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RESEARCH ARTICLE
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THE PREVALENCE AND SEVERITY OF RESTLESS LEG SYNDROMES AND ITS IMPACT ON YOUNG PREGNANT FEMALES

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ABSTRACT:

OBJECTIVE: This study examines the prevalence of Restless Legs Syndrome (RLS) among pregnant women and evaluates its effects on maternal health. It emphasizes the importance of physiotherapy in addressing the challenges posed by this condition.

INTRODUCTION: Pregnancy represents a unique physiological state that increases susceptibility to RLS, a condition that significantly disrupts sleep, mental well-being, and physical functionality. The interplay between RLS symptoms and maternal health highlights the need for comprehensive investigations. This study seeks to quantify the prevalence of RLS among pregnant women and examine its implications for maternal health, contributing to the body of knowledge on this underrecognized condition.

METHOD AND MATERIAL: A cross-sectional study was conducted with 258 pregnant women aged 18–35 years, recruited from obstetric care facilities. Diagnosis of RLS was established using the Cambridge-Hopkins Restless Legs Syndrome Questionnaire and symptom severity evaluated via the International Restless Legs Syndrome Rating Scale. Statistical analyses were performed using SPSS software to identify prevalence rates, symptom severity, and associated sociodemographic and clinical factors.

RESULT: In a study of 258 pregnant participants, 65.5% were diagnosed with Restless Legs Syndrome (RLS). Symptoms were reported in various contexts: 7% felt them only while sitting, 28.7% only while lying, and 29.8% in both positions. Symptom severity varied, with 20.5% experiencing extreme distress, 26.7% moderate distress, 6.6% mild distress, and 11.6% no distress. Frequency over the past year included daily (22.9%), 4-5 times weekly (30.2%), and 2-3 times weekly (12.4%), highlighting RLS as a pervasive and distressing issue during pregnancy.

CONCLUSION: RLS represents a substantial, yet underrecognized, contributor to maternal morbidity during pregnancy. This study underscores the imperative for heightened clinical awareness and systematic screening protocols to mitigate its deleterious effects on maternal health outcomes. Further investigation into non-pharmacological management strategies, including physiotherapeutic interventions, is warranted to enhance care delivery for affected populations.

KEYWORDS: Restless Legs Syndrome; pregnancy; maternal morbidity; physiotherapy; paresthesia; prevalence..

1. INTRODUCTION: RLS is a neurological disorder affecting the limbs but can extend to other parts; it is manifested by an alarming and often irresistible desire to move one or both lower limbs at night, particularly when the individual is idle [1]. Multiple research works worldwide have provided evidence for the association between pregnancy and Restless Leg Syndrome (RLS). It seems that a great number of women who are to be mothers experience this condition, and it is especially frustrating when it happens during a period of happiness and expectation. Several factors have been said to cause either the onset or aggravation of RLS during pregnancy. For example, it was established that a higher age of the mother is likely responsible for this disorder or disease. Further, pregnant women with multiples, including twins or triplets, may be more vulnerable [2] [3]. The global incidence rate of Restless Leg Syndrome (RLS) stands between 2% and 15% of the population, with an average incidence rate of 3%.[4][5] This is a way of stating affirmatively that millions of people all over the globe suffer from this demanding ailment. Nevertheless, RLS can present in a dissimilar form in different populations; for example, when pregnant. In pregnancy, the RLS symptoms may acquire characteristic features for the expectant mothers. Besides the common desire to shift the legs, pregnant women often feel tingling, itching, or pulsating pain in the legs [6] [7]. Before going further, it is crucial to underscore that Restless Legs Syndrome (RLS) tends to worsen in the third trimester of pregnancy. This timing is usually associated with very serious hormonal changes that are typical for the preparatory period to childbirth. Such hormonal changes may interfere with the nervous system and circulation and thus are likely to worsen the RLS symptoms in most pregnant women [8]. Although the factors that can put a person at high risk of developing RLS include several factors outside genetics and heritability are known to cause this ailment. Research studies have shown that a particular cause is low dietary iron stores. Iron is vital in supporting the proper functioning of nerves, and a lack of it will worsen RLS symptoms. Although diet plays an important role, several risk enhancers exist and predispose an individual to RLS. This condition is very much a multifaceted systemic disease that is influenced by hormonal changes, lifestyle concerns, race, and age. For example, some of the behavioral risk factors for RLS include the following: Inactivity or infrequent exercise, sleeplessness [2] [10] [11].

When it comes to managing Restless Leg Syndrome (RLS), both pharmacological intervention and lifestyle changes are recommended by healthcare practitioners. For individuals experiencing this condition, or for the general population, using therapeutic drugs can help to alleviate symptoms quite considerably. It may be some way of possibly relieving some of the sensations in the legs and therefore give those who suffer from this condition a better quality of life. Nonetheless, taking pills is not the absolute solution to the disease. The other steps that individuals need to take for the correct control of RLS are also very relevant and essential so that people should be able to have a healthy lifestyle. This includes exercising, especially as it improves the blood circulation in the body and reduces the occurrence of symptoms [1]. As pregnancy progresses, it is necessary to investigate other therapeutic approaches to prevent the use of medications for Restless Leg Syndrome (RLS). That is

why expecting mothers are advised to get enough sleep at night because the state of rest has a positive effect on the physical and emotional state. Practical expectations involve having a sleep-inducing bedtime regime including wearing proper clothing and making light adjustments. Other than the embrace of sleep, the integration of light and regular exercise in one's lifestyle should also be embraced. Proper walking, prenatal yoga, or even simple stretching can improve circulation and help relieve most of the symptoms that come with RLS. In addition to assisting with particular symptoms, these exercises play a role in conditioning whereby pregnant women are relieved of fatigue. This is also the best time to adopt meditation and mindfulness procedures. Stress and anxiety have been found to cause the worsening of RLS, and these techniques can be used to minimize the symptoms of RLS. If for at least 5-10 minutes a day, pregnant women can learn how to breathe, meditate, or take a break and think about something positive, this will help create the appearance of tranquility, which is so necessary for the challenges of pregnancy. Moreover, the selection of these choices as well as their moderation is equally important. There is also an indication that eating foods containing iron, including green leafy vegetables, lean meats, beans, and iron-fortified cereals, can help improve the body's iron status and thus reduce RLS. In some cases, healthcare providers may prescribe iron supplements in the case where intake is low [12] [13] [14]. Given the increasing concern of RLS and various populations, this study sees its importance in systematically establishing the prevalence and severity of RLS among young pregnant women in Karachi. This group of a population is particularly of interest as pregnancy triggers some physiological and hormonal changes that may impact the development of RLS symptoms. The study aims to go further in determining more often this condition affects this population and the magnitude at which it interferes with their functioning. In a first step towards a better characterization of RLS, researchers are currently exploring the symptoms that are connected with this disorder in young expectant mothers.

In addition, the study will seek to establish the impact of RLS on the quality of life of these women. This involves looking at how the symptoms, discomforts, and manifestations of RLS, such as leg movements during sleep, sleep disturbances and sleep quality, mood and anxiety, and physical functions, are related. This social construction of knowledge is important to understand that the problems with RLS are not only physical; they also influence mood, stress, and the ability to perform activities that will help clients move to the next phase of their lives—being pregnant. Thus, the goal of this research is both straightforward—to survey the current state of affairs in terms of both the prevalence and intensity of RLS—and potentially helpful to the various caregivers, practitioners, and support networks that could benefit from fresh data. Finally, it can improve the comprehension of young pregnant ladies to diagnose RLS in Karachi to implement management concepts that might better the quality of life for those with this condition. It is in this context that the study consequently aims to undertake a detailed scrutiny of this pervasive health concern to bring attention and support to an area of maternal health that requires it.

1.1 STATEMENT OF PROBLEM

RLS is a considerably common ailment that has been spotted much of the time in correlation with the phase of pregnancy among female youths in Karachi. This topic is going to raise awareness of women's health since RLS is very widespread and directly linked to pregnancy. The purpose of this study is to shed some light on RLS during pregnancy and, therefore, improve the healthcare approach for pregnant women in Karachi.

1.2 RATIONALE OF STUDY

This study on RLS among young pregnant females in Karachi is worth undertaking due to its potential to reveal the prevalence and impact of RLS within this population. Understanding the prevalence of RLS contributes to a valuable Understanding of this health issue that could notably impact the maternal wellbeing of young expectant mothers. This study's worth lies in its ability to provide targeted information about RLS, aiding healthcare practitioners in offering more informed care to young pregnant women in Karachi

1.3 OBJECTIVE

This research methodically investigates the frequency and intensity of restless leg syndrome (RLS) in young pregnant women.

- The primary objective of this study is to find out the prevalence of Restless Legs Syndrome (RLS) during pregnancy
- The secondary objective is to find out the severity of Restless Leg Syndrome (RLS) in pregnant women.

1.4 OPERATIONAL DEFINITION

Pregnancy: a gestational period in which an embryo matures into a fetus inside the uterus of a female [15]

Restless Leg Syndrome (RLS): is a neurological disorder represented by an intractable drive to initiate motion in the lower limbs due to pain arising during periods of physical inactivity significantly affecting sleep quality.[16]

Maternal health: holistic health condition of a mother, including physical and cognitive, as well as psychological well-being during pregnancy, childbirth, and postnatal period.[17]

3. MATERIAL AND METHOD

The study was a cross-sectional design conducted in maternity hospitals and clinics serving pregnant women. The research was planned to take place over six months. The sample size was calculated using OpenEPI, yielding a total of 258 participants, with a 5% margin of error and a 95% confidence interval. Non-probability convenience sampling was used to recruit participants. The inclusion criteria specified that participants must be pregnant women aged 18 to 35 years, residing in the study area, and without conditions like diabetes, hypertension, or kidney disease. Exclusion criteria included women who regularly engage in exercise as a primary treatment for Restless Legs Syndrome (RLS), those taking medications affecting RLS symptoms, and individuals with medical conditions that significantly impact RLS. Outcome measures included the prevalence of RLS, assessed using the Cambridge-Hopkins Restless Legs Syndrome Short Form 2 Diagnostic Questionnaire (CH-RLSQ13), a validated tool for diagnosing RLS through self-completed questionnaires. The severity of RLS symptoms was evaluated using the RLS Rating Scale, which is recognized for its reliability in clinical and research settings. Data collection involved administering standardized questionnaires, including the International Restless Legs Syndrome Study Group (IRLSSG) rating scale. Ethical considerations such as confidentiality and informed consent were prioritized throughout the study. For data analysis, SPSS software was used, and the normality of the data was checked using the Shapiro-Wilk test. A chi-square test was applied to assess associations between various factors, with a significance level set at $p < 0.05$.

4. RESULTS

The study was conducted on pregnant females. The mean age of the research was **27.59 ±3.39**. The study showed that among 258 participants, 169 (65.5%) were RLS-positive, while the remaining 89 (34.5%) were RLS-negative.

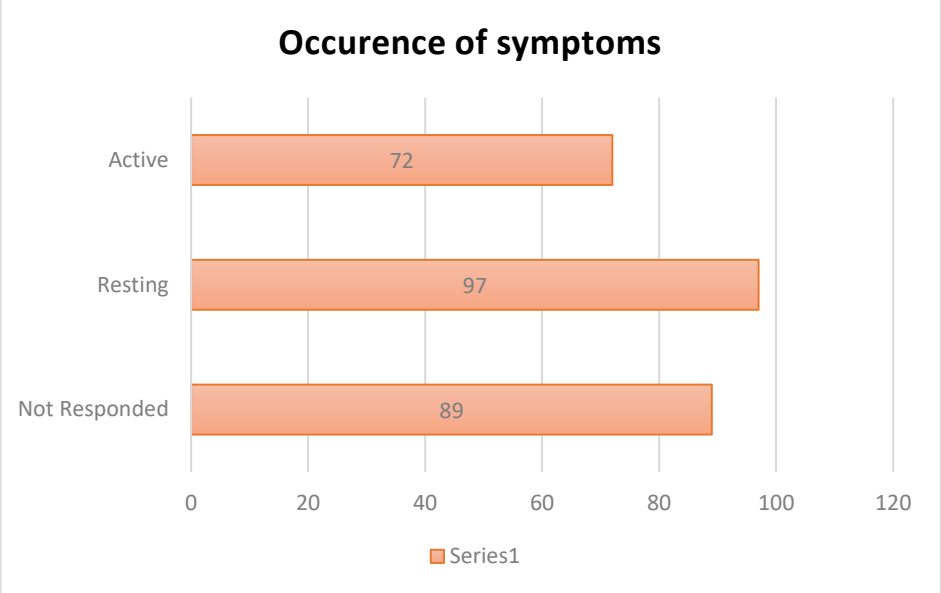
TABLE 1: Responses to Sensory and Motor Symptoms Associated with Restless Legs Syndrome (RLS)

Condition	YES		NO		P-Value
Do you have, or have you had, recurrent uncomfortable feelings or sensations in your legs while you are sitting or lying down?	Frequency	%	Frequency	%	0.001*
	122	47.3	136	52.7	
Do you, or have you had, a recurrent need or urge to move your legs while you are sitting or lying down?	113	43.8	145	56.2	

The prevalence of recurrent uncomfortable sensations in the legs among participants while sitting or lying down results indicated that 122 participants (47.3%) reported experiencing these sensations, whereas 136 (52.7%) did not, with a highly significant P-value of 0.001, indicating a meaningful difference between the groups.

In a related question, 113 participants (43.8%) acknowledged having a recurrent urge or need to move their legs in these positions, while 145 participants (56.2%) did not report this urge. The P-value, similarly significant at 0.001, suggests a strong association between the prevalence of discomfort and the need for leg movement when sitting or lying down.

FIGURE 1: Occurrence of Restless Legs Syndrome (RLS) Symptoms in Participants While Active and Resting.



Among the total participants, 89 (34.5%) didn't respond to this question as they didn't have RLS, the remaining 97(37.6%) had symptoms of RLS while they were at rest while 72 (27.9%) had symptoms while they were physically active as shown in **figure 1.**

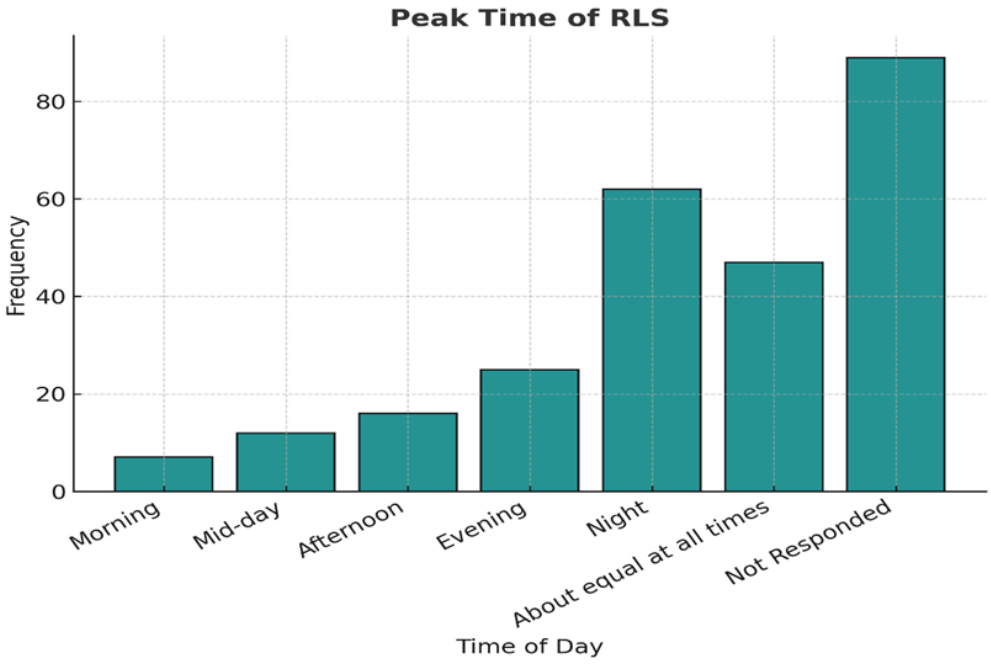


FIGURE2.

Among the total participants, 89 (34.5%) didn't respond to this question as they didn't have RLS, the remaining 7 (2.7%) responded that they felt symptoms in the morning, 12(4.7%) reported their symptoms in mid-day, 16(6.2%) reported their symptoms afternoon, 25(9.7%) reported their symptoms in the evening while 62(24%) reported symptoms in the night as shown in figure 2.

TABLE 2: Frequency of RLS Symptoms Occurring While Sitting, Lying Down,

	Variable	Frequency	%	P-Value
Do these feelings occur only when sitting or only when lying down?	Not Responded	89	34.5	0.001*
	Only when sitting	18	7	
	Only when lying down	74	28.7	
	Both when sitting and when lying down.	77	29.8	

(34.5%) 89 participants of the study didn't respond to this question as they didn't have RLS, the remaining 18 (7%) reported that they usually feel the symptoms while sitting, 74(28.7%) reported they feel the symptoms while lying 77(29.8%) reported they feel the symptoms in both positions as shown in table2.

DISTRESS LEVEL AND FREQUENCY OF LEG SENSATIONS

Table 3: Distress Level of Leg Sensations

DISTRESS LEVEL	FREQUENCY (N)	PERCENTAGE (%)	P-VALUE
NOT RESPONDED	89	34.5	0.001*
NOT AT ALL DISTRESSING	30	11.6	
A LITTLE BIT	17	6.6	
MODERATELY	69	26.7	
EXTREMELY DISTRESSING	53	20.5	

Table 4: Frequency of Leg Sensations in the Past 12 Months

FREQUENCY OF SENSATIONS	FREQUENCY (N)	PERCENTAGE (%)	P-VALUE
NOT RESPONDED	89	34.5	0.001*
EVERY DAY	59	22.9	
4-5 DAYS PER WEEK	78	30.2	
2-3 DAYS PER WEEK	32	12.4	

Restless Legs Syndrome Of those who did respond, 18 participants (7%) reported feeling symptoms only while sitting, 74 participants (28.7%) said they only felt the symptoms while lying down, and 77 participants (29.8%) experienced the symptoms in both positions.

Regarding how distressing the feelings in their legs were, 89 participants (34.5%) did not respond, as they did not have RLS. Of the remaining respondents, 30 (11.6%) reported that their symptoms were not distressing at all, 17 (6.6%) said their symptoms were a little distressing, 69 (26.7%) considered them moderately distressing, and 53 (20.5%) described the symptoms as extremely distressing. In terms of how frequently these feelings were experienced in the past 12 months, 89 participants (34.5%) did not respond for the same reason. Among those who did respond, 59 participants (22.9%) reported experiencing the symptoms every day, 78 (30.2%) felt them 4-5 days per week, and 32 (12.4%) experienced the symptoms 2-3 days per week.

8. DISCUSSION:

To Restless Legs Syndrome (RLS) is a neurological disease characterized by an urge to move the legs and sometimes accompanied by uncomfortable feelings such as tickling, creeping, numbness, and pulling. It is accompanied by uncomfortable sensations that become worse while at rest or during periods of inactivity, though gets somewhat diminished with movement, meaning it interferes with one's sleep and functionality. As for risks, pregnant women have a higher likelihood of getting RLS because of hormonal changes and fluctuating iron levels (Kim et al., 2023). The worldwide epidemiological data on RLS during pregnancy are between 10–30% depending on the criteria used

and location; South Asian women had the highest incidence (Sanders et al., 2023). According to the research conducted among pregnant women in Karachi, 65.5% of the women complained of RLS contrary to 10% to 30% globally depending on diagnostic criteria and location (Sanders et al., 2023). Some studies demonstrated the prevalence of restless leg syndrome (RLS) among pregnant women in different countries with significant results supported by WHO data. In Europe, the prevalence of RLS during pregnancy ranges from 12% to 36%: the rate depends on the country yet. For example, Terzi et al. from Turkey found that 37.1% of women had headaches in the third trimester, which was one of the highest rates observed in the region (BMC Neurology, 2021). Across Asia, research in India and Japan is slightly lower where Balendran et al. documented 22.5% while Harano et al. noted only 3.5% (Frontiers in Neurology, 2023). According to the WHO and related investigations, RLS in pregnancy is globally estimated to be 22.9%, particularly in the third trimester with variations in the prevalence by country and region (WHO, 2023). This paper has presented physiotherapy as one of the essential non-medical approaches to treating RLS during pregnancy. Recent research shows that moderate aerobic exercises and physical stretching programs, as well as muscle strengthening, increase blood flow, and prevent pain and other RLS symptoms (Shamekh et al., 2022). Such techniques are helpful because the use of medication during the pregnancy period is somewhat restricted due to fetal risks (Nguyen et al., 2022). Thus, the results deduced from this study reveal a higher prevalence rate of RLS among the individuals in Karachi; incorporating features of physiotherapy in prenatal care can be advantageous. Evaluating pregnant women for RLS and implementing exercise-based approaches during the first trimester of pregnancy could ultimately help enhance maternal quality of life and pregnancy outcomes by controlling the somatic and psychological effects of the disorder (Kim et al., 2023). The results obtained from this study for Restless Legs Syndrome (RLS) regarding the association with increased maternal age confirm the findings of previous research to state that pregnant women in the age group of 30 years and above are at higher risk for moderate to severe symptoms of RLS. These combined factors place older adults at a higher risk of developing LTPB than younger adults due to age-induced decrease in dopaminergic function and increased vascular resistance, as suggested by Broström et al. (2023). Thus, these studies support the need for focused intercessions and detailed evaluations of this group to prevent the effects of RLS during pregnancy. This is in line with the global studies where low serum ferritin levels are identified as the most influential factor in RLS, especially in the South Asian population due to low dietary iron intake. Increased RLS severity was also significant with the following clinical characteristics: Older pregnant women need to be scrutinized during prenatal screening. The stronger association in this population supports the importance of additional exploration of modifiers related to genes involved in iron metabolism. Moreover, emphasis should be made concerning dietary intake especially that of iron-bearing foods as low dietary iron has the potential of having a critical impact on iron balance and such health outcomes. Physical inactivity, smoking, and high BMI were also other factors indicating poor lifestyle that significantly worsened the severity of RLS similar to other findings by Karan and Cols (2018) worked out that modification of lifestyle might help in reducing RLS signs. However, this research points out that these dietary and activity-based factors have a much greater impact on South Asians because of the differing dietary patterns and activity levels. Also, the levels of distress by RLS symptoms in this study reveal 20.5% of participants experiencing extreme distress and 26.7% of participants moderate distress which is consistent with the literature mentioned by (Kim et al., 2023). It also stated that RLS can severely impact sleep quality and daily functioning if not managed. The frequency of symptoms, with 30.2% of participants experiencing them 4-5 days per week and 22.9% experiencing them daily, further underscores the need for targeted interventions, particularly in under-researched populations like Karachi. The study's findings contribute valuable insights to the existing body of knowledge on RLS, particularly in pregnant women in South Asia, where cultural, genetic, and lifestyle factors may exacerbate the condition. The need for further research, particularly into genetic factors and the long-term effects of RLS, is clear, and routine screening for RLS during pregnancy should be considered to improve maternal and fetal outcomes in high-prevalence regions These findings highlight the need to recognize physiotherapy as an essential nonpharmacological option for treatment of RLS during pregnancy. Some of the physiotherapy

interventions include moderate aerobic exercises, stretching as well as muscle strengthening are effective in enhancing circulation, relieving discomfort, and managing RLS (Shamekh et al., 2022). These interventions are particularly crucial because medications are restricted during pregnancy as they pose threats to the unborn baby (Nguyen et al., 2022). Based on these observations, the prevalence of Restless Legs Syndrome (RLS) is considerably high in Karachi which, when combined with prenatal care, can give a lot of benefits when physiotherapy is applied. In addition, increased RLS awareness and the introduction of physiotherapy interventions during prenatal care could also help improve pregnancy results regarding the impact of the disease on the physical and psychological state of the affected mothers (Kim et al., 2023). The findings of the current study support age as a predictor in the RLS, with a considerable relationship shown in the obtained data. In these studies, and as today's investigations confirm, maternal age greater than 30 was found to significantly increase the risk of developing moderate to severe RLS symptoms. For example, Broström et al. (2023) explain that older, pregnant women are at a greater risk of developing severe RLS symptoms. This may be attributed to the following factors which are, they are mostly related to age, reduced dopaminergic which is crucial in the regulation of movement and sensation, increased vascular resistance which is known to aggravate the signs and symptoms of RLS. Further research into RLS physiology is warranted by these findings, especially in pregnant women, as hormonal changes and other physiological processes may aggravate symptoms of the syndrome. Since dopaminergic dysfunction is implicated in other movement disorders that are likely to emerge with increased prevalence in the elderly, it follows that dopaminergic dysfunction may be more severe in this age group, and therefore enhance the likelihood of RLS. Moreover, it is essential to note that vascular changes related to aging also contribute to reduced blood circulation, which plays a role in the sensations experienced in RLS. These insights about the mentioned mechanisms may prove pivotal for formulating interventions that can help pregnant women suffering from RLS. In contrast to these conclusions, some studies conducted within the Western population have not always found age to be the decisive factor affecting the severity of RLS. This inconsistency indicates that the clinical manifestations of RLS might be biologically diverse between different populations based on genes, cultures, and lifestyles. RLS has social determinants such as diet and exercise and importantly the socioeconomic status of the patient. Cohort differences also emphasize the importance of contextual analysis, as they expose the multifaceted character of the syndrome. These findings underline the need for future research in sub-populations where potentially different environmental and cultural factors could influence RLS. Based on these implications, it is important to consider screening for RLS in prenatal care, particularly among women of age above 30 or those with a history of iron deficiency. Iron deficiency has been identified as a risk factor, especially for RLS, given its significance of dopamine metabolic and neurological processes. These regular check-ups help in the early detection of complications such as gestational hypertension which if not well managed affects both the mother and fetus negatively. Gestational hypertension, which is the increase in blood pressure when pregnant, can progress to dangerous conditions such as preeclampsia. Thus, more attention should be paid to the management of RLS in association with gestational hypertension. Innovative physiotherapy methods reveal themselves as safe and efficient options that can relieve RLS's symptoms, thereby improving patients' quality of life and avoiding exposure to risky pharmaceuticals when pregnant women are confronted with the issue. Specific exercises including stretching as well as strengthening exercises and relaxation techniques should also be employed to lessen discomfort associated with RLS. Moreover, these interventions are helpful in pregnancy where most of the pharmacological treatments are prohibited or may become harmful to the health of the mother and her baby. Thus, introducing physiotherapy into routine treatment can help women to cope with the symptoms and have a better quality of life during pregnancy. This research contributes to the knowledge on pregnancy-related RLS, particularly in regions that have limited research such as Karachi, and supports the need for lifestyle modifications. Inactivity, smoking, and high BMI have been found to aggravate RLS, which works in harmony with the observation made by Karan and his team (2018) regarding the effectiveness of lifestyle changes. Literature has associated sedentary lifestyles, especially a lack of exercise, with worse prognosis in numerous health concerns, including

RLS. Promoting the physical activity of women at a comfortable and safe level during pregnancy can significantly contribute to preventing and controlling symptoms of RLS. Furthermore, smoking has been identified as contributing to various complications such as those that may occur during pregnancy. This relationship between smoking and RLS severity reemphasizes the importance of adopting healthy lifestyle advice during antenatal care. Higher BMI also correlates with more severe RLS, meaning that their patients may improve their condition by maintaining a proper diet and exercising consistently. These lifestyle factors point to the fact that there is an interaction between them hence the need for a multi-disciplinary approach in managing RLS in pregnant women. Here, the inclusion of lifestyle changes offers HC professionals the chance to effectively partake in the treatment of RLS, arming women with the means to improve their quality of life during pregnancy. Furthermore, the study provides information about activity patterns and diets that exist among South Asian communities and how these factors may affect the manifestation and treatment of RLS. Culture in terms of diet and physical activity as well as social cultural beliefs of a society play a significant role in the experience of women by RLS. Hence, it becomes important for healthcare providers to take these cultural factors into careful consideration while formulating such intervention-related strategies. Incorporation of culturally appropriate strategies that consider local values and practices will most likely ensure better compliance with the recommended changes in lifestyles and therapeutic practice

9. LIMITATIONS

While this study provides valuable insights into the prevalence and impact of Restless Legs Syndrome (RLS) in pregnant women, some considerations should be noted. Although simple random sampling was used to minimize selection bias and enhance the representativeness of the study population, the reliance on self-reported data introduces potential recall bias, as participants may not accurately remember or report their symptoms. Additionally, the cross-sectional design does not allow for the establishment of causal relationships between variables. A longitudinal approach would provide more robust data and allow for a deeper exploration of the relationships over time. Future studies may also benefit from expanding to more diverse populations to strengthen the global understanding of RLS in pregnant women

10. RECOMMENDATIONS

The findings suggest several strategies that could inform both clinical practice and future research initiatives. One key recommendation is the integration of routine screenings for Restless Legs Syndrome (RLS) within prenatal care, facilitating early detection and intervention, particularly for women who may face higher risks due to factors such as age or iron deficiency. Additionally, a strong emphasis on non-pharmacological treatments, including exercise, physiotherapy, and dietary adjustments, offers a safe and effective means to manage RLS symptoms during pregnancy. Incorporating these interventions into standard prenatal care practices can significantly improve patient outcomes. Public health efforts to raise awareness about RLS among both healthcare providers and pregnant women are also essential, as they would support earlier identification and foster better adherence to treatment, ultimately enhancing the quality of life for affected individuals. Lastly, further longitudinal research is recommended to explore the underlying mechanisms of RLS and its long-term effects on maternal and fetal health. Expanding such studies across diverse populations would increase the generalizability of the findings, contributing to a broader understanding of the condition.

11. CONCLUSION

This study highlights the significant prevalence of Restless Legs Syndrome (RLS) among pregnant women, emphasizing the critical need for early detection and effective management. The findings suggest that incorporating non-pharmacological interventions, such as tailored exercise programs, relaxation techniques, and dietary modifications, into routine prenatal care can substantially improve maternal health outcomes and quality of life. Furthermore, addressing factors such as advanced

maternal age, nutritional deficiencies, and other underlying health conditions that contribute to RLS can enhance the effectiveness of these interventions. These non-pharmacological approaches provide a safe and sustainable alternative to pharmacological treatments, supporting long-term well-being for expectant mothers. The results also point to the need for more inclusive research and clinical strategies that consider diverse populations and individual risk factors. Ultimately, a comprehensive approach to managing RLS, including attention to lifestyle factors, can improve pregnancy outcomes and promote overall maternal health.

12. Acknowledgement: [Font type Times New Roman, font size 14. Line spacing should be 1.5 throughout the text.]

13. Disclaimer: [Font type Times New Roman, font size 14. Line spacing should be 1.5 throughout the text.]

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