

Self efficacy in sleep disorder patients

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■ **ABSTRACT** : Sleep, a complex biologic process controlled by the nervous system and is important for proper cognitive, immune and metabolic function. As the aging occurs, it leads to changes in sleep, and the prevalence of sleep disorders increases with age, having a negative impact on the quality of life and well being in older adults. The present study was aimed to examine the effect of sleep disorder on self efficacy of adults. The sample consisted of 240 patients, 120 sleep disorder and 120 non-sleep disorder patients. Test of sleep disorder screening questionnaire by Emory Health Care Centre and Academic Medical College Atlanta, Georgia and self efficacy by Pareek (1988) were used. For analysis of data Mean, SD and t test were used. Results revealed that patients with sleep disorder have poor self efficacy in comparison to normal adults. Patients with Insomnia sleep disorder have better self efficacy in comparison to other types of sleep disorder patients.

■ **KEY WORDS**: Sleep disorder, Self efficacy, Quality of life, Well being

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Sleep, a complex biologic process controlled by the nervous system, is essential for proper cognitive, immune, and metabolic function (Barsam *et al.*, 2012). (Sleep disturbances are associated with diminished quality of life, increased risk for psychological disorders, inappropriate use of sleep aids, decreased daytime functioning, and significant morbidity and mortality among older adults. Although sleeping problems are common among all age groups, the elderly suffer a higher prevalence of sleep disorders. Overall, 57 per cent of the elderly have been reported to suffer from sleep disturbances (Foley *et al.*, 1995). Likewise, in another study, more than 50 per cent of the elderly had poor sleep quality (Bazargan, 1996). Likewise, Catherine and colleagues reported the prevalence rate of sleep problems

to be 77.7 per cent in the elderly (Lo and Lee, 2012). A large number of epidemiological studies have also suggested that upto 50 per cent of the elderly individuals complain about poor sleep (Vitiello *et al.*, 2004). Weaver and colleague evaluated the self-efficacy for sleep apnea among patients. According to the results, the subjects with high self-efficacy had higher motivation to cope with sleep disorders (Weaver *et al.*, 2003). The study by Mazloomi and colleagues also showed that self-efficacy levels increased with individuals' development through the five stages of behaviour change (Mahmoudabad *et al.*, 2010).

Inability to sleep can lead to difficulty in sustaining attention, a slowed response time, impairments in memory and concentration, and decreased performance (Martin

and Ancoli-Israel, 2003).

Rutledge *et al.* (2013) to identify factors impacting self-efficacy for sleep. A significant association was found between sleep self-efficacy and race ($p < 0.01$). All predictor variables except one were found to be significantly correlated with the self-efficacy for sleep ($p < 0.01$).

Schlarb *et al.* (2012) sleep problems, especially insomnia, are a common complaint among adults. Short sleep was significantly associated with a considerably increased rate of insomnia (20%). Insomniacs showed lower self-efficacy than students without sleep problems.

Self-efficacy is defined as the situation-specific confidence that people can tackle with high-risk conditions without revert to their former behaviours (Bandura, 2001). This construct has been retrieved from Bandura's self-efficacy theory. Weaver and colleague evaluated the self-efficacy for sleep apnea among patients. According to the results, the subjects with high self-efficacy had higher motivation to cope with sleep disorders (Weaver *et al.*, 2003).

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According to the Mahin Nazari *et al.* (2014) results the positive correlation between self-efficacy and sleep quality showed that the individuals with higher self-efficacy had better sleep quality. The present study findings demonstrated significant relationships between self-efficacy and the variables of stages of change.

In-line with this, Bouchard and colleagues discussed low self-efficacy in the context of sleep problems (Bouchard *et al.*, 2003).

One could anticipate that high self-efficacy might be a protective factor for sleep problems; in contrast, low self-efficacy seems to be a risk factor for sleep problems and, thus, should be kept in mind in the prevention and therapy of sleep disorders (Angelika *et al.*, 2012).

Bihlmaier *et al.* (2016) Children with chronic insomnia ($n = 54$) had significantly lower GSE scores ($p < 0.001$) compared to a sample of healthy school-age children ($n = 54$) matched concerning age ($M = 7.5$ years) and gender (59.3 % boys, 40.7 % girls). In general, higher sleep disturbance scores were associated with lower GSE ($r_s = -0.37, p < 0.001$).

Objectives of the study:

To study the well-being in government and private sectors employees having sleep apnea.

- To examine self efficacy among adult sleep disorder patients.
- To investigate the self efficacy in different types of sleep disorders.
- To study the various dimensions of self efficacy among sleep disorder patients.

Hypotheses of the study :

Ho1 Sleep disorder patients will not have better self efficacy in comparison to normal.

Ho2 There will be difference in self efficacy among types of sleep disorder.

Ho3 Dimensions of self efficacy will be different among sleep disorder patients.

■ RESEARCH METHODS

Sample:

The total number of sample in the study consists of 240 patients. The patients were selected from Bikaner city. The elimination criteria were being chronic diseases. *i.e.* heart problem diabetes and terminal disease.

Sampling:

Instruments:

The two tool were used to analyze the data. Sleep disorder screening questionnaire (2010) Emory Health Care Centre and Academic Medical College, Atlanta, Georgia and Major Scale was used to assess the data. Udai (1988) Personal Effectiveness Scale (PE Scale-S) DN Pestponjee, Handbook of Psychological and Social Instrument. Concept: New Delhi was used to measure effective and ineffective dimensions of the persons behaviour in the area of self disclosure openness to feedback and perfectiveness.

Statistical techniques:

The data collected will be analyzed with suitable statistical measures Mean, Standard deviation, t test and any other higher statistics according to the data collected.

■ RESEARCH FINDINGS AND DISCUSSION

Table 1 indicates that gender difference in self efficacy among sleep disorder patients and normal adults. There is significant difference among males with the

Gender	Normal adult			Sleep disorder patient			t value
	N	Mean	SD	N	Mean	SD	
Male	60	28.20	2.349	60	26.05	2.062	5.328*
Female	60	28.12	2.116	60	26.23	2.445	4.511*

* indicates significance of value at P=0.01 level

Types of sleep disorder	Sleep disorder adult			Normal adult			t value
	N	Mean	SD	N	Mean	SD	
Insomnia	30	38.0	3.08	30	44.2	2.81	3.34**
Sleep –Apnea	30	35.8	2.77	30	42.9	4.35	7.54**
Narcolepsy	30	32.9	2.82	30	37.4	3.10	5.88**
PLMD	30	32.8	2.26	30	38.8	2.80	9.13**

** indicates significance of value at P=0.01 level

Dimensions	Sleep disorder adult			Normal adult			t value
	N	Mean	SD	N	Mean	SD	
Self disclosure	120	10.4	2.20	120	12.8	1.94	8.96**
Openness to feed back	120	13.1	1.99	120	15.2	2.20	7.75**
Perceptiveness	120	11.4	1.22	120	12.9	1.27	9.33**

** indicates significance of value at P=0.01 level

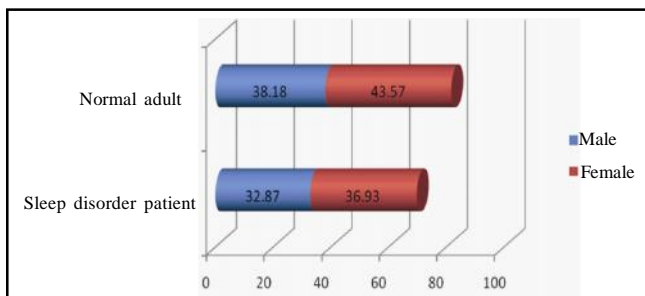


Fig. 1 : Self efficacy among sleep disorder and normal adults

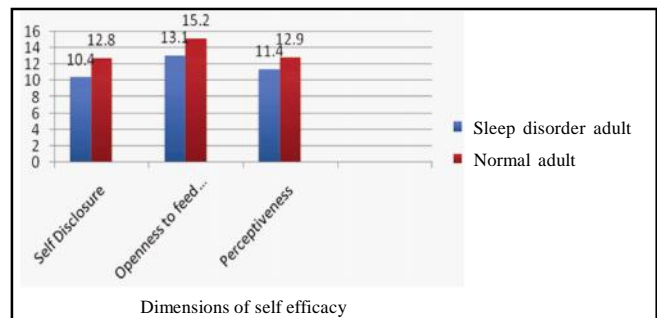


Fig. 3 : Mean, SD of dimensions of self efficacy among sleep disorder and normal adult

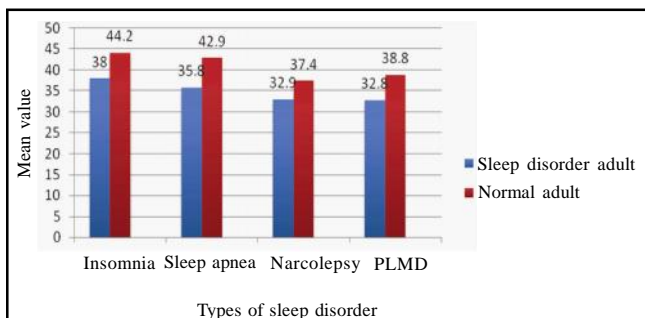


Fig. 2 : Self efficacy among sleep disorder and normal adult in different types of sleep disorder

mean score of 28.20 and 26.05 and t value of 2.996. Similarly in females differ significantly with mean score 28.12 and 26.23 and t value of 5.328. There is a clear

difference in self-efficacy among sleep disorder and normal adults. The difference clearly show that sleep disorder adults both male and female have less believe in one’s belief in one’s own ability to complete tasks and reach goals. The result further depicts that all the types of sleep disorder was found to be significant in sleep disorder patients.

The result depicts that normal adults have better self efficacy than sleep disorder patients. Amongst the all, Insomnia patients have better self efficacy in comparison to others.

All the dimensions of self-efficacy are significant in normal adults in comparison to sleep disorder adults. Self-disclosure, openness to feedback perceptiveness of

normal adults is significantly higher in comparison to sleep disorder adults with mean score of 10.4, 13.1, 11.4 (sleep disorder adults), 12.8, 15.2, 12.9 (normal adults), respectively. This clearly indicate that normal adults, disclose their feelings, emotions, views with others they open for positive and negative feedback and also perceive others thoughts. Both on other hand Sleep disorder patients are very secretive tensed and emotionally unstable. They hide themselves from others. They don't perceive others and remain isolated.

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