



## A STUDY TO ASSESS EFFECT OF SLEEP HYGIENE EDUCATION ON QUALITY OF SLEEP AMONG HEMODIALYSIS PATIENTS AT TERTIARY CARE HOSPITAL, KARAD

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**ABSTRACT** This research aimed to determine the effect of sleep hygiene education on Quality of Sleep among Hemodialysis patients. One group pretest posttest 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 Dialysis Center, Krishna hospital, Karad. Quality of Sleep was measured before and after the intervention by Pittsburgh Sleep Quality Index (PSQI). The collected data were studied and analyzed in terms of objectives of the study using descriptive and inferential statistics. The mean difference between the pre- and post-test quality of sleep score was 3.15. The t-test value was 8.929 and was found significant at  $p < 0.001$  level. Hence, result of the study reveals that sleep hygiene education improved the quality of sleep is among hemodialysis patients. The study concluded that the sleep hygiene education improves the quality of sleep among hemodialysis patients. Therefore, education, training and counselling should be developed to improve the patients' quality of sleep among hemodialysis patients.

**KEYWORDS :** sleep hygiene education, quality of sleep, Hemodialysis

### 1. INTRODUCTION

End stage renal disease (ESRD) and Chronic kidney disease (CKD) are major public health problems in developing countries. Hemodialysis and Kidney transplantation are the only choices of treatment for ESRD and CKD patients.<sup>1</sup> 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.<sup>2</sup> In the world, over 2 million of people receive treatment with dialysis or a kidney transplant to stay alive, and only 20% are treated in about 100 developing countries.<sup>3</sup>

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.<sup>4</sup>

The patients undergoing Haemodialysis need more rest and sleep and they need good sleep hygiene, but normally due to the physiological changes patient sleep pattern were disturbed this leads to decreased optimal function. Sleep quality is an important in the quality of life in dialysis patients and many hemodialysis patients' complaints of poor sleep. Therefore, this study was aimed to determine effect of sleep hygiene education on Quality of Sleep among Hemodialysis patients.

### 2. REVIEW OF LITERATURE

Descriptive research study conducted with the title of A study to assess quality of sleep and sleep hygiene among patients with haemodialysis. Non - probability - Convenience Sampling Technique was used to select the samples for this study. A total of 50 patients participated in the study. Pittsburgh sleep assessment scale and sleep hygiene assessment questionnaire was used to assess the quality of sleep and sleep hygiene for data collection. The mean score of quality of sleep was  $62.57 \pm 13.41$  and mean score of quality of sleep hygiene was  $51.4 \pm 15.77$  among patients with Hemodialysis. The study finding revealed that assessment results show that the quality of sleep and sleep hygiene was poor among haemodialysis patient.<sup>5</sup>

Cross-sectional study carried out during August-December 2009 in Shariati Dialysis Center, Fasa University of Medical Sciences. Data were gathered on 61 patients receiving a hemodialysis treatment. Quality of sleep was measured using the Pittsburgh Sleep Quality Index (PSQI) in dialysis patients Forty-five subjects (73.8%) reported poor sleep quality defined as a global PSQI. Poor sleep quality is a very common problem in dialysis patients. Assessment and management of

sleep quality should be an important component of care giving to this patients.<sup>2</sup>

### 3. MATERIALS AND METHODS:

One group pretest posttest design was used to conduct the study among hemodialysis patients and totally 40 hemodialysis patients were selected by purposive sampling technique. The samples included in this study were who fulfilled the inclusion criteria with the age of 18-65 years, speak Marathi or English language, and receive hemodialysis treatment twice in a week. Samples with seriously sick or unconscious and not willing to participate in the study were excluded from the study. Ethical permission was obtained prior to 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, the pre-test quality of sleep was assessed by using Pittsburgh Sleep Quality Index (PSQI). After the pre-test, sleep hygiene education was given to hemodialysis patients and then post-test quality of sleep was assessed by using PSQI.

### 4. RESULTS:

#### Description of sample characteristics:

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 1: Comparison of pretest and post test quality of sleep among hemodialysis patients**

Phase	Mean	SD	Mean difference	Paired t test
Pretest	9.65	2.925	3.15	t=8.929 P<0.0001 significant
Posttest	6.55	2.012		

Data presented in table.1 shows that mean pre-test quality of sleep score was 9.65, and mean post-test quality of sleep score was 6.55, the mean difference between the pre- and post-test quality of sleep score was 3.15. The t-test value was 8.929 and was found significant at  $p < 0.001$  level. Hence, result of the study reveals that sleep hygiene education improved the quality of sleep is among hemodialysis patients.

**CONCLUSION:**

The study concluded that the sleep hygiene education improves the quality of sleep among hemodialysis patients. Therefore, education, training and counselling should be developed to improve the patients' quality of sleep among hemodialysis patients.

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