

## Novice Nurses' Perception of Working Night Shifts: A Qualitative Study

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ARTICLE INFO	ABSTRACT
<p><b>Article type:</b> Original Article</p> <hr/> <p><b>Article History:</b> Received: 5 Dec. 2012 Accepted: 4 Apr. 2013 ePublished: 27 Agu. 2013</p> <hr/> <p><b>Keywords:</b> Perception Nursing Nursing service Hospital Night work Qualitative Research</p>	<p><b>Introduction:</b> Nursing is always accompanied by shift working and nurses in Iran have to work night shifts in some stages of their professional life. Therefore, the present study aimed to describe the novice nurses' perception of working night shifts.</p> <p><b>Methods:</b> The present qualitative study was conducted on 20 novice nurses working in two university hospitals of Jahrom, Iran. The study data were collected through focus group interviews. All the interviews were recorded, transcribed, and analyzed using constant comparative analysis and qualitative content analysis.</p> <p><b>Results:</b> The study findings revealed five major themes of value system, physical and psychological problems, social relationships, organizational problems, and appropriate opportunity.</p> <p><b>Conclusion:</b> The study presented a deep understanding of the novice nurses' perception of working night shifts, which can be used by the managers as a basis for organizing health and treatment systems.</p>

### Introduction

Shift working is an old social phenomenon which has its roots in the history of human life. Besides, more attention is being paid to this phenomenon after the industrial revolution and development of science and technology, particularly invention of artificial light sources which resulted in creation of 24-hour societies.<sup>1</sup> According to the statistics, the prevalence of shift working is 15-20% and 20% of the workforce in European countries and the U.S, respectively.<sup>2</sup> Although shift working is quite vital for a lot of organizations and public as well as private institutes to continue their activities, based on the studies by Harington institute, only 10% of the individuals working night shifts enjoy

their shift work and the others just tolerate it.<sup>3</sup>

Due to its specific nature, nursing is one of the occupations which require rotations in the working time and these shift works affect the nurses' physical as well as psychological health.<sup>4</sup> Moreover, night working in nursing is usually accompanied by socio-cultural as well as ethical challenges. Of course, this problem is not restricted to Iran and exists in all family-oriented countries, including Pakistan, Japan, and even some developed countries. In Iran, night working has been always one of the basic problems of the nursing society; such a way that a great number requests, in which the nurses state that if they are not agreed to work during the day, they will not be able to continue working, are daily

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sent to the universities' office of nursing. Even experienced nurses are also faced with this problem.<sup>5</sup>

Based on the studies conducted on the nurses' shift working schedules, a poorly designed working schedule can have effects on the quality of healthcare, patient satisfaction, duration of inpatient treatment, absence from work, effectiveness of expenditures, and productivity.<sup>6</sup> However, some studies, such as the one performed by Choubineh *et al.* have shown that shift workers who have voluntarily chosen to work in shifts have more job satisfaction and complain less about shift working problems.<sup>7</sup>

Overall, night working is a necessity in providing medical and nursing services and the prevalence of its related issues is highly effective in the nurses' personal life as well as service quality and both the patients' and the employers' level of satisfaction. Moreover, qualitative research is based on the naturalistic paradigm which investigates the human phenomena which have their roots in social sciences; therefore, this method is considered as the best for describing the life experiences.<sup>8</sup> Consequently, the present qualitative study aims to explain the viewpoints of the nurses passing their project period; so that the results will be used in developing appropriate interventions for dealing with the above-mentioned problems.

## **Materials and methods**

In general, qualitative research methods aim to discover and understand the humans' inner world. In fact, the individuals' experiences form the structure of the reality for them and only by entering their world of experiences, the researchers are able to discover the meanings of the phenomena from their point of view.<sup>9</sup> Thus, in order to discover the participants' experiences, the qualitative approach, which is appropriate for extracting the perceptions from the

literature particularly in exploratory studies, was utilized in this study.

The current study was conducted on the 20 nurses who were working in two university hospitals affiliated to Jahrom University of Medical Sciences, Jahrom, Iran, had the experience of night working, were working in rotational shifts, and was willing to cooperate with the researcher. The average age of participants was 23 years and the mean duration of nursing experience was 1 years. The samples were selected through purposeful sampling and the study data were collected through focus group interviews which were performed by one of the researchers. Considering the study objectives, the interviewer tried to have the least interference and accelerate the interview by asking lead-in as well as clarifying questions. After establishing the arrangement and asking for the subjects' permission, all focus group interviews were recorded using a digital tape recorder and converted into the audio files which could be transferred to the computer. Overall, the focus group interviews lasted for 40-80 min with the mean of 60 min. Due to the nature of the issue, observation was not possible; therefore, field notes were used in order to note the environmental conditions as well as the participants' non-verbal responses during the focus group interviews. By doing so, the researcher aimed to use the supplementary method for data collection and, at the same time, complete the breaks in the categories obtained from the data. In order to prevent the misinterpretation of the data, the researcher transcribed the focus group interviews and completed the information using the field notes immediately after the interviews. After the initial coding, the transcriptions were given to some of the study participants and the ambiguous parts were removed. The researchers' recorded reminders were also of great help in this process.

Furthermore, constant comparative analysis

and qualitative content analysis were used in order to analyze the data. In order for first level coding, the data were studied line by line and live codes; i.e., the codes obtained from what the participants say, were identified as open codes. In the second level, the coded data were compared with the other data and the categories were created. Categories are in fact the simple coded data created by combining the conceptually similar clusters or, in other words, accumulation of level one codes. Finally, conceptual topics were developed from the categories in the third level. Data collection was stopped after four 5-participants focus group interviews in their workplaces and reaching the point of data saturation. Data saturation refers to the point no new themes can be found in what the participants' say.<sup>10</sup> In order to ensure the consistency of the data, analysis was performed by two researchers both together and separately. Moreover, different methods, such as constant observation and investigation, allocation of enough time for data collection, building good relationships with the participants, and performing the interviews in appropriate places selected by the participants, were used in order to increase the acceptability and reliability of the data. Data acceptability was also increased by reviewing, modifying, and confirming the transcriptions by some participants as well as the external checks. The researcher also tried to reach agreement with the participants regarding the meaning of the data and what he had presented through the themes.

This research has been approved by the Ethics Committee of Shiraz University of Medical Sciences(2013-123), also Getting license for conducting the study from the college and workplace as well as the participants' workplace, obtaining written informed consents from the participants for recording the interviews, explaining the study objectives to the subjects, observing the ethical issues in writing the field notes as

well as secrecy in publishing the information, letting the participants resign from taking part in the study whenever they intended to, observing the authors' rights while using the literature and print as well as electronic resources, and providing the participants with the results were the ethical issues the researchers took into account in this study.

The limitations of the study included the difficulty of gathering the volunteer nurses who worked in different work shifts together and finding an appropriate, quiet place for the interviews.

## Results

As a result of constant comparative analysis and qualitative content analysis, 5 main themes were extracted. Each theme also included several subcategories which represented its major dimensions. The main themes of the study were value system, physical and psychological problems, social relationships, organizational problems, and appropriate opportunity.

### *Value system*

In this study, the majority of the participants emphasized that women and particularly young girls have to be at home during the night and considered their being out as a kind of opposition to individual, familial, and social values, even if they were in an official workplace. One of the participants said: "Even if nothing happens to a person during the night shift, if she is touched by someone, it will always remain in her mind". Most of the study participants mentioned that their families were against their daughters' or wives' night working. For instance, one of them said: "My family believes that it is better for a young girl to be home at night rather than being at the workplace. They say that working in the morning and evening is OK, but I have to be home at night".

Furthermore, the study participants believed that night working was opposed to their

social values. For example, one of the participants stated: "If the companions of the patients see that we are laughing with a guy, they look at us in a terrible manner".

#### *Physical and psychological problems*

All the participants complained about their physical as well as psychological problems resulting from night working among which, stress due to the workplace conditions, insomnia, sleeping disorders, and some physical problems were more prevalent. Considering this issue, one of the participants said: "When I enter my workplace, I spend the night with working stress." Also, another one mentioned: "We have seen nothing from night working but insomnia, fatigue, and illness". Besides, another participant said: "After working at night, I usually have stomachache or headache or I am impatient".

#### *Social relationships*

Based on the study participants' another subsequence of night working was disruption of their relationships with their families as well as the society due to the continuous night shifts and being required to work in previous and following shifts, as well. For instance, one of the participants mentioned: "During the six months that I have entered the hospital, I have not gone to a travel or even to a party. Whenever there is a ceremony, it is cancelled because of my shift working."

#### *Organizational problems*

Another theme of the present research was the organizational problems related to night working. The subcategories of this theme include the feeling of fear and insecurity in the last hours of the night which results from organizational deficiencies, the managers' not understanding what the nurses passing their project period say, excessive working pressure, discrimination between the nurses passing their project period and physicians as well as other nurses, and lack of welfare facilities for spending a 12.5-hour night shift. In this regard, one of the participants

mentioned: "When all the others are sleeping at night, we are not secure in the hospital. There is also a lot of work to do". Another one also explained: "Our rest room is located where the patients' noise does not let us sleep. The nurses want to rest for one hour, but they cannot sleep or even lie down". In addition, during one of the focus group interviews, one participant stated: "Sometimes, the authorities do not listen to you, do not understand you to employ an extra workforce or find a solution for you".

#### *Appropriate opportunity*

Some of the nurses did not consider all the dimensions of night working unfavorable. On the other hand, they believed that sometimes working night shifts provided them with great opportunities for learning, thinking, spiritual promotion, practicing autonomous performance, and solving their personal problems. One of the participants said: "Sometimes we receive excellent trainings at night because some cases can only be found during the night shifts, not in the morning or evening shifts". Another participant also stated: "Sometimes when I am working at night and have fewer patients, I read Quran". In addition, another one mentioned: "We usually work more autonomously at night and learn much more beside the patients". Another participant also said: "If I am off after the night shift or have to work in the following evening, I do my housework."

## **Discussion**

Individual, familial, and social values form the basis of the individuals' thought and deviation from them is considered as conflict with oneself, family, and society. Women's night working in hospitals is not quite approved in family-oriented societies, such as Iran. The participants of the present study also pointed to this issue and mentioned it as one of the challenges of their night working. This is consistent with the findings of the study conducted by Nikbakht Nasrabadi

et al. showing that most of the subjects emphasized their own, the family members', and the society's negative socio-cultural attitude toward shift working.<sup>11</sup> They also performed another study in 2004 and showed that the majority of the society members and even the nurses as well as their families had a negative attitude toward the women's night working.<sup>12</sup>

Considering the theme of "physical and psychological problems", there are a great number of studies most of which confirm that night working in unconventional hours is accompanied by a large number of damages and negative points for humans. For instance, Choubineh et al. showed shift working to have lots of effects, such as psychological and gastrointestinal problems, on the operating room technicians.<sup>7</sup> In the same line, Motamedzadeh et al. conducted a study on the personnel of one of the educational hospitals affiliated to Hamadan University of Medical Sciences, Hamadan, Iran and revealed the significant increase of blood pressure due to shift working and that there were significantly more smokers among the shift workers. Therefore, shift working, as one of the major workplace stressors, can be one of the risk factors of cardiovascular diseases.<sup>13</sup> Moreover, Hojati et al. showed that insomnia in nurses led to a decrease in public health. They also mentioned fatigue and feeling of excessive pressure and stress as the main problems of the nurses working night shifts.<sup>14</sup> In the research by Pati et al. also, most nurses working night shifts suffered from sleeping disorders.<sup>15</sup> According to the participants of the study by Nikbakht Nasrabadi et al. the physical effects of night working included chronic headaches, weight loss, chronic fatigue, skin disorders, sleeping disorders, taking frequent naps during the day, and gastrointestinal problems. They also mentioned sleeping disorders, anxiety, inactivity, need for hypnotic drugs, and reduction of accuracy as well as concentration as the psychological effects of

night working.<sup>16</sup> Thus, all these findings are consistent with those of the current study.

Another main theme of the present study included the issues related to the participants' social relationships and as mentioned before, night working, particularly if it is accompanied by working in previous and following shifts, or continuous shift works can lead to the disruption of the personnel's relationship with the family members as well as the society and also have destructive effects on their marital, familial, and social relationships. This is in agreement with the results of the study by Heidary and Hosseinpour which showed that the mean of night working women's sexual relationships with their husbands was significantly lower than that of the ones working in other shifts.<sup>17</sup> Moreover, Choubineh et al. revealed a significant relationship between social relationship and shift working as well as the prevalence of its undesirable effects.<sup>7</sup> Jabbarzadeh et al. also investigated the effects of night working on the nurses working night shifts and showed that most study cases suffered from social function disorders, including the decrease in taking part in recreation as well as social activities.<sup>18</sup> Furthermore, the findings of the study by Gholizadeh revealed a significant relationship between shift working in petroleum industry and family problems. It was also shown that shift working was accompanied by disorders in educational, psychological, emotional, and family management issues.<sup>19</sup>

The fourth theme of the current study was organizational problems which represented the problems resulting from the workplace organizational structure, managers, colleagues, and other environmental factors related to the nurses and leading to the nurses' feeling of fear, frustration, disappointment, and lack of job satisfaction. Considering the great emphasis on the codes comprising this theme, it can be mentioned as the most important challenge of night

working from the study participants' point of view. Concerning the subcategories of this theme, insecurity has been mentioned by other researchers, as well. For instance, McMahan states that the public media frequently report events about the hospital staff which shows the lack of security for the staff at night shifts. Night supervisors, he continues, have to look around the hospital and have everywhere under control and they report frightening experiences during the night. In addition, having a permanent security guard might be costly, but it is necessary especially in case they have to go to insecure parts of the hospital.<sup>20</sup>

Another subcategory of this theme is the lack of welfare facilities; for instance, lack of an appropriate place for a short sleep during the night, lack of warm food and having to use the leftover, cold, poor-quality food, and lack of proper time and place for sitting and revitalization during the long hours of night work. Although the literature and management articles have put great emphasis on providing welfare facilities for the staff of the organizations, particularly the hospitals which require performing difficult works as well as working in unconventional hours, due to the lack of facilities and incorrect management methods, these issues are unfortunately neglected in some hospitals and the explicit laws are even sometimes ignored. In order to solve these problems, Choubineh *et al.* as well as Nikbakht Nasrabadi *et al.* recommend shorter hours of night work, providing appropriate places for rest in the department, using warm food during the night shift, and training the night workers regarding special diets.<sup>7,16</sup>

In this study, long shifts, large volume of work, and small number of personnel for night shifts were other problems related to the organizational problems which were located under the subcategory of working pressure. Although the nature of nursing and night working increases the pressure on the personnel and requires the efficiency of

skillful workforce in each shift, according to the researchers' experience in clinical nursing works and presence in night shifts, the experienced personnel complain less about this issue compared to the less experienced nurses participating in this study. This difference might be due to the fact that novice nurses have not gained sufficient experiences and skills in order to overcome this problem by accurate time management as well as agility, use the remaining time for doing other tasks, and feel less working pressure. Of course, this point does not reduce the responsibility of hospital and nursing managers for eliminating the existing barriers for solving this problem.

Another proposed issue related to the theme of organizational problems is discrimination and lack of the managers' understanding. According to the study participants, in addition to ignorance and lack of accurate understanding of the nurses' problems and complaints, hospital and nursing managers discriminate between the nurses and the physicians, always consider the physicians rightful, and condemn the nurses all the time. Moreover, the pay less attention to the nurses passing their project period and impose the burden of a large number of problems only on their shoulders. This finding was confirmed by the results of the study conducted by Valizadeh *et al.* in order to determine the challenges of nursing students' education period; in a way that one of the 3 main themes of the study was "lack of the society's attention to the dignity of nursing". They believed that the cultural structure of most healthcare institutes in Iran cause the nurses to be located in a lower status in comparison to the managers most of whom are physicians. In this way, independence which is one of the features of professionalization is threatened.<sup>21</sup> The researchers of the present study believe that observing equity and justice in each society and organization, including the healthcare staff, forms the basis of a fresh, motivated

organization for well performance of its responsibilities. On the other hand, injustice and discrimination leads to dissatisfaction which, consequently, results in disorders in performing tasks, presenting services of low quality, staff's quitting their jobs, damages to the organization, stigmatization, and bankruptcy.

In spite of the fact that most of the studies conducted on night working focus on the problems and challenges of this phenomenon, by having a positive attitude, one can investigate this apparently negative issue from another perspective. For instance, the participants of the current study stated that night working provided them with the opportunity for learning more, thinking, spiritual promotion, solving personal problems, practicing autonomous performance, building close relationships with the patients, and using their experiences. One of the themes obtained from the research by Nikbakht Nasrabadi is quite consistent with the fifth theme of the present study. He stated that the nurses working night shifts agreed that more knowledge and skill can be obtained during night work. Authority and independence are also other dimensions which can be obtained by night working nurses.<sup>16</sup> McMahan also conducted a study regarding the professional needs on 45 nurses who had to answer the study questionnaires through post. According to the results, the nurses had found a great number of professional needs in working night shifts, which might be due to the fact that they had experienced the management role and some degrees of responsibility during the night.<sup>20</sup> Considering the role of the relationship between the nurses and the patients during the night shift, Nikbakht Nasrabadi et al. believe that the active interaction between the nurses and the patients during night shifts, when the nurses have close relationships with the patients and feel more responsible toward caring for several patients, improves the nurses' knowledge

and quality of work and makes them skillful individuals in treatment issues.<sup>16</sup>

## Conclusion

In this study, the participants expressed their peculiar perceptions and viewpoints regarding night working based on the working conditions. In general, the findings of qualitative studies cannot be generalized and by changing the working and environmental conditions, the viewpoints about night working may change and other results may be obtained. However, as mentioned in the discussion section, most of the themes of this study are in agreement with the findings of other studies conducted on the issue, which shows the relative similarity of the novice nurses' problems all around the world in general and in Iran in particular when being faced with night working and requires public attempts to be made in order to eliminate the existing problems and strengthen its positive points. In order to solve the consequences of this unwanted phenomenon, the researchers recommend more studies on this issue, covering subjects related to night working issues in the students' educational curriculum, improving the nurses' level of knowledge and capability for dealing with critical situations and accurate time management, paying attention to the night workers' welfare issues, making necessary arrangements for solving the physical and psychological problems resulting from night working, making advertisements in the public media in order to change the people's attitude regarding the importance and necessity of the nurses' working night shifts, reducing the working hours, and avoiding the inappropriate schedules of shift working. Moreover, since qualitative studies cannot deeply investigate this issue, it is recommended to be investigated more accurately in quantitative studies in order to discover and explain its unidentified dimensions.

## Ethical issues

None to be declared

## Conflict of interest

The authors declare no conflict of interest in this study.

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