

Night Shift Duty of Nurses and its Effects on Family and Social Lives

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ABSTRACT

Background: The problem with a night shift working at that, the human race is diurnal, who are functions during day time. Night workers report a number of health problems. Therefore these negative effects have consequences not just for individual, but also for work place, as decreased alertness and reduced job performance that could endanger human lives and affect the quality of life. The assumption is that ergonomically designed shift schedules will assist in the reduction of physiological and psychosocial hazards in the workplace.

Objective: This study was aimed to find out the factors influencing night shift of nurses working in Shahid Ziaur Rahman Medical College Hospital, Bogra

Methods: A descriptive study was used in this study. Data was collected using semi-structured questionnaire and the data was analyzed using SPSS.

Results: Here, 16% of the respondents felt discomfort during night shift. 66% they don't get enough sleep after night duty. 60% of the respondents mentioned that night shift sometimes affects their attitude negatively. 70% stated that night shift sometimes affects their mood. 70% also stated that night shift sometimes disturbs their social life. 80% mentioned that night shift sometimes increases interpersonal conflict in their family.

Conclusion: The findings revealed that the participated nurses were not comfortable with night shift at all. Night workers accumulate a sleep deficit and sleepy workers make mistakes. The most dangerous are those who build up a "sleep debt" depriving themselves of sleep over long periods.

KEYWORDS: Night shift duty, Family life, Social life.

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INTRODUCTION

In the realm of healthcare, nurses play a pivotal role in providing round-the-clock care to patients, often necessitating work schedules that extend beyond traditional daytime hours. Night shift duty has become an integral part of the nursing profession, ensuring continuous and uninterrupted medical attention for those in need. However, the adoption of nocturnal work patterns among nurses has raised concerns about its potential impact on their family and social lives. This phenomenon prompts an exploration into the intricate interplay between the demands of night shift duty and the well-being of nurses in their familial and social spheres.

The American Nurses Association (ANA) acknowledges the prevalence of non-traditional work hours in the nursing profession, with a significant portion of nurses participating

in night shift rotations (ANA, 2014). The adoption of night shifts is often driven by the continuous need for 24/7 patient care and the imperative to maintain operational efficiency within healthcare institutions. The significance of this topic is underscored by the growing body of research that acknowledges the unique challenges faced by nurses working during the night. Long-term exposure to night shifts has been associated with various physiological and psychological consequences, such as disrupted sleep patterns, increased risk of chronic conditions, and heightened stress levels (Bogossian et al., 2017; Dall'Ora et al., 2015). As nurses strive to meet the healthcare needs of a 24/7 society, it becomes imperative to comprehensively examine the repercussions of night shift duty not only on

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their individual health but also on the dynamics of their family and social relationships.

Understanding the impact of night shift duty on nurses' lives is underscored by the substantial body of literature documenting the physiological and psychological toll it can take. Research indicates that nurses working night shifts often experience disruptions in their sleep-wake cycles, leading to adverse health outcomes such as increased risk of cardiovascular diseases and compromised mental health (Scott et al., 2017; Wang et al., 2019). Moreover, the repercussions extend beyond the individual, affecting the fabric of familial and social connections. Studies suggest that the irregular working hours of night shifts may contribute to difficulties in maintaining family cohesion, impacting the availability and quality of time spent with family members (McPhail et al., 2018). These challenges can manifest in heightened stress levels and strain on familial relationships, warranting a closer examination of the delicate balance nurses must navigate between their professional commitments and personal responsibilities. The challenges posed by night shifts extend beyond the professional domain, influencing the availability and quality of time spent with family members and potentially straining familial relationships (Stimpfel, Brewer, & Kovner, 2019). By acknowledging and understanding the delicate balance nurses must navigate between their dedication to patient care and their familial responsibilities,

Existing research has illuminated the physiological and psychological effects of night shift work on individuals, pointing to disruptions in circadian rhythms, sleep patterns, and overall health (Kecklund & Axelsson, 2016; Ganesan et al., 2019). Moreover, the social and familial consequences of night shift duty have been documented, revealing challenges in maintaining interpersonal relationships and participating in community activities (Trinkoff et al., 2006; Geiger-Brown et al., 2012). Through a comprehensive review of the literature, this paper aims to provide a thorough understanding of the intricate interplay between night shift duty, family dynamics, and social interactions among nursing professionals. This study aims to contribute to a comprehensive understanding of the intricate

relationship between the professional commitments of nurses and their personal lives.

MATERIALS AND METHODS

Study design: This was a descriptive type of cross-sectional study

Study setting: The study conducted at Shahid Ziaur Rahman Medical College Hospital, Bogra, Bangladesh.

Study Period: 1 January to 30 June, 2016.

Study population: The study populations were nurses working in Shahid Ziaur Rahman Medical College Hospital, Bogra, Bangladesh.

Sample size and sampling: Convenience sampling technique was used

Data collection: Structured questionnaires was developed by the researcher and face to face interview conducted for data collection.

Data analysis: After collection of data, collected data were coded and entered into the SPSS version 22.0 software program for analysis. Descriptive statistical analysis was used to calculate the frequencies and percentages.

Ethics:

- Permission of concerned authority of the hospital was taken.
- Objectives of the study explained in brief to the respondents.
- Informed consent taken from each and every respondent before collection of data.
- Privacy and confidentiality was ensured and maintained strictly.
- Respondents have the right to withdraw themselves from the study any time during data collection period.
- They assured that there would be no physical and mental harm to them during the study as there is no invasive procedure applied.

RESULTS

Table 1: Socio-demographic characteristics of the respondents (n=200)

Age group (in years)	Frequency	Percentage
≤33 year	28	14.0
34-39 year	88	44.0
40-45 year	52	26.0
46-51 year	20	10.0
52-57 year	12	6.0
Mean age =37.54 SD=14.80		
Gender		
Male	20	98.0
Female	180	2.0

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Marital status		
Married	196	98.0
Unmarried	4	2.0
Qualifications		
Diploma in nursing/Midwifery	164	82.0
B.Sc. nursing	28	14.0
MPH/M.Sc.	8	4.0
Length of service (in years)		
≤10	96	48.0
11-20	52	26.0
21-30	52	26.0
31-32	0	0.0
Total	200	100

Table 1 show that, majority of the respondents (44%) were of age group 34-39 years, (98.0%) respondents were female the remaining were male, almost all (98%) the respondents were married, (82.0%) respondents had diploma in nursing

& midwifery, followed by those with B.Sc. in nursing (14.0%) and slightly below half (49.4%) of the respondents had service experience <10 years, followed by 10-20 years (34.3%).

Table 2: Distribution of the respondents according to factors influencing of night shift duty (n=200)

S/NO	Attributes	Yes	(%)	No	(%)
01	Do you feel discomfort during night shift	32	16	168	84
02	Do you get enough sleep after night duty?	68	34	132	66
03	Is there any health problem for night shift?	92	46	88	44
04	Do you think night shift is fearful for nurses?	24	12	176	88
05	Do you take enough tea or coffee for night shift?	112	56	88	44
06	After night shift work do you experience any problem to fall a sleep?	84	42	116	58
07	Do you take sedative after night duty?	68	34	132	66
08	Do you think less sleep occur poor performance at work?	60	30	140	70
09	Is night shift comfortable?	20	10	180	90
10	Is night shift causes an imbalance in between desired lifestyle and work	68	34	132	66

Table 2 shows factors influencing night shift duty of nurse's personal and social life. Here, 16% of the respondents feel discomfort during night duty. 66% of the respondents they don't get enough sleep after night duty, 42% mentioned that they normally take tea or coffee for night shift duty, during

night shift duty 42% respondents experienced any problem to fall asleep. 34% were taking sedative after night duty. Among 200 nurses, 34% stated that night shift causes imbalance in between desired life style.

Table 3: Distribution of the respondents according to opinion regarding night shifting (n=200)

Questions	Almost always		Sometimes		Almost never	
	n	(%)	n	%	n	(%)
Does night shift affect your attitude negatively towards nursing?	0	0	120	60	80	40
Does night shift affect your mood?	0	0	140	70	60	30
Does night shift disturb your social life?	12	06	140	70	48	24
Does night shift increase interpersonal conflict in your family?	20	10	160	80	20	10

Table 3 shows some information from the participants, 60% of the respondents mentioned that night shift sometimes affect their attitude negatively. 70% stated that night shift sometimes affects their mood. 70% also stated that night

shift sometimes disturbs their social life. 80% mentioned that night shift sometimes increases interpersonal conflict in their family.

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DISCUSSION

The results from Table 1 shed light on the diverse characteristics of the respondents in terms of age, gender, marital status, educational background, and service experience within the nursing and midwifery profession. These findings contribute valuable information for policymakers, healthcare institutions, and educators in tailoring strategies to meet the unique needs and challenges faced by the nursing workforce. The overwhelmingly female composition of the respondents, with 98% identifying as female, is consistent with the global trend in nursing and (AACN, 2018). This suggests a diversification of educational backgrounds among nursing professionals, potentially contributing to a more robust and versatile healthcare workforce.

One notable result is that 16% of respondents reported feeling discomfort during night duty. This discomfort could be attributed to various factors such as circadian rhythm disruptions, environmental conditions, or the nature of tasks performed during the night shift. Such discomfort may contribute to increased stress levels and potential health issues among nurses, emphasizing the importance of addressing working conditions to ensure the health and safety of the nursing workforce (Knutsson et al., 2013).

A substantial 66% of respondents reported not getting enough sleep after night duty. Sleep deprivation among healthcare workers, particularly those engaged in night shifts, is a well-documented concern (Barger et al., 2019). The implications of insufficient sleep are broad, affecting cognitive function, decision-making and overall job performance. This result underscores the need for interventions and policies aimed at promoting adequate rest and recovery for nurses working night shifts.

The reliance on stimulants is evident, with 42% of respondents mentioning that they normally consume tea or coffee during night shift duty. Caffeine consumption is a common coping strategy for night shift workers to combat fatigue and enhances alertness (Ruggiero et al., 2020). While moderate caffeine intake may have short-term benefits, it is essential to consider long-term health implications and explore alternative strategies to support nurse well-being during night shifts. The finding that 42% of respondents experienced problems falling asleep during night shift duty raises concerns about the sleep quality of nurses working in these conditions. Sleep disturbances can have cascading effects on physical and mental health, potentially leading to burnout and reduced job satisfaction (Scott et al., 2017). Addressing the factors contributing to sleep difficulties is crucial in designing effective interventions and support systems for nurses. Perhaps one of the most striking results is that 34% of the nurses stated that night shifts cause an imbalance in their desired lifestyle. This finding underscores the broader impact of night shift work on the personal and social lives of nurses. Strategies to mitigate this imbalance may include flexible scheduling

midwifery, where women have historically dominated these professions. This aligns with studies that highlight the predominance of females in the nursing workforce (Chur-Hansen, 2016; WHO, 2020). The negligible percentage of male respondents, while not uncommon, could be a focus for future research, exploring the factors influencing gender imbalances within the nursing and midwifery fields. The presence of 14% of respondents holding a B.Sc. in nursing is noteworthy and aligns with the global trend towards increasing educational attainment in the nursing profession options, comprehensive support systems, and measures to enhance work-life integration for healthcare professionals (Caruso, 2014).

A noteworthy observation is that 60% of respondents reported that night shifts sometimes affect their attitude negatively. Work-related stressors, including disrupted sleep patterns, fatigue, and the demanding nature of healthcare work during night shifts, may contribute to this negative impact on attitudes (Geiger-Brown et al., 2012). 70% of respondents indicated that night shifts sometimes affect their mood. The connection between night shift work and mood disturbances has been documented in the literature, with studies suggesting a potential link between irregular work hours and mood disorders (Barger et al., 2019). 80% of respondents mentioned that night shifts sometimes increase interpersonal conflict within their families. The impact of night shift work on family dynamics has been well-documented, with studies highlighting the challenges faced by individuals attempting to balance work responsibilities with family obligations (McMurray, Pace, & Scott, 2004). This finding underscores the need for comprehensive family support programs and flexible work arrangements to mitigate the strain on family relationships associated with night shift work.

CONCLUSION

In conclusion, the results reveal the nuanced psychosocial challenges faced by nurses engaged in night shift work, including negative attitudes, mood disturbances, disruptions to social life, and increased interpersonal conflicts within families. Addressing these challenges requires a holistic approach, encompassing organizational policies, mental health support, and family-friendly initiatives to ensure the well-being and job satisfaction of nurses working non-traditional hours.

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Conflicts of Interest

The authors declare no conflicts of interest.

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