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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURE TEACHING PROGRAMME ON RESTLESS LEG SYNDROME AMONG NURSES IN SELECTED HOSPITAL.

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ABSTRACT

The study evaluated the effectiveness of a Structured Teaching Programme (STP) on Restless Leg Syndrome (RLS) among nurses at JNU Hospital. It assessed baseline knowledge, compared pre- and post-test scores, and examined associations with demographic variables. Two hypotheses were tested. Data were collected using a structured questionnaire and analyzed to determine knowledge improvement and its relationship with selected variables. The results indicated Most nurses had inadequate knowledge of RLS before the intervention. After the Structured Teaching Programme (STP), knowledge improved significantly, with mean scores rising from 57.52% to 83.85%, confirming its effectiveness. A significant association was found with the source of information ($p<0.05$), while no association was observed with other demographic variables. In conclusion, the study revealed that nurses initially had limited knowledge about RLS, which significantly improved following the structured teaching programme. Hence, the STP was effective in enhancing awareness and understanding of RLS among nurses.

Keywords: Effectiveness, Structured Teaching Programme, Knowledge, Restless Leg Syndrome.

INTRODUCTION

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Restless Leg Syndrome (RLS), or Willis-Ekbom Disease, is a neurological disorder characterized by an urge to move the legs with unpleasant sensations, worsening at rest and at night, causing sleep disturbances. It affects 5–10% of adults but is often underdiagnosed. RLS may be early- or late-onset and is linked to dopamine dysfunction, with risk factors such as iron deficiency, pregnancy, and chronic diseases. Diagnosis is clinical. Management includes medications and lifestyle changes. Nurses play a vital role in early identification, and Structured Teaching Programmes (STPs) enhance their knowledge and practice.

Need for the study:

Restless Legs Syndrome (RLS) is a common neuro-sensory disorder that disrupts sleep and leads to fatigue, mood changes, and reduced quality of life. Despite affecting about 7.12% of adults globally, it remains under-recognized and underdiagnosed. Risk factors include age, smoking, depression, diabetes, and lifestyle habits, while diagnosis is often difficult due to symptom overlap.

In India, data are limited. Studies report 2.1% prevalence in Bangalore and 26.11% among cirrhosis patients in Jaipur, indicating higher risk with chronic conditions. These findings highlight gaps in awareness and diagnosis.

This study aims to assess prevalence, identify risk factors, and improve early detection, management, and healthcare education.

Objectives:

1. To assess the knowledge of Restless Legs Syndrome among nurses.
2. To evaluate the effectiveness of a Structured Teaching Programme (STP) on Restless Legs Syndrome among nurses in a selected hospital.
3. To determine the association between the effectiveness of the Structured Teaching Programme on Restless Legs Syndrome and the demographic variables of the nurses in a selected hospital.

Assumptions:

Nurses may have limited baseline knowledge of Restless Leg Syndrome (RLS). A Structured Teaching Programme (STP) can improve their knowledge, leading to better identification and management in clinical practice. The effectiveness of STP may be influenced by demographic factors such as age, education, and experience.

RESEARCH METHODOLOGY

A quantitative one-group pre-test and post-test design was used to evaluate the effectiveness of a Structured Teaching Programme (STP) on nurses' knowledge and practices regarding Restless Leg Syndrome (RLS). The study was conducted at JNU Hospital, Jaipur, among 30 nurses selected through purposive sampling. Data were collected using a structured questionnaire including demographic

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variables and 30 MCQs on RLS.

Scoring was categorized as:

Adequate knowledge: 75–100%

Moderately adequate: 51–74%

Inadequate: ≤50%

The tool's validity was ensured by review from five experts (four nursing, one medical), and reliability was confirmed with a Pearson correlation coefficient of 0.9.

Data collection involved three stages:

Pre-test to assess baseline knowledge,

Intervention through the STP,

Post-test after 10 days.

A pilot study with six nurses in a private Jaipur hospital confirmed feasibility, validity, and reliability of the tool.

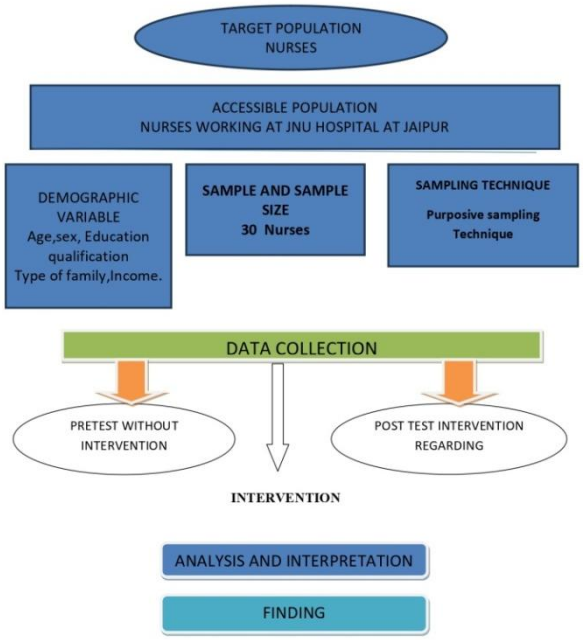
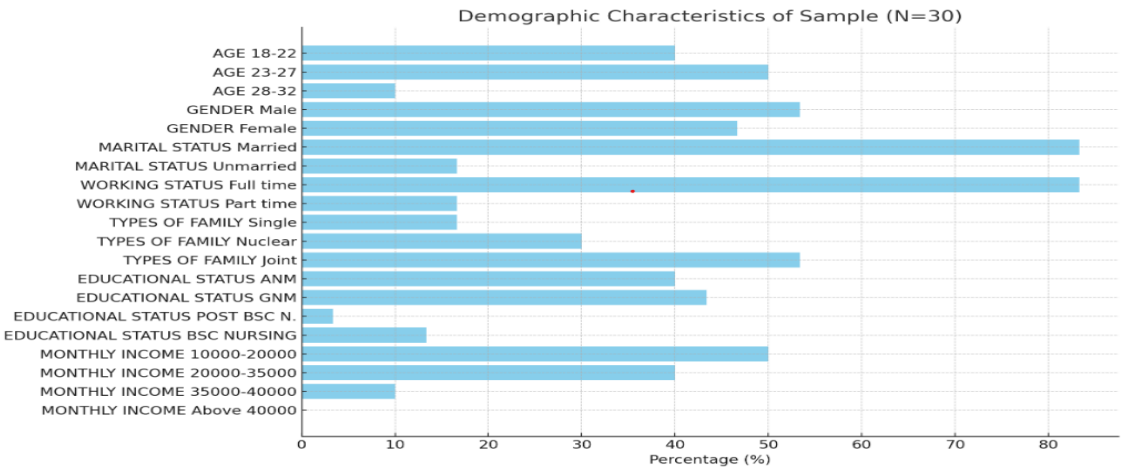


FIG 2 : SCHEMATIC PRESENTATION RESEARCH

For statistical analysis, descriptive statistics (mean, percentage, standard deviation) and inferential tests (t-test, chi-square, Pearson correlation) were used to evaluate the effectiveness of the intervention.

Data Analysis and Statistics

Section I Descriptive analysis of demographic variables.



SECTION II - Assessment knowledge of Nurses care prior to implementation of STP.

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TABLE: Area wise comparison of mean, standard deviation and mean percentage of pre test knowledge scores of nurses regarding RLS.

AREAS	NO of faculty	SCORE		
		MEAN	SD	MEAN %
ANM	**4**	2.2	1.22	66
GNM	5	1.8	2.93	54.6
BSC NURSING	21	1.7	1.88	51.95
Overall	30	1.9	2.01	57.52

TABLE: LEVEL OF KNOWLEDGE (Pre-Test) OF NURSES ON RLS -

Level of knowledge	Mini-Max Obtainable Score	Frequency	Percentage %
Adequate knowledge	75% to 100%	3	10
Moderately adequate	-51% to 74%	8	27
Inadequate knowledge	-50% and below	19	63

The findings revealed that a majority of nurses had inadequate knowledge about RLS prior to intervention. This underscores the urgent need for structured educational programmes to enhance awareness, understanding, and management of RLS among nursing professionals.

SECTION III COMPARISION OF PRETEST AND POSTTEST KNOWLEDGE OF NURSES REGARDING RESTLESS LEG SYNDROME

TABLE : Area wise comparison of mean , standard deviation and mean percentage of pre and post test knowledge scores of Nurses regarding restless leg syndrome.

AREA	MAXIMUUM SCORE	PRETEST SCORE			POSTTEST SCORE			DIFFERENCE MEAN %
		Mean	SD	Mean %	Mean	SD	Mean%	
ANM	4	2.2	1.22	66	3.4	1.2	85.00	19.00
GNM	5	1.8	2.93	54.6	3.9	2.4	78.00	23.40
BSC N.	21	1.7	1.88	51.95	18.0	2.1	85.71	33.76
Overall	**30**	1.9	2.01	57.52	25.2	2.0	83.85	26.33

TABLE : LEVEL OF KNOWLEDGE COMPARISON. –

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Level of knowledge	Mini-Max Obtainable Score	Pre test Percentage %	Post test Percentage %	Difference (%)
Adequate knowledge	75% to 100%	10	64	+54
Moderately adequate	-51% to 74%	27	33	+6
Inadequate knowledge	-50% and below	63	3	-60

The findings clearly demonstrate that the STP was highly effective in improving nurses' knowledge of RLS. Most nurses moved from inadequate to adequate knowledge levels, confirming the value of structured educational interventions in nursing practice.

SECTION IV : ASSOCATION BETWEEN THE SELECTED DEMOGRAPHIC VARIABLES WITH THE LEVELS OF KNOWLEDGE NURSES REGARDING RESTLESS LEG SYNDROME

TABLE :

Variable	χ^2 Value	p-value	Significance
Age	0.615	0.961	NS
Gender	0.756	0.685	NS
Marital Status	0.711	0.701	NS
Working Status	0.963	0.618	NS
Type of Family	1.038	0.904	NS
Educational Status	13.381	0.037	**Significant**
Monthly Income	1.141	0.888	NS

Chi-square analysis showed no significant association between knowledge and most demographic variables ($p>0.05$). However, educational status showed a significant association ($p=0.037$), indicating that higher educational levels are linked to better knowledge of Restless Leg Syndrome.

DISCUSSION ON THE FINDINGS BASED ON THE OBJECTIVES OF THE STUDY:

Objective 1: To assess the knowledge of Restless Legs Syndrome among nurses.

The study assessed nurses' knowledge of Restless Leg Syndrome (RLS) and found generally low awareness levels. This knowledge gap may lead to underreporting or misdiagnosis in clinical practice. Although prevalence was not measured, the findings suggest that limited understanding among nurses could contribute to underestimation of RLS cases.

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Objective 2: To evaluate the effectiveness of a Structured Teaching Programme (STP) on Restless Legs Syndrome among nurses in a selected hospital.

The effectiveness of the Structured Teaching Programme (STP) was assessed using pre- and post-test scores. Before intervention, 63% of nurses had inadequate knowledge, with a mean score of 57.52%. After STP, the mean score increased to 83.85%, with inadequate knowledge reduced to 3% and adequate knowledge rising to 64%. These findings indicate a significant improvement, confirming the effectiveness of the STP in enhancing nurses' knowledge of RLS.

Objective 3: To determine Association between the Effectiveness of STP on RLS among Nurses in a Selected Hospital with Their Demographic Variables.

The study analyzed the association between demographic variables and nurses' knowledge levels before and after the intervention using the Chi-square test.

The analysis revealed no significant correlation between nurses' knowledge levels and demographic characteristics, such as:

- Age ($p = 0.961$) Gender ($p = 0.685$)
- Marital status ($p = 0.701$) Work status ($p = 0.618$)
- Type of family ($p = 0.904$) Monthly income ($p = 0.888$)

However, a significant association ($p = 0.037$) was found between knowledge levels and educational qualification.

- Nurses with higher education levels (B.Sc. Nursing, Post B.Sc. Nursing) had better knowledge of RLS than those with ANM and GNM qualifications.
- This suggests that formal nursing education plays a critical role in RLS awareness and knowledge improvement.

Thus, STP was effective across all groups, but its impact was greater among those with higher education levels.

CONCLUSION

The study identified a knowledge gap among nurses regarding Restless Leg Syndrome (RLS). The Structured Teaching Programme (STP) significantly improved knowledge levels. Educational qualification influenced knowledge, while other demographic factors did not. Structured educational programmes are essential to enhance nurses' competence and improve patient care.

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