



A STUDY TO ASSESS QUALITY OF SLEEP AMONG HEMODIALYSIS PATIENTS AT TERTIARY CARE HOSPITAL, KARAD.

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ABSTRACT

Objectives: 1.To assess the quality of sleep among hemodialysis patient. 2. To find out association between quality of sleep and sociodemographic variables.

Materials and Methods: Descriptive research design was used to conduct the study among hemodialysis patients and totally 40 patients was selected by purposive sampling technique. The study was conducted at Krishna hospital, Karad. The data were collected by structured questionnaire. Quality of sleep was measured by the Pittsburgh Sleep Quality Index (PSQI). The collected data were studied and analyzed in terms of objectives of the study using descriptive and inferential statistics.

Results: 85% of hemodialysis patients had poor quality of sleep and education has found significant association between quality of sleep among hemodialysis patients.

Conclusion: The result of the present study show that hemodialysis patients complained of sleep problems and that most had poor quality of sleep.

KEYWORDS :

Introduction

The prevalence of poor sleep in hemodialysis patients (60-85%) is substantially greater than reported in the general population. The most common sleep problems among end stage renal disease (ESRD) patients because of irregularity in sleeping habits, difficulty falling asleep, early morning awakening, frequent awakening at night, sleep apnoea, periodic limb movement during sleep and restless legs syndrome.¹ The ESRD have become worldwide public health problems. This condition increase patient morbidity and mortality risks and put major economic strain on the health care system.²

Decreased quality of sleep is common in dialysis patients and complaints are common in patients with ESRD on dialysis it include delayed sleep onset, frequent awakening, restlessness and daytime sleepiness. The patients with disturbed quality of sleep have physical symptoms such as loss of appetite, anxiety, tiredness, nervousness and depression.³ The incidence of poor sleep and its causes in patients with hemodialysis have attracted the attention of many researchers. The sleep disturbances in hemodialysis patients is due to the medicines, illness and treatment so that they are facing problems in performing activity of daily living.⁴ Sleep quality is an important and determining factor in the quality of life in dialysis patients. Although many chronic dialysis patients complain of poor sleep. Therefore, this study was designed to study sleep quality among hemodialysis patient.

Materials and Methods:

Descriptive research design was used to conduct the study among hemodialysis patients and totally 40 patients was selected by purposive sampling technique. The samples included in this study were who fulfilled the inclusion criteria with available at the time of data collection and who were willing to participate. Ethical permission was obtained before the data collection. After obtaining permission from the setting, the patients were asked their willingness to participate in the study and informed consent was obtained. After collecting the demographic data, Quality of sleep was measured using the Pittsburgh Sleep Quality Index (PSQI). The collected data were studied and analyzed in terms of objectives of the study using descriptive and inferential statistics.

Description of the tools:

The structured questionnaire comprised two sections covering the following areas

Section A: socio demographic data:

It consists of age, gender, education, occupation, monthly income, marital status, residence and duration of hemodialysis.

Section B: Pittsburgh Sleep Quality Index (PSQI) to assess the quality of sleep among hemodialysis patients. The score 6-21 indicates the poor sleep and score <5 indicate good sleep.

Statistical analysis:

The data were analyzed using descriptive statistics and Chi square test used to find out association between quality of sleep and socio-demographic variables.

Results:

Table.1: Frequency and percentage distribution of socio-demographic variables of subjects

Sl.No	Socio-Demographic Variables		Frequency	Percentage
1.	Age	18-40	14	35
		41-75	26	65
2.	Gender	Male	27	67.5
		Female	13	32.5
3.	Education	No formal education/Primary education	9	22.5
		Secondary Education and Above	31	77.5
4.	Occupation	Employed/House wife	32	80
		Unemployed/Retired	8	20
5.	Monthly income	Below Rs. 5000	16	40
		Rs. 5000 and above	24	60
6.	Marital status	Married	38	95
		Unmarried	2	5
7.	Residence	Urban	1	2.5
		Rural	39	97.5
8.	Duration of hemodialysis	Below 3 years	17	42.5
		3 years and above	23	57.5

Description of sample characteristics:

The data presented in table no.1 reveals that among all samples majority of (44.73%) were from 41-75. As regards to gender majority of (67.5%) were male. As regards to education (77.5%) were having Secondary Education and Above. The data concerning the Occupation, majority (80%) were Employed and House wife. Majority 60% samples were having income of Rs. 5000 and above. (95%) were married. In relation to the residence majority (97.5%) were residing in rural area. Majority (57.5%) were having Duration of hemodialysis that is 3 years and above.

Table.3: Association between quality of sleep and socio-demographic variables.

Sr.no	Variables		Quality of sleep		Chi square value	P value
			Poor sleep	Good sleep		
1	Age	18-40years	12	2	0.008619	0.926
		41-75year	22	4		
2	Gender	Male	23	4	0.002235	0.9623
		Female	11	2		
3	Educational Qualification	No education/Primary education	4	5	14.981	0.0001
		Secondary education and above	30	1		
4	Occupation	Employed/Housewife	28	4	0.7843	0.3758
		Unemployed/Retired	6	2		
5	Income of the family per month	Below Rs.5000	13	3	0.2941	0.5876
		Rs.5000 and above	21	3		
6	Marital status	Married	32	6	0.3715	0.5422
		Unmarried	2	0		
7	Residence	Urban	1	0	0.1810	0.6705
		Rural	33	6		
8	Duration of Hemodialysis	Below 3 years	14	3	0.1625	0.6869
		3 years and above	20	3		

Significant <0.05*

Table.3 reveals that age, gender, occupation, income of the family per month, marital status, residence and duration of hemodialysis were not significantly associated with quality of sleep hence the educational qualification was found significantly associated with quality of sleep among hemodialysis patients.

Discussion:

The findings of the present study show that the 85% hemodialysis patient was having poor quality of sleep. The findings of the similar study also reported that patient undergoing hemodialysis was having poor quality of sleep. A study conducted by Kobra Parvan et al with the title of Quality of Sleep and its Relationship to Quality of Life in Hemodialysis Patients. The study was conducted on 245 hemodialysis patients in 2012. Quality of sleep was measured by the Pittsburgh Sleep Quality Index (PSQI). 83.3% of hemodialysis patients had poor quality of sleep.⁴ A study conducted by Rahele Sabet et. al with the title of Quality of sleep in dialysis patients. Study was conducted on 61 dialysis patients in 2009. Quality of sleep was measured using the Pittsburgh Sleep Quality Index (PSQI) in dialysis patients and 73.8% reported poor sleep quality defined as a global PSQI score > 5.²

Conclusion:

The result of the present study show that hemodialysis patients complained of sleep problems and that most had poor quality of sleep. Assessment and management of sleep quality should be an important component of care giving to these patients. The poor quality of sleep in hemodialysis patients has an effect on the deterioration of their quality of life. Therefore, education, training and counselling should be developed to improve the patients' quality of sleep among hemodialysis patients.

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Table.2: Frequency and Percentage Distribution of quality of sleep among hemodialysis patients.

Grades	Score	Frequency	Percentage
Poor sleep	6-21	34	85%
Good sleep	<5	6	15%

Data presented in table.2 it reveals that majority of hemodialysis patients (85%) had poor quality of sleep and (15%) of having good quality of sleep.

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