural effects of night work, the impact of night work on health, and night work as an opportunity to gain more clinical experiences.^[7] Similar to the mentioned study, the night shift problems were psychological, physical, and emotional, and students learned new experiences in dealing with new clinical situations. Moreover, the gained the ability of critical-thinking and decision-making and how to manage time. These results confirm that night shifts can affect the health of each employee, including students and staff, and enhance clinical experiences for both students and staff.

Gifkins *et al.* compared nurses' perceptions of short- and long-term shifts and found a difference between novice and experienced nurses in three main fields in terms of occupational challenges, including perceptions about the usefulness of shift work, adaptation, and social support strategies at home and work.^[18] In the present study, student was expressed the feeling of psychological problems due to exploitation by the nurses. In this regard, Budden *et al.* reported that there is a high rate of bullying in nursing students, which causes them to feel anxious and depressed. They also noted that the experience of bullying in nursing students would have a negative effect on patients care.^[21] In the present

study, the advantages of night shifts were gaining new experiences and obtaining independence. However, nurses and students were not compared in the current research. Consistent with our findings, Nilsson reported special features for night shifts due to the difference between morning and night shifts in terms of clinical experiences and learning. One of the causes of this difference is changes in the duties of night nurses, such as routine and predictable routines (e.g., writing reports and administering medicine), unpredictable responsibilities when dealing with patients with critical conditions (e.g., pain and restlessness), and nonnursing duties (e.g., recording and sending tests).^[3] In line with these results, Perry *et al.* showed that nurses' behavior significantly affects students' responsibility for learning, and this causes students to be sufficiently prepared for professional practice and to act independently.^[22] In the present study, the problems of night shifts pointed out by students included learning deficits and psychological and physical problems. In a study, Palese *et al.* compared morning and night shifts, reporting lower satisfaction and clinical learning and higher fatigue levels for nurses in night shifts.^[9]

One of the major drawbacks of the present study was assessing students' experiences of problems and benefits of night shift internship and lack of evaluating the attitude of nursing personnel, professors, and healthcare system toward these issues.

Conclusion

In general, the goal of nursing internship and night shift course is to learn more in clinical situations, perform independent work, become familiar with the performance of nurses in the night shift, and perform the shift work. The present study led to the identification of problems in night shifts such as exploitation and bullying students, which must be followed up by the medical education system so that the deficiencies related to student learning and how staff interact with students that lead to a sense of alienation can be resolved by holding meetings and justifying supervisors and nurses. However, given the benefits of night shifts for students, including gaining new experiences, gaining the ability of critical-thinking and clinical decision-making, learning how to deal with new clinical situations, socialization, gaining the ability to manage time, and obtaining independence in work, it is recommended that student internship courses at night shifts continue for these individuals.

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Conflicts of interest

There are no conflicts of interest.

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