Improving Insomnia in Primary Care Patients a Randomized Controlled Trial of Nurse-Led Group Treatment: A Literature Review

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ABSTRACT

Introduction: Insomnia is generally defined as complaints of poor or unsatisfactory sleep, which can include difficulty initiating sleep, awakening after sleep onset, poor sleep quality, early morning awakenings, short sleep times, short total sleep times and daytime consequences. Chronic insomnia is a common problem in primary health care, affecting 10 - 19% of those seeking primary care.

Method: Patient is a randomly selected sample of 165 people and divided into 2 groups, namely 90 treatment groups and 75 control groups in seven routine primary health care in Stockholm County, Sweden between August 2011 and June 2014. The intervention to be given was in the treatment group given the intervention consisting of a group treatment program for insomnia based on the CBT-I technique while the control group was free to undergo insomnia treatment as usual.

Result: The formulation of the research problem is to compare how the effect of nurse-led group treatment with the effect of treatment as usual in routine primary health care in Stockholm County, Sweden. In this study, the researcher determined a sample of 165 people who met the research requirements, and divided respondents randomly (single-blinded) consisting of 90 treatment groups and 75 control groups.

Conclusion: There was a significant difference between the treatment of insomnia with cognitive therapy and the treatment of insomnia with drugs. So that we can reduce the long-term effects of using drugs to treat insomnia.

Keywords: Insomnia; Primary Care Patients
Introduction

Insomnia is generally defined as complaints of poor or unsatisfactory sleep, which can include difficulty initiating sleep, awakening after sleep onset, poor sleep quality, early morning awakenings, short sleep times, short total sleep times and daytime consequences (Sateia et al., 2000). Chronic insomnia is a common problem in primary health care, affecting 10 - 19% of those seeking primary care (Shochat et al., 1999; Simon and Vonkorff, 1997), and individuals suffering from insomnia consult their family or a general practitioner (doctor) more frequently than other specialists, such as psychiatrists (Radecki and Brunton, 1993).

Insomnia is more common in women than in men. The highest prevalence is in middle age (40-49 years) and decreases thereafter (Mallon et al., 2014). Various somatic and mental health disorders are associated with insomnia, including cardiovascular disease (Mallon et al., 2002), diabetes (Knutson et al., 2006), and psychiatric disorders (Taylor et al., 2003). Insomnia is also associated with reduced quality of life (Leger et al., 2012; Zammit et al., 1999). These factors make insomnia a public health problem that in primary care patients tends to be more serious than insomnia in the general population. Typically, insomnia in primary care patients is a combination of difficulty initiating sleep, difficulty maintaining sleep, waking up early in the morning and sleep is not refreshing (Leger et al., 2010). Insomnia in primary care patients has been reported as a fairly stable condition, and often general practitioners are unaware that patients have sleep problems. Of those with severe insomnia who were treated pharmacologically, only 22% reported a significant hypnotic effect as prescribed, while 44% reported no effect or no symptom reduction (Hohagen et al., 1993). This paper aims to provide a critical appraisal on the journal article so that the results of this critical study can be used as a good scientific evidence base for evidence based nursing and as a basis for further research on the effectiveness of cognitive therapy for insomnia.

Doctors generally stick to hypnotic prescriptions, but are rarely able to provide them nonpharmacological choices (Siriwardena et al., 2010). Although prescription doctors and nurses expect patients to be unwilling to try alternative treatment regimens, patients are open to exploring non-pharmacological options because they usually experience little benefit from hypnosis (Dyas et al., 2010). The aim of this paper is to review research journals on Improving insomnia in primary care patients: A randomized
controlled trial of nurse-led group treatment so that it can be used as a reference in providing nursing interventions with sleep disorders in primary care patients.

**Method**

The author uses the tools from the Critical Appraisal Skills Program as a guide in conducting Critical Appraisal for the Randomized Controlled Trial (RCT) study. This tool was chosen because it is in accordance with the design of this study, namely RCT. The discussion of this journal article uses three general questions, namely: (1) Is the research valid? (2) What are the results? (3) Are the research results important and useful (CASP, 2017) The results of this critical study are used as a good scientific evidence for Evidence Based Nursing.

Formulation of clinical problems according to (Pudjiastuti, 2010) can be written in the PICO framework format. PICO framework in this study, namely: patient (P) is a randomly selected sample of 165 people and divided into 2 groups, namely 90 treatment groups and 75 control groups in seven routine primary health care in Stockholm County, Sweden between August 2011 and June 2014. The intervention (I) to be given was in the treatment group given the intervention consisting of a group treatment program for insomnia based on the CBT-I technique while the control group was free to undergo insomnia treatment as usual. The outcome (O) was the effect of the effectiveness of group nurse-led treatment with the usual treatment effect in routine primary health care in Stockholm County, Sweden. Based on the PICO framework, this study belongs to an experimental study that aims to determine the effect of group treatment using the CBT-I technique in the treatment group by comparing the usual insomnia treatment in the control group.

**Result**

This study describes a detailed research problem that is focused on the abstract and introduction. The formulation of the research problem is to compare how the effect of nurse-led group treatment with the effect of treatment as usual in routine primary health care in Stockholm County, Sweden. In this study, the researcher determined a
sample of 165 people who met the research requirements, and divided respondents randomly (single-blinded) consisting of 90 treatment groups and 75 control groups.

**Discussion**

The data of all respondents has been calculated in the data analysis section. The results of the study are presented in the form of a table which presents a number of figures explaining the intervention and measurement for the two groups. The results of this study will support the conclusion. Research in the therapy category used double blind, where the respondent did not know which group he was in and the researcher did not know beforehand (blind) to the respondent who received the intervention, this was done to allow the bias of outcome not to occur.

Based on the inclusion criteria and the table of research results, the researcher explained that the two groups had the same background data, namely having sleep disorders and being over 18 years of age. This was done in the study to minimize outcome false. The intervention in this study was carried out randomly because it used RCT. Participants who met the inclusion criteria were randomly assigned to interventions. So that intervention was carried out on 90 people in the treatment group while 75 people in the control group were released to follow insomnia treatment as usual.

Based on the results of the study, the intervention carried out in this study found that there were significant group differences between the treatment group and the control group. This is indicated by the Total ISI (Insomnia Severity Index) score decreasing from 18.41 to 10.74 in the treatment group and from 17.01 to 16.55 in the control group. Insomnia severity in the treatment group increased significantly higher than that of the control group. The total ISI score decreased from 18.41 to 10.74 in the treatment group and from 17.01 to 16.55 in the control group. The between-group effect size was large: 1.23 (Cohen's d). The treatment group reported significantly greater improvement than the control group in all ISI items from baseline to post-treatment (p <0.001). Age and sex had no significant effect. I could not comment on the results on the total ISI score (age, p = 0.208; sex p = 0.657).

The results of this study cannot be applied to local areas because in this study researchers did not use objective measures for sleep assessment. Researchers only
assessed sleep based on the perceptions of the respondents only. The research results in this journal have included all research variables, sleep quality based on the respondent's sleep disturbance, treatment with the guidance of nurses who have been trained in the use of instruments and guiding the treatment group. An important strength of this study was the randomized controlled trial design that followed the CONSORT guidelines (Moher et al., 2001).

The benefit of this research is that we get a non-pharmacological way to treat insomnia, thereby reducing the effects of long-term treatment. This study also had several limitations, in that the researcher did not know how many potentially eligible patients were judged ineligible for the study by their doctors and also did not know if any potentially eligible patients were seeking doctor care. The intervention group is bigger than the control group.

Sleep is a part of human life that has a large portion, on average nearly a quarter to a third of the time is used for sleeping. Sleep is a necessity not a state of rest that is not useful. So that if it is disturbed it can interfere with the need for rest. Insomnia is generally defined as complaints of poor or unsatisfactory sleep, which can include difficulty initiating sleep, awakening after sleep onset, poor sleep quality, early morning awakenings, short sleep times, short total sleep time and daytime consequences. And the treatment of insomnia is not only using drugs but also can be treated with cognitive therapy for insomnia.

**Conclusion**

In this journal, it was found that there was a significant difference between the treatment of insomnia with cognitive therapy and the treatment of insomnia with drugs. So that we can reduce the long-term effects of using drugs to treat insomnia.

**Reference**

Bothelius, K., Kyhle, K., Espie, C. A., & Broman, J. E. (2013). Manual-guided cognitive-behavioural therapy for insomnia delivered by ordinary primary care personnel in general medical practice: A randomized controlled effectiveness trial. *Journal of Sleep Research, 22*(6), 688–696. https://doi.org/10.1111/jsr.12067

CASP. (2017). Critical Appraisal Skills Programme (Randomised Controlled Trial). *Critical Appraisal Skills Programme*, (2017), 1–5.
Eguale, T., Buckeridge, D. L., Winslade, N. E., Benedetti, A., Hanley, J. A., & Tamblyn, R. (2012). Drug, Patient, and Physician Characteristics Associated With Off-label Prescribing in Primary Care. Archives of Internal Medicine, 172(10), 781–788. https://doi.org/10.1001/archinternmed.2012.340

Pudjiastuti, P. (2010). Pengantar Evidence-Based Case Reports, 11(6), 385–386.

Sandlund, C., Hetta, J., Nilsson, G. H., Ekstedt, M., & Westman, J. (2017). Improving insomnia in primary care patients: A randomized controlled trial of nurse-led group treatment. International Journal of Nursing Studies, 72, 30–41. https://doi.org/10.1016/j.ijnurstu.2017.03.007