Restless Leg Syndrome: A Cross Sectional Study on Nurses

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Abstract:

Restless legs disorder (RLS) is a typical neurological sensory-motor issue portrayed sensory symptoms along with motor disturbances of the limbs. It has a prevalence of 4% to 29% in the general population.

Objective:

To check the occurrence and severity of RLS in nurses working in different setups in Lahore.

Methodology:

Data of 172 nurses was collected from local health care centers of Lahore through a questionnaire after taking consent. All working women of age more than 20 were included in this study. Nurses who were pregnant or had some traumatic or systemic injuries were excluded. Data was then added to SPSS 22.0 for evaluation to find out the prevalence and severity of restless legs syndrome among the nurses. The data was analyzed by using SPSS software.

Results:

The mean age recorded was 29.01 ± 5.468 years. Total score of questionnaire shows that 45.3% (79/172) nurses did not experience RLS, so the mean score was 0. 26.7% (46/172) nurses experienced mild RLS. The mean score of those who experienced mild RLS was 8.5 ± 1.9. 15.7% (27/172) nurses fall in moderate category, the mean score was 18.11 ± 2.5. 8.1% (14/172) nurses experienced severe RLS category, the mean score of severe experienced nurses was 28.64 ± 1.69.

Conclusion:

This study concludes that the prevalence of RLS in nurses is 54.7%. The severity of RLS is mild to moderate in most of RLS affected nurses.

Keywords:

Restless leg Syndrome, Nurses, Cross Sectional

Introduction:

RLS is a sort of development issue with commanding moment development of legs during inactiveness. Patients' sleep is disrupted during night due to jerking of muscles.[1] It is accompanied by an awkward paresthesia in the legs which influences around 5-15 percent of grown-up individuals in industrialized countries.[2] The paraesthesias may be exceedingly undesirable and usually promote serious sleep disturbances. Ordinary side effects include the legs, however the arms can likewise wind up included. Since it for the most part meddles with rest, it additionally is viewed as a rest disorder.[3] The condition causes an awkward, "bothersome," "sticks and needles," or "dreadful" feeling in the lower extremities.[4] The sensations are generally more terrible while still, particularly when lying or sitting. The symptoms typically appear at the alteration among waking and sleep, or disturbing the arrival to sleep.[5] RLS has been over and again connected with critical decreases in personal satisfaction practically identical to or more regrettable than those revealed in Parkinsonism, diabetes, stroke, and other chronic disorders.[6] RLS is described by side effects that pursue a circadian example. For a few people, indications may cause serious daily rest interruption irritating their circadian rhythms and therefore can altogether affect their quality of life. Sleep disruptions or insomnia results in harmed ADLs, and extensive distraint.[7] Both lack of sleep and weakness may trigger RLS/WED. The indications drive people to continue moving their legs, and regularly to get up and meander about.[8] It has a prevalence of 4% to 29% in the general population.[9] It is assessed that 5% of the

overall public and upwards of 10% of those beyond 65 years old have this issue.[10] Restless legs syndrome influences both genders, yet more typically involve ladies and may appear at any age, even in adulthood. 25% of grown-ups with restless legs syndrome report beginning of side effects between the ages of 10 and 20 years.[11] Most individuals who are influenced critically are middle aged or older.[12] An investigation about occurrence of manifestations of shift work disorder in nurses, and its relationship to person, wellbeing and work factors was led.[13] Pervasiveness rates of side effects of move work issue fluctuated from 32.4– 37.6% relying upon the evaluation strategy and from 4.8– 44.3% relying upon the work routine.[14] Affiliations were found between symptoms of move work issue and age, sexual orientation, circadian compose, number of developments detached by under 11 hours and number of nighttimes worked the latest year, a sleeping disorder and tension.[15] This study will find out the occurrence of RLS in nurses.

Methodology:

In this cross-sectional study data of 172 nurses was collected from local health care centers of Lahore through the IRLSSG criteria questionnaire. All working women of age more than 20 were included in this study. Nurses who were pregnant or had some traumatic or systemic injuries were excluded. Data was then added to SPSS 22.0 for evaluation to find out the prevalence and severity of restless legs syndrome among the nurses. Mean and standard deviation was calculated for quantitative variables while qualitative variables was presented in the form of frequency and percentage. Descriptive frequency statistical tests were used after checking normality of data.

Results:

In this study the mean age recorded was 29.01 ± 5.468 years. the result of total score of questionnaire shows that 45.3% nurses did not experience RLS, so the mean score was 0. 26.7% nurses experienced mild RLS, the mean score was 8.5 ± 1.9. 15.7% nurses fall in moderate category, the mean score was 18.11 ± 2.5. 8.1% nurses experienced severe RLS category, the mean score of severe experienced nurses was 28.64 ± 1.69. The nurses who experienced very severe RLS score 36.14 ± 3.23.82 / 172 nurses (47.7%) did not feel any discomfort. 43 (25%) rate RLS discomfort as mild, 28 (16.3) rate as moderate while rest of 12(7%) and 7 (4.1%) nurses' rate RLS discomfort as severe and very severe, respectively.85 subjects didn't need to move around. 43 (25%) rate the need of moving around because of RLS as mild, 27 (15.7%) nurses rate the need as moderate. The rest of 11(6.4%) and 6(3.5%) nurses rate it as severe, and very severe, respectively.40 nurses (23.3%) rate the relief of RLS leg or arm after moving as mild. 24% subjects rate it as moderate. 8.1% and 2.9% nurses rate it as severe and very severe, respectively. 39 (22.7%) nurses rate the sleep disturbance because of RLS as mild and 22 (12.8%) nurses rate it as moderate. 15 and 6/172 (3.5%) nurses rate the sleep disturbance as severe and very severe, respectively. 40/172 (23.3%) subjects rate the severity of tiredness or sleepiness because of RLS as mild and 26/172 (15.1%) subjects rate it as moderate. 7.6% and 2.3% nurses rate the severity of tiredness or sleepiness as severe and very severe, respectively. 42 (24.4%) nurses rate the severity of RLS as a whole mild and 23 (13.4%) subjects rate the severity as moderate. 8.7% and 2.9% nurses rate the severity of RLS as severe and very severe, respectively.44/172 (25.6%) nurses experienced RLS symptoms one day in a week. 22 (12.8%) subjects experienced 2 to 3 days in a week. 8.7% and 3.5% subjects experienced 4 to 5 days and 6 to 7 days in a week, respectively.46/172 (26.7%) nurses rate the severity of RLS on an average day as mild and 23 (13.4%) nurses severity as moderate. 8.1% and 2.3% nurses rate the severity of RLS as severe and very severe, respectively. The severity of impact of RLS on abilities to carry out daily affair is mild in 25% nurses, moderate in 15.1%, severe in 7.6% and very severe in 3.5% nurses. Severity of mood disturbance like anger, depression, sadness due

to RLS symptoms is mild in 27.3% nurses, moderate in 14%, severe in 8.7% and very severe in 2.3% nurses.

Characteristics	Frequency(%)				
	None	Mild	Mod-erate	Severe	Very Severe
Overall, how would you rate the RLS discomfort in your legs or arms?	47.7 (82)	25(43)	16.3 (28)	7(12)	4.1(7)
Overall, how would you rate the need to move around because of your RLS symptoms?	49.4 (85)	25(43)	15.7 (27)	6.4(11)	3.5(6)
Overall, how much relief of your RLS arm or leg discomfort do you get from moving around?	51.7 (89)	23.3 (40)	14(24)	8.1(14)	2.9(5)
Overall, how severe is your sleep disturbance from your RLS symptoms?	52.3 (90)	22.7 (39)	12.8 (22)	8.7(15)	3.5(6)
How severe is your tiredness or sleepiness from your RLS symptoms?	51.7 (89)	23.3 (40)	15.1 (26)	7.6(13)	2.3(4)
Overall, how severe is your RLS as a whole?	50.6 (87)	24.4 (42)	13.4 (23)	8.7(15)	2.9(5)
How often do you get RLS symptoms?	49.4 (85)	25.6 (44)	12.8 (22)	8.7(15)	3.5(6)
When you have RLS symptoms, how severe are they on an average day?	49.4 (85)	26.7 (44)	13.4 (22)	8.1(15)	2.3(4)
Overall, how severe is the impact of your RLS symptoms on your ability to carry out your daily affairs, for example carrying out a satisfactory family, home, school, or work life?	48.8 (84)	25(43)	15.1 (26)	7.6(13)	3.5(6)
How severe is your mood disturbance from your RLS symptoms, for example angry, depressed, sad, anxious, or irritable?	47.7 (82)	27.3 (47)	14(24)	8.7(15)	2.3(4)

Table 1: Demographical Representation of Characteristics

Discussion:

The main contribution of the current study is the use of the IRLSSG criteria for the diagnosis of RLS and the use of IRLSSG severity scale to assess the severity of RLS for a group of nurses.16 Because our subjects had very similar job tasks in the hospitals, they also had relatively similar socioeconomic status.[17] Epidemiological surveys have shown that RLS is a common neurological movement disorder. In the reports of previous Asian studies, RLS prevalence rates ranged from 0.1% in a primary healthcare center population aged 21 years and older in Singapore to 12.1% in a large Korean cohort.[18] This discrepancy is probably due to the differences in the demographic characteristics and assessment methods used in the different studies. In our study, the overall prevalence of RLS in nurses was 54.7%.[19] Of course, the fact that our study was conducted with a specific population, we cannot generalize the prevalence rate to the general population. Further studies need to improve results by taking data from multiple health care departments.[20]

Conclusion:

This study concludes that the prevalence of RLS in nurses is 54.7%. The severity of RLS is mild to moderate in most of RLS affected nurses. RLS also causing discomfort while performing daily tasks and while sleeping. After moving around to get relief of RLS symptom, most of them got mild relief. RLS is also causing mild to moderate tiredness & sleepiness in nurses.

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