Full Length Research Paper

A Study to Assess the Level of Knowledge among Staff Nurses Working in Different ICUs of Shri Mahant Indiresh Hospital, Patelnagar, Dehradun, Uttarakhand India.

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ARTICLE DETAILS	ABSTRACT
	Restless legs syndrome (RLS), also known as Willis-Ekbom disease (WED), is a long-term disorder that causes an uncontrollable urge to move the legs due to an uncomfortable sensation. This condition typically occurs during evening or night-time hours when sitting or lying down. The discomfort usually improves with movement, and occasionally, arms may also be affected. A study was conducted to assess the knowledge level among staff nurses working in different ICUs in Dehradun, India. The research design used was descriptive, with non-probability convenient sampling. The results showed that the majority of respondents were female, with 60% being female and 40% male. The majority of nurses had experience of 1-2 years, with the second most having 2-3 years and 12.5% having more than 5 years. Personal habits were 67.5% without such habits, with 15% being tobacco consumers, 12.5% being smokers, and 5% being alcoholic consumers. The majority of respondents were from rural areas, while 40% were urban. The percentage of nurses with previous knowledge from electronic media was 10%, mass media 12.5%, print media 17.5%, and self-experienced 60%. The bar graph showed a percentagewise distribution according to the level of knowledge in nurses, with 50% having inadequate knowledge, 40% having moderate knowledge, and 10% having adequate knowledge. The study concluded that the nurses seem to have moderate knowledge regarding Restless Leg Syndrome.

1.Introduction

Nursing is a profession that demands physical, social, mental, and spiritual stabilities. Nurses should not just deal with a variety of health issues but also should have knowledge about various disease conditions and their nursing Interventions. The nursing job is inherently stressful due to its complexity, leading to fatigue and consequences such as restless legs syndrome (RLS). This study aimed to investigate the knowledge of RLS in nurses, its prevalence, and its occurrence. Health problems are seen in nurses due to the physical demands of lifting and moving patients, nurses often experience back pain, muscle strains, and other musculoskeletal disorders. High levels of stress, long working hours, emotional strain, and exposure to traumatic situations can lead to mental health problems such as anxiety, depression, and burnout. Irregular and long working hours can disrupt nurse's sleep patterns, leading to fatigue and potentially impacting their overall health and well-being. Nurses are at risk of exposure to various infectious diseases in healthcare settings, despite following proper precautions, which can pose a threat to their health. Handling chemicals and exposure to hazardous substances in a medical setting can lead to respiratory problems, skin irritation, and other problems. Nurses can face injuries and accidents in the workplace including needle stick injuries, slips, and falls which may result in physical harm. The irregular hours and rotating shifts can disrupt the body's natural circadian rhythm, leading to sleep disorders and other health problems. Restless legs syndrome (RLS) is a condition that causes an uncontrollable urge to move the legs,

usually because of an uncomfortable sensation. It typically happens in the evening or night time hours when you're sitting or lying down. Moving eases the unpleasant feeling temporarily. Restless legs syndrome (RLS), also known as Willis-Ekbom disease (WED), is generally a long term disorder that causes a strong urge to move one's legs. There is often an unpleasant feeling in the legs that improves somewhat by moving them. This is often described as aching, tingling, or crawling in nature.

Occasionally, arms may also be affected. The feelings generally happen when at rest and therefore can make it hard to sleep. Due to the disturbance in sleep, people with RLS may have daytime sleepiness, low energy, irritability, and a depressed mood. Additionally, many have limb twitching during sleep, a condition known as periodic limb movement disorder. RLS is not the same as habitual foot tapping or leg rocking. It is caused by low levels of iron and ferritin in the brain. Nurses due to their demanding work schedules, may have inadequate nutrition or dietary habits that can lead to iron deficiency anemia, which exacerbates RLS symptoms. Nurses often work long shifts and irregular hours, leading to chronic sleep deprivation. Lack of sufficient sleep can worsen RLS symptoms, as fatigue and sleep disturbance are known triggers for RLS. Chronic stress and fatigue due to physical and emotional workload can cause RLS. Due to extended periods of standing or sitting during their shifts, lack of physical activity or a sedentary lifestyle, consuming caffeinated beverages to stay alert during shifts, or using certain medication, can exacerbate the symptoms of restless leg syndrome.

Symptoms of the RLS may include uncomfortable sensations in legs like tingling or creeping, itching, pulling or throbbing, aching, or pain. These sensations typically worsen at rest or periods of inactivity, especially sitting or lying down. They improve with the movements. Some individuals with RLS may also experience involuntary, repetitive leg movements during sleep known as Periodic Limb Movement Disorder. These movements can disrupt sleep patterns and contribute to daytime sleepiness. Restless leg syndrome can be relevant to nurses as nurses often work long and irregular hours, which can lead to chronic fatigue and disrupted sleep patterns.

Fatigue is known to worsen RLS symptoms. Prolonged sitting and standing during their shift, and periods of prolonged inactivity during rest worsen the symptoms. Nursing is a high-stress profession, which causes overstress and sleep disorders to the staff and impacts the severity of the RLS. Imbalance in nutrition and iron deficiency are seen due to busy work schedules, use of caffeine and medication to be alert during their shifts, and inadequate sleep and rest all these factors contribute towards the Restless leg syndrome in nurses. Approximately 15% of the population worldwide suffers from Restless Leg Syndrome. The reported restless leg syndrome prevalence varies between 3.9 and 14.3% depending on the population studied and the criteria used.

The prevalence of RLS in the present study was found to be 11.9% in many parts of world. However, in other Indian studies, its prevalence was 2.1% and 2.9%. Intervention of RLS include avoiding stimulants in the evening (such as caffeine, tobacco and alcohol). Quit smoking, regular daily exercise, good sleep habits, avoiding medicines that trigger the symptoms or make them worse. Massaging your legs, taking hot bathing, apply hot compression to the legs, doing activities that distract your mind such as reading or watching television, relaxation exercises such as yoga, walking and stretching.

1.1 Need for study
Restless leg syndrome (RLS), also known as Willis-Ekbom disease, is a sleep-related movement disorder characterized by unpleasant sensations in the legs. It can occur at any age and can disrupt sleep, affecting daily activities. RLS affects between 5% and 15% of the population, with women being more affected than men. It can also affect pregnant women and end-stage renal disease patients. RLS can cause discomfort, fatigue, and difficulty concentrating, impacting daily functioning and quality of life. It can also contribute to mental health issues like anxiety and depression. Nurses and other healthcare professionals can be significantly affected by RLS, as they often work long shifts and struggle with concentrating and making critical decisions.

1.2 Objective
A study to assess the level of knowledge regarding Restless Leg Syndrome among Registered Nurses in selected hospital Dehradun

2. Materials and methods

2.1 Study area
The study is conducted at MICU, SICU, RICU and CICU of Shri Mahant Indiresh Hospital, Patel-Nagar, Dehradun.

2.2 Sampling population and size
In the present study is those nurses who are Registered Nurse and presently working in Shri Mahant Indiresh Hospital. The target population of the study included nurses of Shri Mahant Indiresh Hospital, Dehradun. 40 nurses from Shri Mahant Indiresh Hospital Dehradun who are currently working in MICU, SICU, RICU and CICU and satisfied the inclusion criteria were allotted to research group.

3. Research methodology

This research deals with the descriptive of methodology and different steps whichwas undertaken for gathering and organizing data for the study to assess the knowledge, attitude and behaviour of selected registered nurses regarding the disease restless leg syndrome which is also known as Willis-Ekbom disease. It consists of research design, research approach, and sampling technique description of tools, data collection, procedure and method of analysis based on the statement and objective of study.

3.1 Research design and research approach

A quantitative approach was used to assess the knowledge regarding restless leg syndrome among the nurses. The data was collected using non-probability convenient sampling. The research design used in this study is a non-experimental descriptive research design to assess the knowledge regarding restless leg syndrome in staff nurses of Shri Mahant Indiresh Hospital, Patel-Nagar, Dehradun.

3.2 Variables

In this study variables are age, sex, years of experience, personal habits, area of residence etc

3.3 Inclusion criteria

- Who all are available during data collection period.
- Who all are willing to participate in the study.
- Nurses of selected area of Dehradun.

3.4 Exclusion criteria

- Not willing to participate in the study.
- Who were on leave during the research.
- Nurses were interns and who were not registered.

3.5 Description of the tools

The tool was designed in two sections; Section-A and Section- B in order to achievethe objectives.
Section-A - It consists of 6 demographic variables like; age, sex, year of experience,personal habit, area of residence and previous knowledge

Section-B - It consists of self-structured questionnaires to assess the level ofknowledge regarding Restless Leg Syndrome.

A sum of 30 knowledge type questions were given to nurses and after that the scoringkey is divided.
The scoring is based on:

Table: 1 Shows level of knowledge and its score (%)

LEVEL OF KNOWLEDGE	SCORING	FREQUENCY	PERCENTAGE
Inadequate	1-10	20	50%
Moderate	11-20	16	40%
Adequate	21-30	04	10%

4. Pilot study

Pilot study was conducted in the general ward to assess the feasibility of study and to decide the statistical analysis. The study conducted to obtain the information for improving the main study and to identify the reliability of the tool and feasibility ofthe study. The sampling technique adopted was convenient technique to draw the sample. The total sample size was 10% nurses of the main sample. It was explained and confidentiality was assured.

5. Results

Table no 2 The percentage distribution of nurses in relation to their age depicts that majority of respondents42.5% were in the age group 35years above, the secondmajority were 32.5%of age group 26-30 years, the rest 17.5% were of age 20-25years age group and the remaining 7.5% were of age group 31-35 years. Percentage distribution of nurses in relation to their gender depicts that majority respondents 60% were females and remaining 40% were males.

The percentage distribution of nurses according to their years of experience depicts that the majority of respondents were 47.5% having experience of 1-2 years, whereas the second majority were 30% having 2-3 years of experience, 12.5% were those with more than 5 years' experience and the least 10% of them were those who had experience of 3-4years. Percentage distribution of nurses according to their personal habits were 67.5% majority with no such habits, 15% with

tobacco consumers, 12.5% with smokers and 5% with alcoholics consumer. Percentage distribution of nurses according to their residential area depicts that majority of respondents 60% are from rural area whereas 40% of them are from urban area. Percentage data of the nurses having no previous knowledge is 60%, previous experience is 17.5% from mass media 12.5% and from electronic media is 10%.

Table 2: Distribution of frequency and percentage according to demographic data

| S. NO	Demographic variables	Frequency	Percentage
1	**Age:**		
	20-25 years	07	17.5%
	26-30 years	13	32.5%
	31-35years	03	7.5%
	35 years above	17	42.5%
2	**Sex:**		
	Male	16	40%
	Female	24	60%
3	**Years Of Experience**:		
	1-2 Years	19	47.5%
	2-3Years 3-4Years	12	30%
	More than 5 Years	4	10%
		5	12.5%
4	**Personal habits**:		
	Smoking	5	12, 5%
	Alcoholics	2	5%
	Tobacco	6	15%
	No such habits	27	67.5%
5	**Area of residence:**		
	Rural	24	60%
	urban	16	40%
6	**Previous knowledge**:		
	Mass media	05	12.5%
	Electronic media	04	10%
	Previous experience	07	17.5%
	No previous knowledge	24	60%

Age
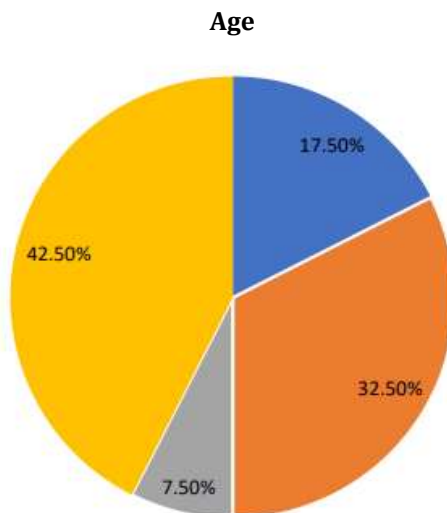
Fig 1: pie chart showing distribution of subject according to age

Age shows that nurses are 7 of age group of 20-25 years i.e 17.5%, 13 areabout 26-30 years i.e 32.5%, 3 are about 31-35 years i.e. 7.5% and 17 are about 35 years i.e.42, 5%.
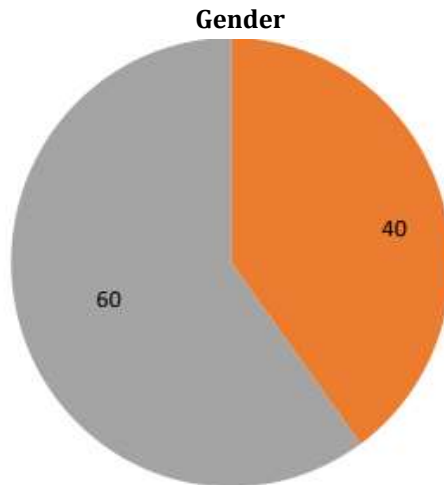
Gender

Fig 2: pie graph showing distribution of subject according to gender

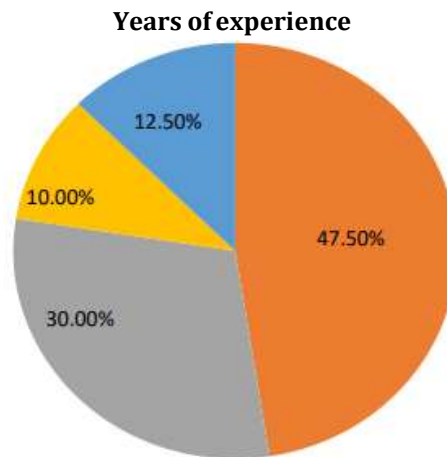It shows that male nurses are 16 i.e. 40% and females nurse are 24 i.e. 60%who have participated.

Years of experience

Fig 3: pie graph showing distribution of subjects according to years ofexperience

It shows that, there are about 19 of 47.5%of staff are having experiencebetween1-2 years, 12 of 30% of 2-23 years, 4 of 10% between 3-4years experience and 5 of 12, 5% with more than 5 years of experience.
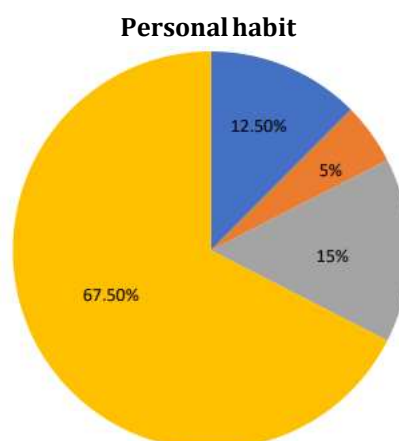
Personal habit

Fig 4: pie graph showing distribution of subjects according to personalhabits

It shows that, 12.5% nurses are smokers, 5% are alcoholic, 15% nurses chewtobacco, and 67.5% nurses having no such habits.
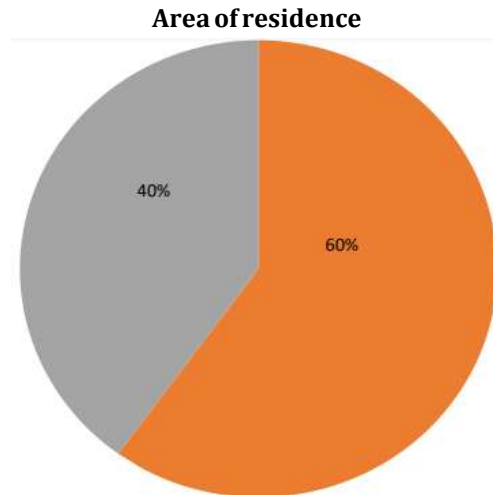
Area of residence

Fig 5: pie graph showing distribution of subject according to area of residence

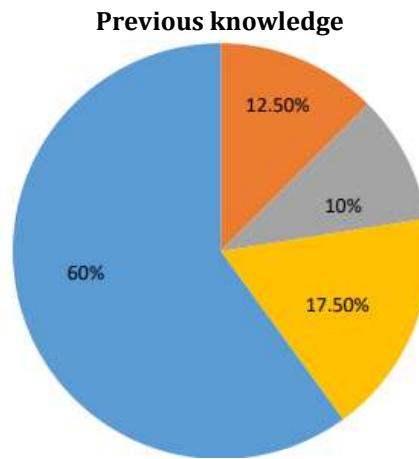It shows that 60% of nurses belong to rural area and 40% belongs to urbanarea

Previous knowledge

Fig 7: Pie graph showing distribution of subjects according to their previous knowledge

It shows that 60% nurses have no previous knowledge, 17.5% have knowledge from previous experience, 12.5% have knowledge from mass media and 10% have knowledge from electronic media.

Table 3-Percentage wise distribution according to level of knowledge

Level of knowledge	Scoring	Frequency	Percentage
Inadequate	1-10	20	50%
Moderate	11-20	16	40%
Adequate	21-30	4	10%

Scoring key
Percentage wise distribution of level of knowledge among nurses about restless leg syndrome that highest 50%of them had inadequate knowledge, 40% had moderate knowledge and only 10% of them had an adequate knowledge
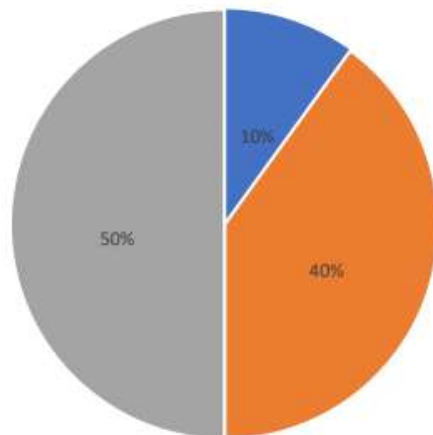
Fig 9: The pie graph showing the distribution of the subjects according totheir level of knowledge.

6.Conclusion

Taking into account the findings of the study, the following conclusion was arrived at: the highest proportion of the sample had inadequate knowledge, which was fifty percent; forty percent of the nurses had moderate knowledge; and ten percent of the nurses had adequate level of knowledge.

7.Recommendations

a) A study can be undertaken on large sample for making more validgeneralization.

b) A Study can also be conducted on other syndromes.

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