



KNOWLEDGE AND ATTITUDE OF PATIENTS REGARDING OBSTRUCTIVE SLEEP APNEA (OSA) AND CONTINUOUS POSITIVE AIRWAY PRESSURE (C-PAP) THERAPY: VIEW TO DEVELOP AN INFORMATION BOOKLET

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ABSTRACT

Introduction: Obstructive Sleep Apnea (OSA) is the most common form of Sleep Related-Breathing Disorder worldwide and is characterized by frequent episodes of upper airway collapse during sleep, causing recurrent arousals, intermittent hypoxemia, sleep fragmentation and poor sleep quality (Lam J *et al.*, 2010) ; and Continuous-Positive Airway Pressure (C-PAP) Therapy is recognized as the first line treatment. The estimated global prevalence of OSA is in the range of 1 billion people. Demographic and other factors are likely to increase the prevalence of OSA over time, which indicate the need of considerable ongoing efforts to raise awareness/knowledge regarding the disease and benefits of treatment and prevention (Benjafield A *et al.*, 2018). It is very well known that patients' knowledge and attitudes/beliefs regarding their illnesses influence their health variables including compliance to treatment (Golay A *et al.*, 2006). But as per the researcher's knowledge very few or possibly no studies on assessment of knowledge and attitude/belief, among OSA patients have been done so far in India and worldwide, focusing on developing an informational booklet for the patients.

Materials and methods: It is a cross-sectional descriptive study with a sample of 100 OSA patients from Sleep Clinic, Department of Medicine, AIIMS, New Delhi, India. Data were collected from July – Dec 2018, by using Modified-Apnea Knowledge Test (M-AKT) and Modified-Apnea Belief Scale ((M-ABS). Respondents who were diagnosed as OSA via Polysomnography and had undergone C-PAP titration in sleep lab were enrolled in the study. Sociodemographic and clinical profile followed by M-AKT (Smith S *et al.*, 2004) and M-ABS (Smith S *et al.*, 2004) was administered, which took around 15-20 minutes. The reliability of M-AKT and M-ABS was 0.81 and 0.79 respectively.

Results: Mean knowledge score of respondents was 11.84 ± 3.37 and the majority of respondents (80%) had fair knowledge. The highest mean percentage was "52.3%" in the Sleep Hygiene domain followed by "49.8%" in the area of OSA and "37.7%" in the domain of C-PAP therapy. Mean attitude score of respondents was 64.3 ± 9.83 and the majority of respondents (57%) had a Neutral Attitude. There was a significant positive correlation between knowledge and attitude regarding OSA and C-PAP Therapy ($r = 0.23$, $p = 0.01$). A significant association was found between knowledge regarding OSA and C-PAP Therapy with the educational level of respondents ($p = 0.02$). A significant association was also found between attitude regarding OSA and C-PAP Therapy with the gender of respondents ($p = 0.03$). **Conclusion:** This study concluded that OSA patients had fair knowledge and neutral attitude regarding OSA and C-PAP Therapy. Therefore, the study suggested that there is a need of reinforcement among OSA patients through information booklet which will enhance the understanding of the patients regarding disease condition and its treatment. **Contribution to the society:** Information booklet will impart knowledge to patients and caregivers, regarding OSA and C-PAP Therapy; and will influence their practices and treatment outcomes. **Acknowledgement:** The researcher appreciates all those who participated in the study and helped to facilitate the research process.

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INTRODUCTION

Obstructive Sleep Apnea (OSA) is the most common form of Sleep Related-Breathing Disorder worldwide and is characterized by frequent episodes of upper airway collapse during sleep, causing recurrent arousals, intermittent hypoxemia, sleep fragmentation and poor sleep quality (Lam J *et al.*, 2010) ; and Continuous-Positive Airway Pressure (C-PAP) Therapy is recognized as the first line treatment. The estimated global prevalence of OSA is in the range of 1 billion people. Demographic and other factors are likely to increase the prevalence of OSA over time, which indicate the need of considerable ongoing efforts to raise awareness/knowledge regarding the disease and benefits of treatment and prevention (Benjafeld A *et al.*, 2018). It is very well known that patients' knowledge and attitudes/beliefs regarding their illnesses influence their health variables including compliance to treatment (Golay A *et al.*, 2006). But as per the researcher's knowledge very few or possibly no studies on assessment of knowledge and attitude/belief, among OSA patients have been done so far in India and worldwide, focusing on developing an informational booklet for the patients.

MATERIALS AND METHODS

It is a cross-sectional descriptive study with a sample of 100 OSA patients from Sleep Clinic, Department of Medicine, AIIMS, New Delhi, India. Data were collected from July – Dec 2018, by using Modified-Apnea Knowledge Test (M-AKT) and Modified-Apnea Belief Scale ((M-ABS). Respondents who were diagnosed as OSA via Polysomnography and had undergone C-PAP titration in sleep lab were enrolled in the study. Sociodemographic and clinical profile followed by M-AKT (Smith S *et al.*, 2004) and M-ABS (Smith S *et al.*, 2004) was administered, which took around 15-20 minutes. The reliability of M-AKT and M-ABS was 0.81 and 0.79 respectively.

RESULTS

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Conclusion

This study concluded that OSA patients had fair knowledge and neutral attitude regarding OSA and C-PAP Therapy. Therefore, the study suggested that there is a need of reinforcement among OSA patients through information booklet which will enhance the understanding of the patients regarding disease condition and its treatment.

Contribution to the society: Information booklet will impart knowledge to patients and caregivers, regarding OSA and C-PAP Therapy; and will influence their practices and treatment outcomes.

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