



# KNOWLEDGE AND RELATED SELF-CARE PRACTICE REGARDING RESTLESS LEG SYNDROME (RLS) AMONG ANTENATAL MOTHERS.

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**Abstract: Background:** The prevalence of restless leg syndrome (RLS) in pregnant women is 19-26% as compared to general population. RLS is more common in the last trimester. The international restless leg syndrome study group has recommended that pregnant women use conservative measures to treat RLS, it entails avoiding factors that can increase the likelihood of having RLS.

**Aim:** To determine the knowledge and related self-care practice of restless leg syndrome among antenatal mothers.

**Methodology:** Quantitative research approach was adopted. Total 210 participants were selected through convenient sampling technique. Data were collected by administering Socio-demographic Performa. A structured questionnaire was administered. The data was analyzed by using descriptive and inferential statistics.

**Results:** The result showed that the prevalence of RLS in Indian pregnant was 54.8%. The mean knowledge score + SD was (9.01 + 2.47) of the antenatal mothers. The mean percentage of knowledge score was 56.25%. The total knowledge score was 18, and range of knowledge score of antenatal mothers was 3-16. Description of practice score regarding management of RLS. The total practice score was 36. The mean practice score + SD was (14.71 + 3.79). The mean percentage was 54.4%. and range of practice score was 6-27. There was a significant correlation  $r = 0.71$  between knowledge score and practice score of antenatal mothers regarding restless leg syndrome.

**Conclusion:** The study concluded that the participants had not adequate knowledge and practice regarding restless leg syndrome. By giving written and pictorial pamphlet at the time of data collection, antenatal mothers motivated to read this pamphlet it may improve the knowledge and practice regarding restless leg syndrome.

**Index Terms - Knowledge, Self care practice, Restless leg syndrome**

## I. INTRODUCTION

Every pregnant woman has a unique pregnancy experience. As a result, every woman's pregnancy experience is new and distinct. Most of the discomforts experienced by pregnant women are caused by hormonal changes or physical changes caused by the growing uterus.<sup>1</sup>

Pregnant women are at least two to three times higher risk of experiencing restless leg syndrome than the general population. Restless leg syndrome during pregnancy is associated with adverse maternal and fetal outcomes.<sup>2</sup>

Pregnancy has been identified as a significant risk factor that can both trigger and worsen RLS. Restless leg syndrome affects pregnant women rise in the third trimester and usually goes after delivery. It was discovered that restless leg syndrome is associated with history of RLS in previous pregnancy, history of RLS prior to conception, consumption of caffeinated drinks in pregnancy, HB level < 11g/dl and inadequacy of iron supplementation during pregnancy.<sup>3</sup>

Apart from avoiding the causes, no other way of preventing restless leg syndrome has been established or researched. If restless leg syndrome is caused by a specific cause, treating those causes may help in the withdrawal or reduction of restless leg syndrome. Another goal of this syndrome is to improve the quality of life, it entails reducing daytime sleepiness and improving sleep quality in pregnant women.<sup>5</sup>

**2.OBJECTIVES:****Primary Objectives**

1. To identify the prevalence of restless leg syndrome among antenatal mothers.
2. To assess the level of knowledge of antenatal mothers regarding restless leg syndrome.
3. To assess the self-care practice of antenatal mothers regarding restless leg syndrome.

**Secondary Objectives**

4. To determine the correlation between knowledge score and self-care practice score of antenatal mothers regarding restless leg syndrome.
5. To determine the association between level of knowledge with their selected demographic variables.
6. To determine the association between self-care practice scores with their selected demographic variables.

**3. Methodology**

Quantitative research approach was adopted total 210 participants were selected through convenient sampling technique. Research study was conducted in antenatal OPD of Himalayan Hospital, Dehradun Uttarakhand. Data were collected by administering Socio-demographic Performa, structured knowledge and practice questionnaires. The data was analyzed by using descriptive and inferential statistics.

**4. Result:**

**4.1 Table no. 1 Frequency and percentage distribution of socio demographic characteristics of Antenatal Mothers.**  
(n=210)

S. No	VARIABLES	FREQUENCY	PERCENTAGE
1.	<b>Age in years</b>		
	19-23 year	36	17.1%
	24-28 year	<b>98</b>	<b>46.7%</b>
	29-33 year	61	29.0%
2.	<b>EDUCATIONAL STATUS</b>		
	No formal education	9	4.3%
	Primary education	50	23.8%
	Secondary education	<b>85</b>	<b>40.5%</b>
	Senior secondary education	51	24.3%
3.	<b>TYPE OF FAMILY</b>		
	Nuclear	58	27.6%
	Joint	<b>112</b>	<b>53.3%</b>
	Extended	40	19.0%
4.	<b>AREA OF LIVING</b>		
	Rural	<b>97</b>	<b>46.2%</b>
	Semi urban	89	42.4%
5.	<b>OCCUPATIONAL STATUS</b>		
	Home Maker	<b>163</b>	<b>77.6%</b>
	Private Job	27	12.9%
	Government Job	2	1.0%
6.	<b>TYPE OF WORK</b>		
	Heavy Work	<b>138</b>	<b>65.7%</b>
	Moderate Work	23	11.0%
7.	<b>DIETARY PATTERN</b>		
	Vegetarian	48	22.9%
	Non-Vegetarian	<b>150</b>	<b>71.4%</b>
8.	<b>GRAVIDA</b>		
	Primi	<b>117</b>	<b>55.7%</b>
	Multi	93	44.3%
9.	<b>TRIMESTER</b>		
	First	30	14.3
	Second	<b>91</b>	<b>43.3</b>
	Third	89	42.4

10.	<b>Hemoglobin Level</b> Below or at 10g/dl Above 10g/dl	<b>112</b> 98	<b>53.3%</b> 46.7%
11.	<b>Any Complications during pregnancy</b> <b>YES</b> Anemia Hypothyroidism Hypertension GDM	<b>66</b> 20 29 11	<b>31.4%</b> 9.5% 13.8% 5.2%
12.	<b>NO</b> <b>Do you feel restlessness/pain in legs?</b> <b>YES</b> <b>NO</b>	<b>6</b> <b>144</b> <b>174</b> 36	<b>2.9%</b> <b>68.6%</b> <b>82.9%</b> 17.1%
13.(a)	<b>Previous knowledge regarding RLS</b> a) <b>YES</b> b) <b>NO</b>	85 <b>125</b>	40.5 % <b>59.5%</b>
13.(b)	<b>If yes, then specific source of knowledge:</b> <b>YES</b> Family members Previous experience Health worker Media/book <b>NO</b>	<b>85</b> 45 18 9 13 <b>125</b>	<b>40.5%</b> 21.4% 8.6% 4.3% 6.2% <b>59.5%</b>

**Table no 2: Prevalence of Restless Leg Syndrome during pregnancy among antenatal mothers. (n=210)**

Variable	Frequency	Percentage (%)
<b>Prevalence</b>	115	54.8%

Table no. 2 shows that prevalence of restless leg syndrome among antenatal mothers was 54.8%.

**Table no. 3: Knowledge score regarding restless leg syndrome among antenatal mothers (n=210)**

Variable	Maximum Score	Range	Mean $\pm$ S.D	Median	Mean Percentage
<b>Knowledge Score</b>	18	3-16	9.01 $\pm$ 2.47	9.0	56.25%

Table 3 Shows that knowledge score of antenatal mothers regarding restless leg syndrome. The range was 3-16, Mean  $\pm$  S.D 9.01  $\pm$  2.47 with Median 9.0 and the Mean % was 56.25%.

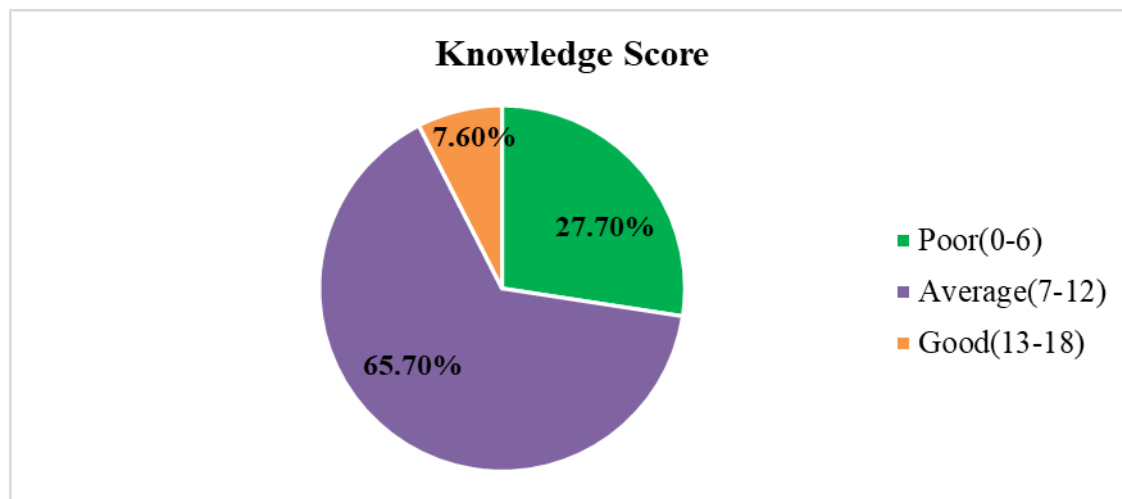
**Figure no. 1:** Percentage distribution of Knowledge score regarding restless leg syndrome among antenatal mothers

Figure no 4. It represents that the level of knowledge distribution, (7.60%) of the participants were having good knowledge and (65.70%) of the antenatal mothers were having average knowledge and (27.70%) antenatal mothers were having poor knowledge regarding restless leg syndrome during pregnancy

**Table no.4** Area wise Mean, SD & Mean Percentage Knowledge score regarding restless leg syndrome among antenatal mothers. **n=210**

S.no	Area (Domains)	Max. Score	Mean $\pm$ SD	Median	Mean %
1	Introduction of restless leg syndrome	4	2.39 $\pm$ .953	2	59.75%
2	Causes & Risk Factors	3	0.93 $\pm$ 0.780	1	23.35%
3	Sign & symptoms	5	2.52 $\pm$ .924	2	63.75%
4	Management & prevention	6	3.2 $\pm$ 1.215	3	79%

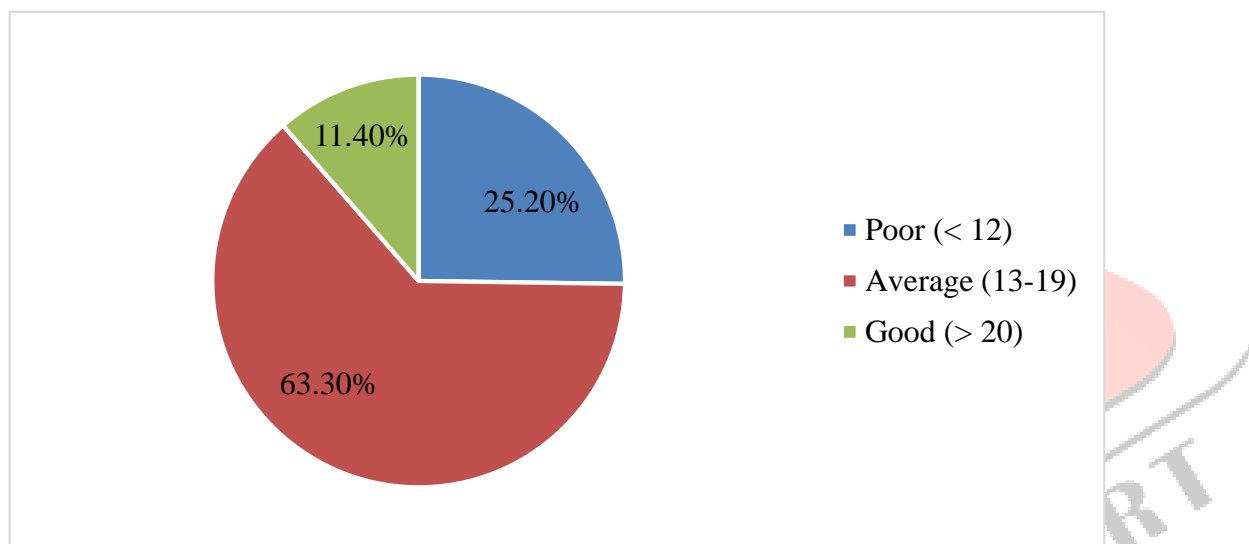
Table no 4 - Data represents that the level of knowledge according to area wise, In introduction, the mean  $\pm$  SD score was (2.39  $\pm$  .953) and mean % was (59.75%), causes and risk factors of mean  $\pm$  SD score was (0.93  $\pm$  0.780) mean % (23.35%), Sign & symptoms mean  $\pm$  SD score was (2.52  $\pm$  .924) mean % (63.75%), Management & prevention mean  $\pm$  SD score was (3.2  $\pm$  1.215) mean % was (79%).

**Table no.5:** Distribution of Practice score regarding restless leg syndrome among antenatal mothers. (n=210)

Variable	Maximm Score	Range	Mean $\pm$ S. D	Median	Mean %
Practice Score	36	6-27	14.71 $\pm$ 3.79	14.0	54.4%

Table 5. shows the Practice score regarding restless leg syndrome among antenatal mothers. The range of practice score was 6-27, Mean  $\pm$ S.D (14.71.  $\pm$ 3.79) with Median 14.0 and the Mean % was 54.4%.

**Figure no.2** Percentage wise distribution of self -reported practice regarding restless leg syndrome among antenatal mothers.



**Table 6.** correlation between knowledge score and self-practice score regarding restless leg syndrome among antenatal mothers.

S.No	Variable	r value	P<0.005
1.	Knowledge Score	0.71	.000 <0.0001
2.	Practice Score		

Table 6. shows the moderate positive significant corelation of knowledge score with practice score regarding restless leg syndrome among antenatal mothers.

**Table no.7** Association between levels of knowledge with their selected demographic variables.

S.no	Variable	Level of Knowledge		$\chi^2$	P<0.005
		Below median (< 9)	At or above median (> 9)		
1.	<b>Age of mothers</b> 19 -28 29-38	<b>65</b> 59	<b>69</b> 17	17.01	* <0.0001
2.	<b>Educational status</b> No formal education Education	34 <b>90</b>	25 <b>61</b>	.068	.794
3.	<b>Type of family</b> Nuclear Joint	26 <b>98</b>	32 <b>54</b>	6.701	.010*
4.	<b>Area of living</b> Rural Urban	57 <b>67</b>	40 <b>46</b>	.006	.938
5.	<b>Occupational status</b> Employed Unemployed	<b>105</b> 19	<b>58</b> 28	8.684	.003*
6.	<b>Type of work</b> Heavy work Light work	<b>87</b> 37	<b>50</b> 36	3.236	0.72
7.	<b>Gravida</b> Primigravida Multigravida	<b>72</b> 52	<b>45</b> 41	.678	.410
8.	<b>Trimester</b> First Second Third	19 <b>60</b> 45	11 31 <b>44</b>	4.663	.097
9.	<b>Previous exposure RLS</b> YES NO	<b>33</b> 9	<b>52</b> 34	4 24.15	* <0.0001

Table no 7 the data shows that association of level of knowledge with selected demographic variables. There were statically significant association found with the level of knowledge with age, type of family, occupational status and previous exposure to restless leg syndrome.

**Table 8.** Association between selfcare practice score regarding restless leg syndrome among antenatal mothers with their selected demographic variable. (n=210)

S.No.	Variable	Level of practice		$\chi^2$	P <0.005
		Below median <14	Above median >14		
1.	<b>Age of mothers</b> 19 -28 29-38	46 <b>62</b>	<b>88</b> 14	43.34	<b>&lt;0.0001*</b>
2.	<b>Occupational Status</b> Employed Unemployed	<b>86</b> 22	<b>77</b> 25	.517	.472
3.	<b>Educational status</b> No formal education Education	37 <b>71</b>	22 <b>80</b>	4.182	<b>.041*</b>
4.	<b>Area of living</b> Rural Semi urban	51 <b>57</b>	46 <b>56</b>	.095	.758
5.	<b>Type of work</b> Heavy work Light work	62 46	75 27	6.012	<b>.014*</b>
6.	<b>Complications</b> Anemia Hypothyroidism Hypertension GDM NO	12 14 7 0 75	8 15 4 6 69	7.738	.102
7.	<b>Previous exposure to RLS</b> YES NO	33 75	52 50	9.083	<b>.001*</b>
8.	<b>Hemoglobin</b> Below and at 10 g/dl Above 10 g/dl	<b>69</b> 39	41 61	11.805	<b>.001*</b>
9.	<b>Gravida</b> Primigravida Multigravida	<b>57</b> 51	<b>60</b> 42	.777	.318

Table 8. The data shows that association of level of practice with selected demographic variables. There were statically significant association found with the level of practice with age of antenatal mothers, educational status, type of work, previous exposure to restless leg syndrome and hemoglobin level.

### 5. Discussion:

The study result was based on the objective and hypothesis with comparison of other study in the same area.

#### To identify the prevalence of restless leg syndrome among antenatal mothers.

The present study shows the prevalence of restless leg syndrome during pregnancy, that most of 54.8% antenatal mothers were suffering from restless leg syndrome. This finding correlated with **Dr. Soma Habib, Dr. Muhammed Asif, Dr. EromTanveer, Dr. Muhammed Riaz Baig Chugtai, et.al.(2018)** conducted an observational study on 370 pregnant females to investigate the prevalence of restless leg syndrome during pregnancy and its associated factor at different private and govt. Hospital of Karachi. Study results showed that moderate restless leg syndrome was 6.9%, prevalence of severe restless leg syndrome was 47.1, the prevalence of very severe restless leg syndrome was 46.1%. This study also concluded that there is the high prevalence of restless leg syndrome in 3<sup>rd</sup> trimester, and there are various factors responsible for causing restless leg syndromes such as genetic factors, physiological change, hormonal factors and dietary factors during pregnancy.

### To assess the level of knowledge regarding restless leg syndrome among antenatal mothers

In present study the level of Knowledge of antenatal mothers shows that (7.60%) of the participants were having good knowledge and ( 65.70%)of the antenatal mothers were having average knowledge and (27.70%) antenatal mothers were having poor knowledge regarding restless leg syndrome during pregnancy.

Similar study conducted by **A. Gurung, A Dangwal, G Saini et.al. (2020)** to assess Knowledge regarding Restless leg syndrome during pregnancy. In this study the knowledge score of Pregnant women average knowledge score was (24.03%), Good knowledge score was (55.76%),and Very Good knowledge score was (20.19%).

### 6.Conclusion

A descriptive study was conducted to assess the prevalence, knowledge and practice of antenatal mothers regarding Restless Leg Syndrome during pregnancy. This study concluded that out of 210 participants, 54.8%(115) antenatal mothers were suffering from Restless Leg Syndrome during pregnancy, and about 7.6% of the antenatal mothers were having good knowledge regarding Restless Leg Syndrome during pregnancy whereas only 11.4% of antenatal mothers were having good practice regarding restless leg syndrome during pregnancy.

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