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A Study On Insomnia, Depression And Anxiety Among Working And Non-Working Middle Aged Women

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***Abstract*-Insomnia is characterized by an inability to sleep and / or to remain asleep for a reasonable period. As opposed to being a sleep disorder, insomnia is most often caused by sleep disorder, though they are not only causes. Other causes include, fear stress, anxiety, medication, herbs and caffeine. The present study based on insomnia related to anxiety and depression among working and non-working middle aged women. The study attempt to determine the relation of anxiety and depression in insomniac women. Data was collected based on purposive sampling from a total number of 80 middle aged working and non-working women through questionnaire method. For quantitative analysis of results descriptive and inferential statistics was used. The results shows a significant difference between working and non- working women in case of insomnia. This research has found insomnia is significantly related to anxiety but significantly related to depression, more in case of non-working women.**

***Key Words* : Insomnia, Depression, Anxiety.**

I. INTRODUCTION

Many of us toss and turn or watch the clock when we can't sleep for a night or two. But for some, a restless night is routine. More than 40 million Americans suffer from chronic, long-term sleep disorders, and an additional 20 million report sleeping problems occasionally, according to the National Institutes of Health. Stress and anxiety may cause sleeping problems or make existing problems worse. And having an anxiety disorder exacerbates the problem.

Sleep disorders are characterized by abnormal sleep patterns that interfere with physical, mental, and emotional functioning. Stress or anxiety can cause a serious night without sleep, as do a variety of other problems.

Insomnia is the clinical term for people who have trouble falling asleep, difficulty staying asleep, waking too early in the morning, or waking up feeling unrefreshed.

Other common sleep disorders include sleep apnea (loud snoring caused by an obstructed airway), sleepwalking, and narcolepsy (falling asleep spontaneously). Restless leg syndrome and bruxism (grinding of the teeth while sleeping) are conditions that also may contribute to sleep disorders

There are 2 types of insomnia:

- **Primary insomnia** is not a symptom or side-effect of another medical condition. It is its own disorder. It may be life-long or triggered by travel, shift work, stressful life events, or other factors that disrupt your sleep routine. Primary insomnia may end once the issue is resolved, or can last for years. Some people tend to be prone to primary insomnia.
- **Secondary insomnia** has an underlying cause, so it's a symptom or side-effect of something else. It is the most common type. Secondary insomnia may have a medical cause, such as:
    - Depression or anxiety
    - Chronic pain such as from fibromyalgia, migraine, or arthritis
    - Gastrointestinal problems such as heartburn
    - Sleep disorders, such as sleep apnea or restless leg syndrome
    - Stroke
    - Alzheimer's disease
    - Menopause

  Secondary insomnia also can result from:
    - Some medicines, such as those that treat asthma, heart problems, allergies, and colds
    - Caffeine, tobacco, and alcohol

- Poor sleep environment (such as too much light or noise, or a bed partner who snores)

  Secondary insomnia often goes away once the underlying cause is treated, but may become a primary insomnia.

Some people with primary or secondary insomnia form habits to deal with the lack of sleep, such as worrying about sleep or going to bed too early. These habits can make insomnia worse or last longer.

Insomnia is considered as one of the most prevalent sleep disorders that many people suffer from. It extends across different age-groups, and has been observed in every country where sleep problems have been measured. During recent years, there has been an increasing focus on defining insomnia, not only because it is a main complaint, but also because it is deemed as a qualitative disorder with recurrent regular and severe symptoms. It also poses an obstacle to many of an individual's daily functions [8].

The definition of insomnia remains somewhat controversial. For example, the estimates for a complaint of difficulty sleeping ranged from 26.3% to 35.4%. The estimates of occasional insomnia or insomnia with no duration restriction, on the other hand, ranged from 21.0% to 27.0%. However, as the restrictiveness of chronicity increased, the estimates decreased to a range of 9.0% to 10.2%, and when patients were asked about insomnia, it was reported at 5% as a primary problem and 28.0% as a secondary one. While primary care patients reported insomnia at 10% to 19% of the time, physicians have estimated that 17% of their general population, 72% of psychiatric consults, and 93% of psychriatic inpatient suffers insomnia. ..9

Anxiety causes sleeping problems, and new research suggests sleep deprivation can cause an **anxiety** disorder. Research also shows that some form of sleep disruption is present in nearly all psychiatric disorders. Studies also show that people with chronic **insomnia** are at high risk of developing an **anxiety** disorder.

If you've been diagnosed with clinical **depression**, you may be having trouble getting to sleep or staying asleep. ... In fact, one of the common signs of **depression**is **insomnia** or an inability to fall and stay asleep. That's not to say **insomnia** or other sleep problems are caused only by **depression**.

.**Anxiety Disorder or Sleep Disorder: Which Comes First?**

Either one. Anxiety causes sleeping problems, and new research suggests sleep deprivation can cause an anxiety disorder.

Research also shows that some form of sleep disruption is present in nearly all psychiatric disorders. Studies also show that people with chronic insomnia are at high risk of developing an anxiety disorder.

Health Risks

The risks of inadequate sleep extend way beyond tiredness. Sleeplessness can lead to poor performance at work or school, increased risk of injury, and health problems.

In addition to anxiety and mood disorders, those with sleep disorders are risk for heart disease, heart failure, irregular heartbeat, heart attack, high blood pressure, stroke, diabetes, and obesity.

Insomnia in adults is partially explained by genetic factors, and this heritability is higher in females than in males, suggests a new study on twins.The estimated heritability of insomnia was 59 per cent for females and 38 per cent for males.

Sleep is essential for normal physiologic function. Chronic sleep deprivation and poor-quality, fragmented sleep result in excessive daytime sleepiness, neurocognitive dysfunction, memory impairment, depression, anxiety, dysglycemia, systemic inflammation, heart rhythm abnormalities, atherosclerosis, and cardiovascular events.1 Although the differences in sleep physiology between men and women are modest, the prevalence and presentation of sleep disorders vary considerably between the sexes

Treatment

If you suspect you have a sleep disorder, visit a primary care physician, mental health professional, or sleep disorders clinic. Treatment options include sleep medicine and cognitive-behavior therapy, which teaches how to identify and modify behaviours that perpetuate sleeping problems.

Treatment options for an anxiety disorder also include cognitive-behaviour therapy, as well as relaxation techniques, and medication. Your doctor

or therapist may recommend one or a combination of these treatments.

II. METHODOLOGY:

OBJECTIVE

Sleep disorder are now recognized as a public mental health concern with considerable psychiatric and societal consequence specially on the working life of women. The aim of the current research is to assess the relationship between anxiety ,depression and insomnia on a group of middle aged employed women and determine the degree of differences related to nature of sleep disturbances irrespective of working status of women.

HYPOTHESIS

1. Working and Non-working women do differ among themselves in relation to Insomnia .
2. There is no significant difference exist between Working and Non-working women in terms of Depression.
3. There is no significant difference exist between Working and Non-working women in terms of Anxiety.
4. There is a significant relation between insomnia and depression of adult women.
5. There is a significant relation between insomnia and anxiety of adult women.

OPERATIONAL DEFINITION :

INSOMNIA: Insomnia is difficulty falling asleep or staying asleep, even when a person has the chance to do so. People with insomnia can feel dissatisfied with their sleep and usually experience one or more of the following symptoms fatigue, low energy, difficulty concentrating, mood disturbances, and decreased performance in work or at school.

ANXIETY: Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behaviour, such as pacing back and forth, somatic complaints and rumination.

DEPRESSION: Depression an illness that involves the body, mood, and thoughts and that affects the way a person eats, sleeps, feels about himself or herself, and thinks about things.

SAMPLE:

Sampling Technique: In this study purposive sample was used to collect data in which unique cases were selected to fulfil the purpose. In purposive sampling the researcher never knows whether the cases selected represent the population. Purposive sampling was appropriate to select the unique cases that are especially informative to fulfil the objective of the study.

- **Sampling Criteria**:

A total number of 80 middle aged women are selected based on the following criteria:

1. INCLUSION:

- Age – 40 to 45 (years)
- Sex – Female
- Education – Graduate
- Social Economic Status – Upper Middle Class
- Working Status – At least 5 years experienced

2. EXCLUSION:

- Age - Below 40 years
- Education - Below class 12th
- Working Status- Nil

MEASURES:

1. **Information Blank** : Considering information name, age, sex, religion, mother tongue, marital status, education, working status, personal hobby, major illness (Physical/Mental)
2. **Insomnia Sleep Questionnaire:** The INSOMNIA SCREENING QUESTIONNAIRE is a screening tool used to guide the physician in the clinical evaluation of insomnia. It is used to screen for a primary sleep disorder as indicated in the Insomnia Algorithm. Based on the general rules below the physician should perform a more detailed clinical evaluation and/or refer where he/she feels it is appropriate.

DIAGNOSTICS DOMAINS:

- 1. Insomnia: Q1-6
- 2. Psychiatric Disorder: Q7-10
- 3. Circadian Rhythm Disorder:Q12-13
- 4. Parasomnias:Q14
- 5. Sleep Disordered Breathing(Sleep Apnea):Q15-17

3. **Beck Depression Inventory:** It is an inventory, there are some statements regarding the way people feel or think. One statement must be chosen for

each section. Put a circle round the number of statement which fits the way he/she feels at the moment.

4. State trait Anxiety Inventory: The State-Trait Inventory was devised by Speilberger, Gorsuch and Lushene to provide a reliable means of distinguishing between two distinct aspects of anxiety, State anxiety is conceptualized as a transitory level of Anxiety ,which often situation ally determined, whereas trait anxiety is regarded as a relatively stable individual characteristics.

STATISTICS USED

After collection of adequate and suitable data statistical technique were applied for quantitative analysis of the result. Descriptive statistics such as mean and Standard Deviation and Inferential Statistics like t will be applied for quantitative analysis.

III. RESULTS AND DISCUSSION

The data obtained from the subject were systematically arranged and properly tabulated with respect to each of the variable considered in the present study. The presentation of the data has reflected the measure of the obtained selected study variable and their statistical technique were applied to analyze and to find out necessary information to serve the object of the study.

TABLE 1. MEAN , SD AND t- SCORE OF DEPRESSION FOR WORKING AND NONWORKING MIDDLE AGED WOMEN

SAMPLE CATEGORY		MEAN	SD	t-test
NON-WORKING WOMEN		46.48	3.82	*2.01
WORKING WOMEN		45.37	3.14	

***significant at .01 level (p< .01)**

Table 1 show that mean score and SD of working and non working female related to depression are respectively 6.08 ,4.50 and 2.42 and 1.33. The significant mean difference exist between these two groups of women by applying t- statistics which is 8.52 (p<.01 level).

TABLE 2.
ANXIETY SCORES FOR WORKING AND NONWORKING MIDDLE AGED WOMEN

SAMPLE CATEGORY	INSOMNIA	PSYCHATRIC DISORDER	CARCADIAN RHYTHM DISORDER	MOVEMENT DISORDER	PARASOMNIAS	SLEEP APNEA
NON-WORKING WOMEN	4.75	2.07	2.37	2.25	2.25	2.65
WORKING WOMEN	5.12	2	5	1.5	1.48	2.75

***Insignificant at .01 level(p>.01)**

Table 2 show that mean score and SD score of working and non working middle aged women regarding anxiety are respectively 46.48 and 45.37; 3.82 and 3.14. The significance difference between these two means score find out by applying t-statistics which is 2.01. The result shows insignificant mean difference between working and non working women at 0.01 level.

		MEAN		T-TEST
NON-WORKING WOMEN		19.48	2.42	*5.12
WORKING WOMEN		15.65	1.33	

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TABLE 3. INSOMNIA SCORES FOR WORKING AND NONWORKING MIDDLE AGED WOMEN

Table-3 shows the mean scores of both sample category related to sleep disorder. The scores of non- working women falls below the range ,thus the scores dose not indicate any kind of sleep disorder among them.

In case of working women scores related to insomnia and circadian rhythmic disorder are respectively 5.12 and 5 which is above average in range. The mean scores of Psychiatric disorder, Movement disorder , Parasomnia and Sleep Apnea are respectively 2,1.5,1.48, and 2.75 that are evaluate within below average range of sleep disorder.

TABLE: 4
GRAPHICAL PRESENTATION SHOWS MEAN SCORE FOR WORKING ANDNONWORKING MIDDLE AGED WOMEN OF DEPRESSION

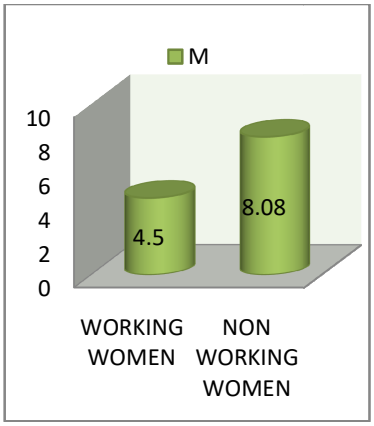


TABLE 5: GRAPHICAL REPRESENTATION FOR WORKING AND NON WORKING MIDDLE AGED WOMEN OF ANXIETY

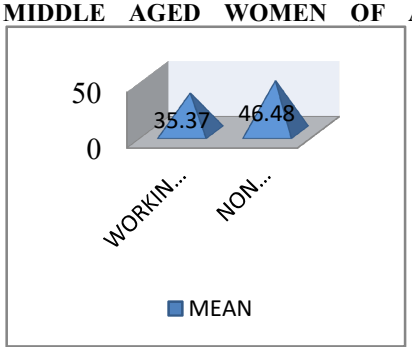
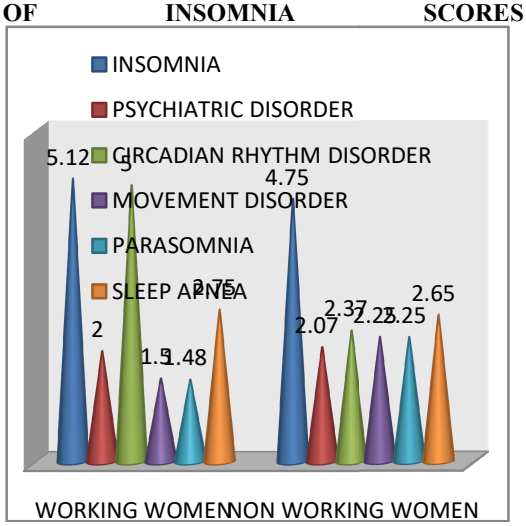


TABLE 6: GRAPHICAL REPRESENTATION OF INSOMNIA SCORES



IV. DISCUSSION

From the above depression scores it was found that the obtain t value is higher than the critical value at 0.01 level of significance .As the computed t is higher than the critical value at 0.01 level of significance, the probability P of the correctness of null hypothesis considered too low and may therefore be rejected. Thus it is inferred that depression of non working women is significantly high than that of working middle aged women. From comparative study of working and non-working population it had explored that both the groups were showing similar type of trend of depression but the non- working women showing more prevalence of depression than that of working

women. The overall prevalence of depression was still high and was associated with the higher socio economic status, married females, family problems, economic problems. Our comparative study of depression among working and non-working women population had explored that both the groups were showing similar type of trend of depression with the non-working women showing more prevalence of depression than the working women.

On the other hand it was found that t value of anxiety is more at 0.01 level of significance, the probability P of the correctness of null hypothesis considered too low and hence null hypothesis therefore be rejected and it is inferred that there is significant difference between working and non working middle aged women relates to anxiety.

. The present study is supported by the evidences that the nature of the relationship between multiple roles with life satisfaction and anxiety is exceedingly complexes. Social scientists contend that the number of roles alone does not account for the beneficial impact of multiple role involvement for women. Rather, factors such as quality of roles , available financial resources (Home, 1998), job characteristics , social support , influence the effects of multiple roles involvement for working women. Lennon (1994) found similar results. He found that fulltime housework involves more autonomy, more interruptions, greater physical efforts, more routine, fewer time pressures and less responsibility for matters outside one's control than paid work. Evidences are also available in support of the engagement of non-working women in less number of roles may also be a contributory factor towards high anxiety in them, as they have to rely mainly on their roles as house wives. Whereas, occupying multiple roles is thought to increase women's chances to learn, to build social network and open access to informational, instrumental and emotional support and to buffer life's stresses and strains. Playing multiple roles also provides cognitive cushioning and alternative sources of self-esteem and gratification when things go poorly in one life domain.

Sleep disorders are far more common in women than previously appreciated and presenting symptoms often differ from those in men. Although insomnia itself is more prevalent among women, it can constitute an atypical presentation of other sleep disorders such in women. Women often are incorrectly diagnosed as having and been treated for anxiety, depression, chronic fatigue, and psychosomatic disorders. Sleep is essential for women to live a functional, productive life. Diagnostic evaluations should be performed and, if needed, treatment prescribed when sleep is disturbed.

V. CONCLUSION :

Epidemiologic studies show that psychopathology is a very powerful risk factor for the occurrence of insomnia. Depression and/or anxiety are quite prevalent among insomniacs, while insomnia is more than twice as prevalent in depressed than in non-depressed individuals. Moreover, recent data support a strong causal link of insomnia to both depression and anxiety but cause-and-effect relationship between insomnia and psychopathology, however, has not as yet been definitively established. The study also signify the degree of sleep disorder varies among working adult women in comparison to non-working one. Results also reveal the significant difference of anxiety and depression irrespective of the working status of women.

REFERENCES:

1. (ICSD 2): Diagnostic and coding manual. 2nd ed. 2005.
2. Abnormal psychology (authorized adaption from the United States edition, entitled Abnormal psychology, Fifteenth Edition, ISBN 9780205167265, by James N Butcher, Susan Mineka and Jill M Hooley, Published by Pearson Education Inc. 2013, Pearson Education Inc.
3. American Psychiatric Task Force on DSM-IV Diagnosis and Statistical manual of mental disorder: DSM-IV. American Psychiatric Association, Washington, DC: 1994.
4. Ancoli-Israel. S (2006), Sleep Medicine Clinics: Sleep in the order adults. Volume 1, Number 2, Philadelphia: W.B: Saunders Company.
5. Beck, A. T. Ward, C. H., Mendesion, M., Mock, J. and Erbaugh J. (1961). An Inventory for Measuring Depression. Archives of General Psychiatry. 4, 561-571.
6. Bernard J. Work and family: Changing roles of men and women. Palo Alto, CA: Mayfield.1984.
7. Brett Silverstein. Gender Difference in the Prevalence of Clinical Depression: The Role Played by Depression Associated With Somatic Symptoms. Am J Psychiatry. 1999; 156:3.

8. Drs Robert L. et al. PHQ-9 is adapted from PRIME MD TODAY, available at http://www.pfizer.com.
9. http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf.
10. http://www.who.int/mental_health/management/depression/flyer_depression_2012.pdf
11. Lopez AD, et al. Global Burden of Disease and Risk Factors. Washington: The World Bank; 2006.
12. National Sleep Foundation, Survey of Primary Care Physicians, August 28.2000. Crofton, MD.
13. Nelson, D. L. and Bruke R. J. (2000). Women Executive Health, Stress and Success. The Acadamey of Management Executive, 14, 107-21.
14. Pandya M. and Zala K. (2009). Saurashtra Psychological Association, Abstract Suchitra Publication, Rajkot, p. 30-33.
15. Revati R Dudhatra, Yogesh A Jogsan. Mental Health and Depression among Working and Non-Working Women: International Journal of Scientific and Research. 2012;2(8).
16. Thomas EJ. Marital communication and decision making. New York, Free Press. 1977.
17. World Health Organisation. ICD-9-CM: International Classification of disease, clinical Modification. 4th edition, Salt Lake City (UT): Medicode; 1994.