Original Article

Prevalence of restless leg syndrome and its impact on quality of life in medical students

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Objective: To determine the prevalence of Restless Leg Syndrome (RLS) and its impact on quality of life of medical students.

Methodology: This cross-sectional study included 142 medical students of University of Lahore with 19 – 29 years of age. We used convenient sampling method and standardized Questionnaire of Restless Leg Syndrome. Data were analyzed through SPSS 25.

Results: Out of 142 medical students, 48(33.8%) were male and 94 (66.2%) female. Moderate sleep problems were found in 46 (32.4%) and severe among 21 (14.8%) students. Impact of RLS on Quality of Life was recorded as moderate in 42 (29.6%) and severe in 9 (6.3%) students.

Conclusion: Prevalence of Restless Leg Syndrome was high among female students which resulted in sleep problems and difficulty in activities of daily life. Prevalence among young students was low (severe 14.8% and very severe 3.5%).Quality of Life was affected in mild to moderate degree.

Keywords: Medical students, quality of life, prevalence, restless leg syndrome.

INTRODUCTION

Restless legs syndrome (RLS) is progressive sensorimotor problem characterized by pain, fatigue and restlessness in the legs that can cause considerable sleeplessness.[1] These sleep problems result in disturbed mood, lethargy at daytime, mental problems, and inability of the individual to participate in daily activities.[2] There are four main symptoms of RLS which include decreased strength of lower legs, pain, and restlessness which increases with activity and decreases with rest.[3] Prevalence of RLS has been reported as 12.1% (men, 8.5%; women, 15.4%).[4] High frequency was also found in pregnant women, patient with renal disorders and patients having previous history of RLS.[5] There is an increased level of anxiety and stress among patients with RLS.[6] Although prevalence among young population is high, few of them report for treatment.[7] Causes of RLS in females are hormonal disorders and psychological problems.[8,9] Proper Sleep is essential for the good health and better life quality of the people. Decreased sleep time and absence of sleep could exaggerate reappearance of RLS.[10] The aim of this study was to determine the prevalence of RLS and its impact on quality of life of medical students.

METHODOLOGY

This cross sectional study included 142 medical students of University of Lahore with 19 – 29 years of age. Sample size was calculated by Open Epi Software keeping the level of significance equal to 95% and margin of error equal to 5%.[4] Participants included were having pain and cramps in calf muscles, pain increases with rest or inactivity in the evening or at night and those who had recent surgery, recent fracture and tumor were excluded. An informed written consent was taken from all the participants.

Data were collected through use of convenient sampling. A standardized questionnaire of RLS was used to collect data.

Statistical Analysis: Data were analyzed on SPSS version 25.

RESULTS

Among 142 medical students, 48 (33.8%) were male and 94 (66.2%) female. Sleep problem were found moderate in 46 (32.4%) and severe in 21 (14.0%) students. RLS Impact on Quality of Life was recorded as moderate in 42 (29.6%) and severe in 9 (6.3%) students. Out of 142 participants, RLS was mild in 52 (36.6%), moderate in 44 (31.0%), severe in 21 (14.8%) and very severe in 5 (3.5%) students and 20 (14.1%) had no symptoms (Fig. 1).

We found that 50 (35.2%) students refused to travel in last 1month and 37 (26.1%) refused most of the time (Fig. 2). Difficulty in working full day was noted by 39 (27.5%) few times, 44 (31.0%) sometimes and 40 (28.2%) most of the time (Fig. 3).

Out of 142 medical students, 34 (23.9%) of the students reported that there is no impact of Restless Leg Syndrome (RLS) on Quality of Life (QOL) was mild in

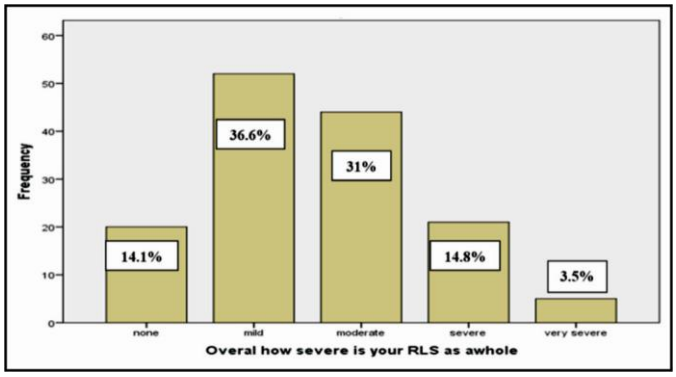

Fig. 1: Severity of Restless Leg Syndrome (N = 142).

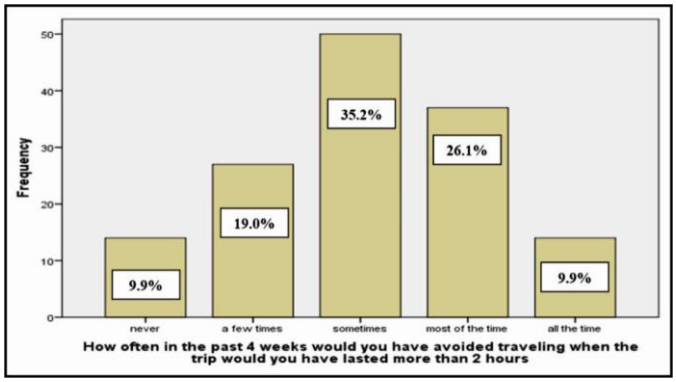

Fig. 2: In the Last 4 weeks how often would you have refused to travel (N = 142).

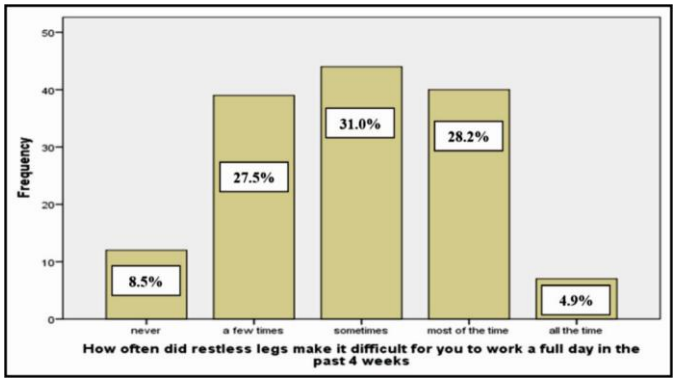

Fig. 3: Difficulty in working full day in past 1month due to Restless Leg Syndrome (N = 142).

Table: Impact on the Quality of Life (N = 142).

Intensity of RLS	Frequency (%)
Very severe	3 (2.1%)
Severe	9 (6.3%)
Moderate	42 (29.6%)
Mild	54 (38.0%)
None	34 (23.9%)

54 (38.0%), moderate in 42 (29.6%), severe in 9 (6.3%) and very severe in 3 (2.1%) students (Table 1).

DISCUSSION

A study by Ishaq et al from Karachi reported afrequency of RLS was 8% among 300 medical students, 24 students were classified positive for RLS with a female preponderance (66.7% were females and 33.3% were males).[11] The severity of RLS was more rated to be mild to moderate.. In our study, among 20 (14.1%) participants no symptoms were found while RLS was mild among 52 (36.6%), moderate among 44 (31.0%), severe among 21 (14.8%) and very severe among 5 (3.5%).

A study by Shalash et al, from Ain Shams University, Cairo reported that among 39 subjects (10%) had RLS and prevalence of individuals who had two or more episodes of RLS of at least moderate severity per week was 5.9%.[10]

A study by Haggstram et al, found prevalence of RLS among medical faculty according to which RLS was diagnosed in 10.25% of the subjects evaluated and most were women (62.5%). The prevalence of daytime sleepiness was significantly greater among the subjects suffering from RLS ($p = 0.04$). RLS subjects were significantly younger than the group without the syndrome ($p = 0.02$).[12] According to our study, prevalence of RLS was high among female students.

CONCLUSION

Prevalence of Restless Leg Syndrome was high among female students which resulted in sleep problems and difficulty in activities of daily life. Quality of Life was affected in mild to moderate degree. Prevalence among young medical students was recorded low (severe 14.8% and very severe 3.5%).

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