

Research Article

Assessment of Barriers to Sleep Patterns in Adult Hospitalized Patients Admitted in Oncology Ward at a Tertiary Care Hospital

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ABSTRACT

Purpose: Sleep disturbance is one of the most common issues in patients suffering from cancer. For healthy functioning, sleep is the basic need of every individual. Sleep has a ripple effect on human body systems. The purpose of this study is to evaluate the quality of sleep of patients admitted in oncology wards at the Aga Khan University Hospital and the factors contributing to sleep disruption.

Method: The study was a prospective observational study conducted in the Department of Oncology, Aga Khan University over the period of two months from March 2019 to May 2019. The participants were selected using a non-probability convenient sampling, considering the constraints of time. A pre validated questionnaire was administered to 50 patients and 30 nursing staff of the same unit.

Results: For the study 50 participants were included in which 64% were male and 36% were female patient'. The length of stay of that patient was 3 to 14 days in oncology unit. The result reveals that 82% sleep was disturbed due to the external factors while in 18% it was due to the internal factors.

Conclusion: Sleep deprivation should be a major cause for concern for healthcare providers. The nurse taking care of cancer patients needs to be extra vigilant to sleep disturbances. Quality of life can be negatively influenced due to lack of sleep when suffering from cancer.

Keywords: Sleep, Disturbance, Hospital, In-Patient, Oncology.

1. INTRODUCTION

Sleep is an essential component of human behavior which contributes to good health and survival. Sleep deprivation will have multiple effects on patients which includes physiological, decline in immune system, delayed wound healing, perception of pain, increased insulin resistance and mortality. Ultimately the risk of illness increases and slows recovery from illness. According to the studies approximately 30% of the patients experience dissatisfaction with their night hours of rest and nurses don't pay much attention to it (Johansson et al., 2005).

Sleep disturbance is one of the most common issues in patients suffering from cancer. For healthy functioning, sleep is the basic need of every individual. Sleep has a ripple effect on human body systems. At the time of deep sleep, growth hormone is secreted which is responsible to control cell regeneration and helps to activate immune system. During sleep healing processes in the body hit the highest point that is why a person with a disease has an increase need for sleep (Robinson et al., 2005). Many patients when hospitalized experience disruption and a reduced quality of sleep. According to studies the issue of disturbed sleep is much more common among inpatients which can ultimately affect their ability to manage anxiety and can be a contributing factor for mood changes (John et al., 2007; Lane and east, 2008). Studies have also shown that someone who is suffering from a medical illness or physical injury has an increased need of sleep. Fulfillment of basic needs plays a vital role in physical and psychological wellbeing of an individual. Nursing is the profession that strives for patient health and also tries to full

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fill basic needs of the patient. According to Clares, Freitas, Galiza, & Almeida 2012 the role of nurses in relation sleep is to help patients with their sleeping problems and resting. When we talk about it comes to adequate sleep of patients at night time, nurses are at front-line taking care of patients at night time and making sure to give them an ideal place to promote adequate sleep (Reid, 2001). Florence Nightingale also described nursing care as a holistic approach and how sleep plays the important role in the healing process. She also cautioned nurses to be mindful and aware of unnecessary noises that could lead to sleep disturbance of patients (Nightingale 1992). Hence it is expected from the nurses that they should pay attention about the sleeping problems of the patient and intervene if it's impaired. This can only be done if nurses have the basic knowledge about sleeping problem and consider it as an important basic need of the patient Potter and Perry (1993). Research has shown that during the night shift nursing staff often wake up the patient for different procedures e.g. to assess vital signs that are essential for the patient. Studies also suggest that nurses should take care of patient's perspective while caring for the patient (Cmiel-et al. Gellerstedt et al. 2004; Oleni et al., 2004; Reid, 2001).

The purpose of this study is to evaluate the quality of sleep of patients admitted in oncology wards at the tertiary care Hospital Karachi and the factors contributing to sleep disruption.

2. METHOD AND MATERIALS

The study was a prospective observational study conducted in the Department of Oncology, at a tertiary care hospital over the period of two months from March 2019 to May 2019. The participants were selected using a non-probability convenient sampling, considering the constraints of time. The target population for this study was patients admitted in oncology unit and the staff assigned during night shifts. The confidentiality of participants was maintained at all times. Participants had the autonomy to leave the study if they wished to. Informed consent was attained for all participants. We included 50 patients and 30 nursing staff in the study.

The ethical approval was taken from the departmental and hospital ethical review committee (ERC number 2019-0779-2733).

Inclusion Criteria:

All patients >18yrs of age with GCS of 15/15 admitted in general and semiprivate wards in oncology department at Tertiary Care Hospital, patient who have spent at least two nights in the ward at the time of study. Staff member assigned on patient on a specific night.

Exclusion Criteria:

Patients admitted in special care unit, patients who are with known sleep disorder or psychiatric disorder.

3. RESULT

For the study 50 participants were included in which 64% of the patients were male and 36% were female. The length of stay of that patient was 3 to 14 days with median 8.5 and standard deviation 3.06. In the general ward 56% were staying whereas, 43% were in semiprivate ward. The study was aiming to rule out the factors leading to sleep disruption. According to the survey in 82% sleep was disturbed due to the external factors while in 18% it was due to the internal factors. External factors include noise (medical equipment noise and staff talking to patient or each other), medication timing, and routine assessment of vital signs during night shift and bed bath. Moreover, internal factors include pain, patient not feeling well during the night and use of toilet. In the external factors 30% sleep was disturbed due to bed bath while, 14% due to medication timing, and routine assessment, and vital signs during night shift and 14% due to visitors talking to their patient overnight. The main internal factor of sleep disturbance at night was the usage of toilets by patients.

	N	%
Patient	50	
Male	32	64%
Female	18	36%
Room Type		
Bay of 5	28	56%
Room with other(semi private)	22	43%
Length of stay	3-14days	
Age group		
18-24 years	8	16%
25-49 years	27	54%
50-64 years	15	30%
65-74 years	0	0%
75-84 years	0	0%
85+ years	0	0%
Was your sleep disturb last night		
Yes	40	80%
No	10	20%
Area was quiet		
1	0	0
2	13	26%
3	17	34%
4	16	32%
5	4	8%
Ease to find sleep?		
1	15	8%
2	24	12%
3	36	18%
4	14	7%
5	10	5%

Variables	External factors		Internal factors	
	N	%	N	%
From bed bath	15	30%		
Staff attended patient	7	14%		
Bed moves	0	0	-	-
Staff talking to each other	2	4%	-	-
Staff talking over phone	4	10%	-	-
Door banging	5	10%	-	-
Visitors talking to their patient overnight	7	14%	-	-
Pain	-	-	3	6%
I was unwell	-	-	2	2%
Went to toilet	-	-	5	10%

4. DISCUSSION

The aim of the study was to deduce the root cause of the sleep disturbance among hospitalized patients. Though there were number of factors identified during the course of study, three most significant ones emerged that required full attention.

Patients have associated sleep disruption to environmental factors, management of the symptoms and nursing interventions (Hultman et al., 2012). The first and foremost issue identified during this study was nurses giving bed bath to the patients during the night shift. Thirty percent of the patients suggested that bed bath during the night is inconvenient and the major cause of their sleep disturbance. Lee theoretical model suggests that disruption and limited sleep is the leading cause of sleep disruption with the increased risk of adverse health outcomes (Lee, 2003).

The second significant factor was the routine assessments during the night shifts. Nursing staff often wakes up the patient during night shift for different routine assessments which includes vital signs twice in a shift as well the routine medication administration during sleep hours due to which patients wake up from the sleep multiple times. Nursing staff while caring for the patients should consider patient's perspective keeping in mind the medical condition of the patient. There are numerous benefits if healthcare professionals can develop patient centered way of working, with individualized nursing care plan with regards patient sleep. This approach will not only improve patients' quality of sleep but also satisfy patient with care for involvement and participation in care. (Edvardsson and Innes, 2010).

The third most important factor identified was the noise level in the ward. According to studies increase level of noise is linked with the higher rates of sleep disturbance among hospitalized patients (Park, 2014). Fourteen percent of our study participants suggested that main source of patient-perceived noise was due to other patients sharing the same room. Moreover, patients also perceived noise from other

human activity like talking, snoring of other patients or their attendants.

Keeping in mind the main sources of sleep disruption identified in our study the other obstacle to sleep disturbance is the lack of awareness among health care workers regarding the importance of sleep in hospitalized patients. Currently nursing assessment lacks sleep assessment of the patients during the course of treatment, which can help nursing staff to plan patient care according to the patient perspective. Studies suggest that there should standardized sleep assessment tool for nurses (Ye et al., 2013).

For this hospital management should limit visiting hour and strictly follow the policy. Further organization should work on decreasing number of beds in a room/bay. Nurses should provide patient sensitive and patient centered care by not interrupting patients sleep unless it is really necessary. Patient bed bath/sponge timings should be adjusted in morning or evening hours.

It would therefore be favorable if medical staff can assess quality and quantity of sleep with the help of standardized tool, however clinical assessment by nurses has yet to be standardized. Although several sleep assessment tools have been reviewed in the past (Bourne et al., 2007; Cole et al., 2007; Devine et al., 2005; Wells et al., 2009), none has been particular to the acute hospital ward set up. Easy-to-use brief sleep assessment tool which can be used routinely can help the nurse identify sleep related issue and can work on it in a timely manner. Clarification of these issues could provide an impetus for improved nursing assessment which will lead to patient centered nursing care to promote sleep quality for patients.

Despite of several adverse effects of sleep disturbance on health and recovery, a number of studies have shown that this problem is not completely addressed among hospitalized patients. A study was conducted in a Canadian General or family practice ward in which 100 patients participated in the study showed that their quality of sleep was not only worse but

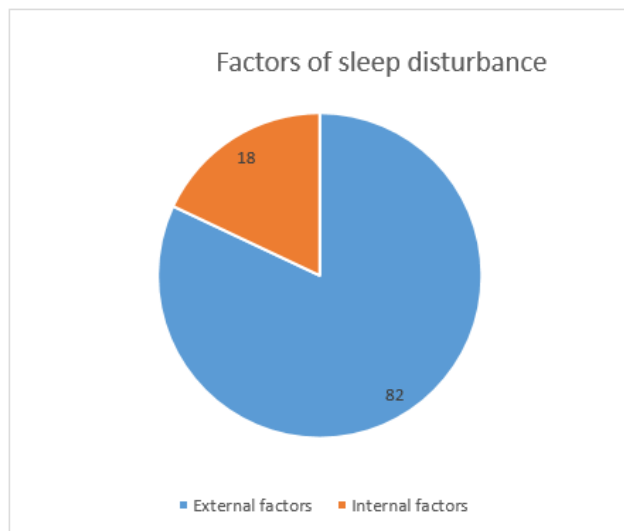
it was comparable to non-hospitalized US insomniacs (Tamrat, Huynh-Le, & Goyal 2014).

5. CONCLUSION

Sleep deprivation should be a major cause for concern for healthcare providers; the literature review revealed that patients during both short and long-term hospital stays are at risk of sleep deprivation and associated negative health outcomes. The nurse taking care of cancer patients needs to be extra vigilant to sleep disturbances. Quality of life can be negatively influenced due to lack of sleep when suffering from cancer. The sleep of family members caring for persons with cancer is also an area of research that merits investigation because coping with cancer is a family experience.

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