A study to assess the knowledge on restless legs syndrome among perimenopausal women

Jagadeeshwari J, Kaviya JN, Deva Dharshini P and Banu B

Department of Obstetrics and Gynaecological Nursing, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu, India

Abstract
Restless legs syndrome (RLS) is a neurological disorder characterized by an uncomfortable sensation in the legs which gets worse in the evening or night, relieved upon movement. The aim of this study was to specify the prevalence of RLS in the group of young medical students and to assess the effect of RLS on sleep, as sleep disturbance is one of the chief complaints of RLS patients. A quantitative approach with descriptive research design was used to conduct the study in Kondancheri village at rural area in Thiruvallur district. This study was a cross-sectional study conducted for a period of 3 weeks. A total of 100 women participated and were given questionnaires to detect RLS based on criteria proposed by the International Restless Legs Syndrome Study Group. They were sent questions on RLS, general health, sleep problems, reproductive health and menopausal state. The response rate was 70.3%; 15.7% of the women were diagnosed with RLS. Prevalence increased with age. RLS subjects more often had symptoms of affected sleep and depressed mood. Co-morbidity with heart disease was more common among RLS subjects, whereas hypertension and diabetes mellitus were not. There was a strong association between vasomotor symptoms and RLS but no statistical relationship between use of hormone replacement therapy, perimenopausal state and RLS. The prevalence of RLS among Swedish women is high. RLS sufferers more often suffered from depression and heart disease, whereas no such associations were noted for diabetes or hypertension. We found an increased prevalence of RLS among women with vasomotor symptoms (night sweats) during the menopausal transition but not among women using hormone replacement therapy.

Keywords: Knowledge, restless legs syndrome and perimenopausal women

Introduction
Restless leg syndrome (RLS) is a neurological disease characterized by throbbing, pulling, creeping, or other unpleasant sensations in the legs and an uncontrollable and sometimes overwhelming urge to move them [1]. It was first described by Sir Thomas Willis, an English physician in 1672 [2]. Later in 1945, Ekbohm classified it into a sensory form called as asthenia cru rum paraesthetica and a painful variant called asthenia cru rum dolorosa [3]. RLS is the generally lifelong condition for which there is no cure. Symptoms may gradually worsen with age some women have remissions, periods in which symptoms decreased or disappear for days, weeks or months, although symptoms usually eventually reappear [4]. The symptoms of RLS can impair sleep onset, sleep maintenance, and overall quality of life. Most studies have reported a prevalence of 5% to 15% of the adult population. RLS affects both men and women with a female preponderance of 2:1. Epidemiological studies have suggested a possible association between RLS and cardiovascular diseases, however the association between RLS and hypertension remains controversial [5]. Previous studies have suggested that individual with RLS are at increased risk of developing the pain because of the presence of periodic limb movements of sleep [PLMS] seen in 80% of patients with RLS [6]. The population-based studies have also suggested that hypertension may act as an intermediary risk factor leading to cardiovascular disease in people with RLS [7]. RLS has been associated with dopaminergic deregulation, several health conditions, and various lifestyle factors like consumption of alcohol, coffee, cigarettes, and some drugs RLS has also been found to substantially increase the risk of major depressive disorder and anxiety disorders. International Restless Legs Syndrome Study Group rating scale (IRLSS) is a valid instrument that has shown high internal consistency, test-retest reliability, and clinical validity [8]. This is primarily a neurobehavioral disorder; hence, objectively, severity can only be assessed by using a questionnaire. Restless legs syndrome affects the quality of sleep and causes daytime somnolence; this was calculated by the Epworth Sleepiness Scale. It refers to the women who had cessation of menstruation since 1 year who are in the early postmenopausal period within 5 years of final menstrual period (classification by NAMS, 2001) and with the age group of 45-55 years and those who experience physical and psychological symptoms of menopause as
Exercise is an incredibly important part of a healthy person’s life. Exercise is attributed to a healthy, long life and is attributed to preventing cancers, high blood pressure, sleep apnea and even asthma. Exercising regularly helps to hone one's athletic skills, to strengthen the cardiovascular system and muscles across the bodies. Exercise can also help to prevent obesity, Type 2 Diabetes and heart disease. This growth has been influenced by many factors. The fitness movement and the increase in leisure time has created a market for physical education and sport programmers to serve individuals of all ages and needs. The emphasis by society on achieving and maintaining optional health and wellbeing throughout one’s life span and on disease prevention and health promotion has also served as the impetus for expansion of professional opportunities. Appropriate physical activity is acknowledged to be an important factor in the attainment of optimal health for people of all ages [10]. The study aim is to determine the knowledge on restless leg syndrome among perimenopausal women.

Methods and Materials
A quantitative approach with descriptive research design was used to conduct the study in Kondancheri village at rural area in Thiruvallur district. Total population of that village is 300. In that area totally there are 6 streets, total premenopausal women 220 among them 100 sample are selected for the study. By using purposive sampling technique. The criteria for sample selection were Woman who had restless legs syndrome with age between 40-75 years of age, Women who can understand Tamil and English, Woman who are willing to participate. The Exclusion criteria for the sample selection are Woman who is not willing to participate. Formal permission was obtained from the Panchayats Head in Kondancheri Village. After obtaining the permission, the investigator selected 100 women’s by using purposive sampling technique. After the sample selection informed consent was obtain from each sample after the general instructions. The investigator collected the demographic variables and questionnaire method to assess the knowledge of restless leg syndrome among perimenopausal women. The data was analysed by using descriptive and inferential statistics. The sample characteristics were described using frequency and percentage. Chi-square was used to associate the selected demographic variables.

Results and Discussion
Section A: Sample characteristics
Among 100 samples 43(43%) were under the age group of 50-60 years, 38(38%) samples were uneducated, 56(56%) samples were middle class, 36(36%) samples had income of rs. 5000-10,000, 51(51%) samples were married, 70(70%) samples were employed.

Section B: Frequency and percentage distribution of level of knowledge on restless leg syndrome among premenopausal women
The level of knowledge on restless leg syndrome are measured by Symptom Assessment Scale (SAS) devised by the investigator which is confirmed by Registered Gynecologist [9].

There was no association between demographic variable among the premenopausal women aged above 40 years. There was statistically significant found in any other health problem on clients. The present study finding is supported by Wesstrom J, et al. Climacteric (2008) has conducted the study on Restless legs syndrome among women: prevalence, co-morbidity and possible relationship to menopause. Objective restless legs syndrome (RLS) is a common neurological movement disorder with a female preponderance and an increasing prevalence with age. Methods a random sample of 5000 women aged 18-64 years was selected from the general Swedish population. They were sent questions on RLS, general health, sleep problem, reproductive health and menopausal state. Results the response rate was 70.3%; 15.7 % of the women were diagnosed with RLS. Prevalence with age. Methods a random sample of 5000 premenopausal women aged above 40 years. There was no association between demographic variable among the premenopausal women aged above 40 years. There was statistically significant found in any other health problem on clients. The present study finding is supported by Wesstrom J, et al. Climacteric (2008) has conducted the study on Restless legs syndrome among women: prevalence, co-morbidity and possible relationship to menopause. Objective restless legs syndrome (RLS) is a common neurological movement disorder with a female preponderance and an increasing prevalence with age. Methods a random sample of 5000 women aged 18-64 years was selected from the general Swedish population. They were sent questions on RLS, general health, sleep problem, reproductive health and menopausal state. Results the response rate was 70.3%; 15.7 % of the women were diagnosed with RLS. Prevalence increased with age.

Conclusions
The study findings shows that 20% woman have an adequate knowledge thus this study proves that woman’s as have inadequate knowledge, 10% of women have moderate knowledge and 15% had adequate knowledge on restless legs syndrome.

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate knowledge</td>
<td>26</td>
<td>26%</td>
</tr>
<tr>
<td>Moderate adequate knowledge</td>
<td>72</td>
<td>72%</td>
</tr>
<tr>
<td>Adequate knowledge</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

The present study finding is supported by R Kutlu, N.Y. Selcuk, S. Sayin (2018) has conducted the study on restless legs syndrome and quality of life in chronic haemodialysis. Aim: the aim of the study was to search frequency of RLS and effects of RLS and quality of life in chronic haemodialysis patient. Settings and design: chronic haemodialysis patient of classical haemodialysis patient were chosen. Length of the study was approximately one year. Subjects and methods: Two hundred and thirty seven patients were investigated. RLS was diagnosed using to international the RLS questionnaires. The international RLS rating scale was used to calculate RLS severity. Results: the overall prevalence of RLS according to the four essential criteria was 18.6%. According to IRLS, 22.7 %of the patients with RLS were mild (n=10), 63.6% were moderate (n=28) and 13.7% were severe (n=6). Only the physical health scores were higher in without RLS than patients with RLS (p=0.027). Conclusion: This study revealed that the frequency of RLS among chronic haemodialysis patients in 18.6% and RLS leads to physical life quality disturbance.

Table 1: Frequency and percentage distribution of level of knowledge on restless leg syndrome among premenopausal women.
Acknowledgement
We would like to extend our gratitude to the authorities of Saveetha College of Nursing and Thiruvalur district kondancheri village.

Reference