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Evaluating the relationship between headache and sleeplessness, anxiety, and depression among Hong Kong Chinese women

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Abstract

As research has shown, "In the general population, there is a robust correlation between sleep apnea, headaches, and mood disorders. Daily, morning headaches will be associated with SDBD. Compared to their pre- and post-menopausal counterparts, perimenopausal women are more likely to experience sleep disruptions, headaches, and low mood "counterparts.

when compared to "After one month, both Caucasians and Hong Kong Chinese reported lower rates of insomnia (11% versus 29%) (Leger et al., 2000, Li et al., 2002). Within a year, 37% of Hong Kong Chinese and 38% of Whites will suffer from frequent headaches (Cheung, 2000, Hagen et al., 2000). Hong Kong Chinese showed lower rates of depression and greater rates of anxiety (2% vs. 13% and 9% vs. 4%, respectively, in lifetime prevalence) than did Caucasians. (Chen et al., 1993; Grant et al., 2005; Hasin et al., 2005). Parker et al. (2001) hypothesise that differences in the prevalence of depression may be due to people's reluctance to admit they have a mental health problem or to the physical manifestations of their symptoms. Because of these differences in prevalence, it is hypothesised that Hong Kong Chinese and Caucasian individuals will have different associations between insomnia, headaches, and mood. The benefits are significant "for the purpose of researching the relationship between insomnia, headaches, and mental health issues amongst the Chinese population of Hong Kong.

Keyword: Mood Disorder, Insomnia, Headache

INTRODUCTION: Chronic "insomnia and headache are among the most frequent health issues. The prevalence of insomnia in the general population has been estimated by epidemiological surveys to be between 9% and 15%. (Ohayon, 2002). There are many neurological illnesses, but headaches are among the most prevalent.

A recent study indicated that 47% of the world's population suffers from a headache at any one time (Stovner et al., 2007). Slumber is more than just an interruption to our daily activities; it is a multifaceted behavioural and physiological process. The body's physiological and psychological functions are facilitated by enough sleep, which helps the body prepare for the

following day's agenda. However, insomnia, the inability to fall asleep or stay asleep, affects most individuals at some point in their lives. The quality or amount of nocturnal sleep is necessarily diminished by insomnia, and this has negative effects on a person's performance throughout the" day.

Women are more likely "than males to suffer from insomnia and headaches, and these conditions are commonly accompanied by snoring, melancholy, and worry. The majority of these investigations were undertaken in North America and Europe, where the Caucasian population was investigated. The majority of these research focused on people who were actively seeking therapy for symptoms such as chronic and severe sleeplessness and headaches. In the Chinese population, there was no investigation on the link between sleeplessness and depression. Poor sleep, headache, and mental disorders may be linked, and the risk factors for headache may be identified. This information can be used to create public health interventions. For these reasons, I set out to explore" the association between sleeplessness, depression, anxiety, and headaches in middle-aged Chinese women; and to identify the risk factors for headache.

LITERATURE REVIEW

When it comes to sleep, "insomnia is defined as" a "nightly complaint of an inadequate quantity of sleep or not feeling refreshed after the usual sleep period" by the International Classification of Sleep Disorders (ICSD). It is classified as "difficulty starting or sustaining sleep, or non-restorative sleep" by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association 1994) as "clinically severe discomfort or impairment." Insomnia's exact pathophysiology remains a mystery, in part because of its varied character, in which insomnia can be a free-standing illness with a pathophysiology, or a comorbid condition owing to multiple medical and mental problems (Roth et al., 2007). According on the "research population, methodology and definition of insomnia, the prevalence of insomnia varies greatly. Using stricter criteria results in a lower prevalence in most cases (Ohayon, 2002). In population samples, the prevalence of insomnia ranged from 9% to 29%. (Yeo, 1996, Neckelmann et al., 2007, Taylor et al, 2005, Leger et al., 2000). The prevalence in clinical samples ranges from 10% to 50%. (Hatoum et al., 1998, Simon and VonKorff, 1997, Ohayon and Roth, 2003, Katz and McHorney, 1998, Ustun et al., 1996). About 12 percent of Hong Kong's general population suffers from sleeplessness at least once a month (Li et al., 2002). Chung and Tang (2006) found that women in their mid-thirties and forties had a greater prevalence of the condition (18 percent). It's common to see a gender disparity in the occurrence of insomnia, with a female predominance (Olson, 1996, Leger et al., 2000, Li et al., 2002, Neckelmann et al., 2007, Ohayon and" Roth, 2003).

Irritable sleep "apnea is becoming more common as we get older (Leger; Neckelmann; Li; Ohayon and Roth, 2003; Ohayon and Roth; Neckelmann; Li; Ohayon and Roth; Neckelmann). The National Heart, Lung, and Blood Institute Working Group on Insomnia, 1999, found that sleep deprivation can cause exhaustion, lack of energy, difficulties focusing, and a poor mood. Insomniacs may also complain of a headache and a lack of capacity to carry out everyday duties. Insomnia can have a negative impact on a person's quality of life (Hatoum et al., 1998,

Zammit et al., 1999). Increased risk of accidents and absenteeism can be caused by sleep deprivation. US$21 billion" in 2006 was the projected yearly economic cost of insomnia in the United States (Kaplan, 2007, Walsh and Engelhardt, 1999).

STATEMENT OF THE PROBLEM

The prevalence of "sleep-headache, sleep-mood disorder, and headache-mood disorder co-morbidity in the literature has been regularly observed. There were several cross sectional and standardised questionnaires to assess the presence and severity of disorders of interest in these studies insomniacs reported a greater number of morning headaches compared to insomnia-free controls. Ohayon (2004) evaluated the general population's risk factors for chronic morning headache (CMH). The Sleep.-EVAL expert system was used to conduct telephone interviews with 18980 adults ages 15 and older. A diagnosis of DSM-IV insomnia was associated with an increased risk of developing CMH compared to individuals who did not have insomnia (20 percent VS 8 percent). Major" depression and SDBD will be also shown to be related with a greater prevalence of CMH in the study (29 percent VS 6 percent , 21 percent VS 6 percent and 15 percent VS 7 percent respectively).

In addition, he "discovered that being a woman, middle-aged, and unemployed or a housewife will be all linked to morning headaches.People with a history of mental illness will be more likely to suffer from severe insomnia. Research by Ohayon and Roth (2002) sought to determine the psychiatric history of insomniacs among the general population. Subjects aged 15 to 100 years will be recruited from the United Kingdom, Germany and Italy, as well as Portugal. Insomnia and mental symptoms will be assessed using the SleepEVAL method. About 30% of insomniacs will be found to have mental health issues. 45% of the participants with co-morbid MDD and anxiety disorder experienced sleeplessness that was severe enough to warrant treatment. 49 percent of those with a current diagnosis of sleeplessness had a history of anxiety and/or mood problems. A psychiatric history was found in 26% of insomnia patients, compared to just 8% of those without the condition.. More than half (56 percent) of people with a recurrence of mood disorder had sleeplessness symptoms prior to the onset of mood disorder symptoms in 41% of cases. Anxiety and depression account for a total of 29% of all occurrences of sleeplessness. Approximately 18 percent of the time, sleeplessness preceded present anxiety problem, whereas 43 percent of the time, anxiety preceded insomnia. In 23% of instances, sleeplessness came first, whereas anxiety came first in 34% of individuals with both a history" of and present anxiety illness. Insomnia, according to the authors, was a symptom of sadness and anxiety.

OBJECTIVE OF THE STUDY

- To study the "cross-sectional relationship of middle-aged Chinese women with sleeplessness, mood problems, and" headaches.

Research Questions

- Is there "any relationship existing between sleeplessness, mood problems, and headaches of chinese" women?

RESEARCH METHODOLOGY

The local "institutional review board examined and approved the research. Of the 39 community centres and women's organisations in Hong Kong that the author contacted, ten consented to take part in the study. After attending their regular group meetings and seminars at the community centres, potential participants will be contacted. Subjects will be given an overview of the study's goals and procedures. All participants signed a permission form stating that they understood the risks. The sample will be considered a convenient sample due to the individuals' willingness to participate in" the study.

RESEARCH DESIGN

We utilized a "questionnaire developed by Morin in 1993 to measure the severity of insomnia and its impact on participants' daily lives over a two-week period. Self-reported questionnaire containing seven items that evaluate severity of sleep onset, sleep maintenance, and early morning awakening problems; satisfaction with current sleep pattern; interference in daily functioning; impairment of quality of life noticeable to others; and level of distress due to the sleep problems are assessed. Each item is quantified using a five-point Likert scale ('O' not at all, '4' very much). A score of 0 to 28 is possible. One minute to finish and less than five minutes to score the first test. Preliminary research has indicated 1ST is a reliable and valid tool for assessing one's own self-perceived sleep issues (Savard et al., 2005, Bastien and a! ISI will be translated into Chinese for us. The Chinese version of the ISI, the original English version, and a physician-rated version of the 1ST will be shown to have significant inter-correlations in a pilot study of 10 multilingual mental inpatients. The Chinese 1ST and the physician-rated version of the 1ST had a Pearson correlation value of 0.98, while the English 1ST and the Chinese 1ST had a" Pearson correlation coefficient of 0.95.

The frequency of "snoring and difficulty getting or staying asleep, as well as the frequency of non-regenerative sleep that produced considerable distress or impairment in daytime functioning, will be also assessed in the questionnaire. The sleep disorder will be described in accordance with DSM-IV criteria" (APA, 1994).

DATA ANALYSIS

Data will be entered into an SPSS dataset using a "single-entry technique," with the results compared to the original surveys to eliminate the possibility of human mistake.

Those who "did not respond to queries about their age or whether they will be pregnant will be excluded from the study. All statistical analyses will be conducted using SPSS 15.0 for Windows (SPSS mc, Chicago, IL), and summary statistics will be used to characterise the demographic and clinical features of the participants. It has been shown that ISI scores below 10 are associated with subthreshold insomnia (Morin et al., 1999; Bastien et al., 2001); therefore, subjects with an ISI score of 11 will be classified as having an insomnia disorder, and those with an ISI score of 11 and a HADS anxiety score of 11 will be classified as having an anxiety disorder.

CONCLUSION

Middle-aged "Later in life, Chinese women are more prone to have sleeplessness, depression, and headaches than younger Chinese women. There is a correlation between anxiety, depression, insomnia, and chronic snoring, and headaches of varying degrees of intensity. No confounding effects of sociodemographics were found in this study. Patients with headaches will have a higher prevalence of disability, and the degree of disability will be correlated with the intensity of the headaches. Even after accounting for coexisting anxiety and sadness, it will be demonstrated that sleeplessness and chronic snoring are linked to an increased risk of headaches. Middle-aged Chinese women who snore three times a week or more are five times as likely to complain of moderate to severe headaches as those who don't snore. The study's results suggest that sleep deprivation, snoring, anxiety, and depression are all variables that contribute to headaches in middle-aged women. For researchers to identify the underlying causes of headache, longitudinal cohort studies with large samples of participants are required "factors of danger

LIMITATIONS OF THE STUDY

Our study has "significant drawbacks. The cross-sectional approach will be only able to identify correlations across variables. Associations' causality could not be established. However, because to a lack of funds and resources, as well as a time restriction, a longitudinal design will be not possible. It would be too dangerous to conduct a long-term study on the relationship between sleep problems, mood disorders, and headaches" in the Chinese population because there will be no prior research on the subject.

REFERENCES

1. Alberti A. Headache and sleep. Sleep Medicine Reviews 2006; 10:431-437.
2. Alberti A, Mazzotta Gallinella E, Sarchielli P. Headache characteristics in obstructive sleep apnea syndrome and insomnia. Acta Neurologica Scandina vica 2005; 111:309-316.
3. American Academy of Sleep Medicine. ICSD-2—international classification of sleep disorders, 2nd ed.: diagnostic and coding manual. Westchester, IL: American Academy of Sleep Medicine; 2005.
4. APA. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. DSM-IV. Washington, DC: American Psychiatric Association; 1994.
5. Baker A, Simpson S, Dawson D. Sleep disruption and mood changes associated with Irienopause. Journal of Psychosomatic Research I 997 ;43(4) :359-369.
6. Bastien CH, Vallieres A, Morin CM. Validation of the insomnia severity index as an outcome measure for insomnia research. Sleep Medicine 2001 ;2:297-307.
7. Belanger Morin CM, Langlois F, Ladouceur R. Insomnia and generalized anxiety disorder (GAD): effects of cognitive behavior therapy for GAD on insomnia symptoms. Journal ofAnxiety Disorders 2002; 18:561-571.
8. Bjelland I, Dahi AA, Haug TT, Neckelmann D. The validity of the Hospital Anxiety and Depression Scale and updated literature review. Journal of Psychosomatic Research 2002; 52: 69-77.
9. Boardman HF, Thomas E, Milison DS, et al. Psychological, sleep, lifestyle, and comorbid associations with headache. Headache 2005 ;45 :657-669.

10. Breslau N, Roth T, Rosenthal L, Andreski P. Sleep disturbance and psychiatric disorders: a longitudinal epidemiological study of young adults. Biological Psychiatry 1996;39:41 1-4 18.
11. Brun J, Claustrat B, Saddier P, Chazot G. Nocturnal melatonin excretion is decreased in patients with migraine without aura attacks associated with menses.Cephalalgia 1995;15: 136-139.
12. Bussone G, Usai S, Grazzi L, Rigamonti A, Solari A, Amico DD. Disability and quality in different primary headaches: results from Italian studies. Neurological Sciences 2004;25: S105-S 107.
13. Claustrat B, Loisy C, Brun J, Beorchia S, Arnaud JL, Chazot G. Nocturnal plasma melatonin levels in migraine: a preliminary report. Headache 1938; 29:242-245.
14. Dennerstein L. Well being, symptoms and the menopausal transition. Maturitas 1996;23: 147-157.
15. Dodick DW, Eross EJ, Parish JM. Clinical, anatomical, and physiologic relationship between sleep and headache. Headache 2003; 43 :282-292.
16. Duru G, Auray JP, Gaudin AF, Dartigues JF, Henry P, Lanteri-Minet M, Lucas C, Pradalier A, Chazot G, El Hasnaoui A. Impact of headache on quality of life in a general population survey in France (GRIM2000 Study). Headache 2004;44:57 1-580.
17. Finn L, Young T, Palta M, Fryback DG1. Sleep-disordered breathing and selfreported general health status in the Wisconsin sleep cohort study. Sleep 1998;21 (7):70 1-706.
18. Goder R, Friege L, Fritzer G, Strenge H, Aldenhoff SB, Hinze-Selch D. Morning headaches in patients with sleep disorders: a systemic polysomnographic study. Sleep Medicine 2003;4:385-391.
19. Lam PM, Leung TN, Haines C, Kwok HC. Climacteric symptoms and knowledge about hormone replacement therapy among Hong Kong Chinese women aged 40-60 years. Maturitas 2003;45 :99- I 07.
20. Lim L, Hg TP, Chua HC, Chiam PC, Won V, Lee T, Fones C, Kua ER. Generalized anxiety disorder in Singapore: prevalence, co-morbidity and risk factors in a multiethnic population. Social Psychiatry and Psychiatric Epidemiology 2005;40:972-979.
21. Lipton RB, Hameisky SW, KolodnerKB,Stenier TJ, Stewart WF. Migraine, quality of life, and depression. A population-based case-control study.Neurology 2000;55:629-635.
22. Morin CM, Colecchi C, Stone J, Sood R, Brink D. Behavioral and pharmacological therapies for late-life insomnia: a randomized controlled trial. JAMA 1999;281(1 1):991-999.
23. National Heart, Lung, and Blood Institute Working Group on Insomnia. Insomnia: assessment and management in primary care. American Family Physician 1999;59:3029-3038.
24. Neckelmann D, Mykietun A, Dahl AA. Chronic insomnia as a risk factor fordeveloping anxiety and depression. Sleep 2007;30(7):873-880.
25. Paiva T, Batista A, Martins P, Martins A. The relationship between headachesand sleep disturbances. Headache 1995 ;35:590-596.
26. Parker G, Gladstone G, Chee KT. Depression in the planet's largest ethnic group:the Chinese. The American Journal of Psychiatry 200 1;158:857-864.

27. Peppard PE, Szklo-Coxc M, Hia KM, Young T. Longitudinal association ofsleep-related breathing disorder and depression. Archives of Internal Medicine2006; 166: 1709-17 15.
28. Peres MFP, Sanchez del Rio M, Seabra MLV, TUfik S, Abucham J, Cipolia-Neto3, Silberstein SD, Zukerman E. Hypothalamic involvement in chronic migraine.Journal ofNeurology Neurosurgery and Psychiatry 2001 ;71 :747-751.