# Modification and Validation of a Diagnostic Questionnaire for Restless Legs Syndrome: Modified-Restless Legs Syndrome Diagnostic Questionnaire (m-RLS-DQ)

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**Abstract**

**Background:** Diagnostic questionnaire that are available for restless legs syndrome does not include items related to RLS mimics and, hence, increases chances of false positive cases. This study aimed at modification and validation of RLS-diagnostic Questionnaire. **Methods:** During modification, additional items were identified, developed, and subjected to evaluation by experts. Experts were requested to validate the content of each item. Based on their responses, content validity indices (average and universal agreement) were calculated. It was then translated to Hindi and validated in a clinical population that included patients with RLS, somatic symptoms disorder, anxiety, other RLS mimics, and osteoarthritis. In addition, a group of healthy controls was also included. Face, concurrent, and discriminant validities were calculated. **Results:** Among 209 subjects, nearly 40 subjects had clinical diagnosis of RLS, osteoarthritis, somatic-symptoms-disorder, and anxiety disorder, each. In addition, 16 patients had other RLS mimics (akathisia, varicose veins, BFS, leg-cramps, chronic insomnia) and 30 were healthy controls. After multiple revisions, content validity indices achieved a score of 1 for m-RLS-DQ. Sensitivity and specificity of m-RLS-DQ v. 1.4 for the diagnosis of RLS were 94.9% and 94.1%, respectively. For the diagnosis of RLS, PPV was 78.7%, and NPV was 98.7% with an accuracy of 94.3%. Less than one fourth of participants having chronic insomnia, somatic symptoms disorder, anxiety disorder, and knee osteoarthritis were found to be false positive on m-RLS-DQ; however, none of the healthy controls were found positive on m-RLS-DQ. Concurrent validity with clinical diagnosis of RLS was 0.83 ($P < 0.001$). Discriminant validity with somatic symptoms disorder was −0.14 ($P = 0.03$) and with osteoarthritis −0.24 ($P < 0.001$). **Conclusion:** m-RLS-DQ is a valid instrument with acceptable psychometric properties, which can be used for the screening as well as diagnosis of RLS in clinical practice and research studies.

**Keywords:** Diagnosis, questionnaire, restless legs syndrome, validity

## INTRODUCTION

Restless legs syndrome (RLS) is a common sleep disorder with varying prevalence across the globe.[1] While the population prevalence of RLS is approximately 5% in American and European population, its prevalence is lower in Asian countries.[1] The community based samples have shown that the prevalence of RLS in adult population in the Asian region ranges between 2.3% and 2.5%.[2,3] Untreated RLS has been found to be associated with several adverse health consequences, e.g., insomnia, depression, anxiety, fibromyalgia, somatic symptoms disorder, migraine, and cardiovascular disorders.[4] Despite these issues, RLS remains undiagnosed and untreated in a large number of patients, and it is being mistaken for above-mentioned psychiatric and sleep disorders.[5] Hence, optimal diagnosis and management of RLS are necessary.

A number of questionnaires have been developed for screening RLS, viz., RLS diagnostic index (RLS-DI), Cambridge-Hopkins RLS diagnostic interview (CH-RLSq), Hopkins diagnostic telephonic interview (HDTI), single question for RLS, RLS diagnostic questionnaire (RLD-DQ), and AIIMS RLS diagnostic questionnaire for Indian patients (ARQIP).[6–11] Though the previous studies have shown

excellent psychometric properties for these questionnaires, a recent meta-analysis has shown that when the reported positive predictive value (PPV) was predicted based on the prevalence of RLS, it became smaller for many of the questionnaires.[12]

Several other medical conditions mimic RLS, and thus, they must be carefully distinguished to reduce false positive rates while diagnosing RLS.[13,14] However, available questionnaires are not able to identify RLS mimics, except for leg cramps.[15] To complicate the issue further, in a decent number of patients, RLS-mimics and RLS may occur together.[4,14] Considering

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these issues, there is a need to develop a questionnaire that (i) has acceptable psychometric properties, especially high specificity, (ii) is able to identify most of the RLS mimics, (iii) allow diagnosis of RLS mimics along with RLS, and finally, (iv) is valid for the diagnosis of RLS.

Considering these issues, the present study was planned, and already available RLS-DQ was modified in an attempt to overcome the above-mentioned issues.[10] Thus, the aim of the study was to develop a questionnaire that has above-mentioned properties, validate it in the clinical population, and assesses its psychometric properties.

## METHODS

This study was conducted after obtaining approval from Institutional Ethics Committee. It had two phases. During phase 1, (i) items of existing RLS-DQ were modified, (ii) the modified version (m-RLS-DQ) underwent content validation, and (iii) it was translated to Hindi.[10] Phase 2 included face validation of m-RLS-DQ, ascertainment of concurrent and discriminant validity, and assessment of psychometric properties.

### Phase 1

Modified RLS diagnostic questionnaire (m-RLS-DQ) was developed following the standard practices for the development of scales and questionnaires.[16,17] Following steps were taken for the development of m-RLS-DQ in English and Hindi.

A. **Domain identification:** Existing RLS-DQ was reviewed to identify the scope for its improvement based on its use in clinical practice by two authors having more than 10 years of experience in the field of sleep medicine (RG) and movement disorders (NK).[10] Literature showing the psychometric properties of the diagnostic instruments for RLS was searched by two other authors (A.D. and V.K.).[15] It was found that while the sensitivity, specificity, and negative predictive values varied between acceptable and excellent, the positive predictive value was a major limitation.[12] This has been ascribed to the absence of items related to RLS mimics in the available diagnostic instruments.[12] Hence, modification of RLS-DQ was aimed at improving the clarity of the existing items and improving the accuracy by including items related to mimics of RLS.[14,18]

B. **Item Development**: Items were developed using a deductive approach following most recent diagnostic criteria for RLS and feedback from the experts.[14,16,19] Different constructs of the RLS were defined based on the literature review by all authors. International literature as well as national literature were consulted for finding out the wordings that the patients use to describe their experiences as well as conditions that mimic RLS.[14,18,20,21] The questionnaire was divided into five sections (I–V) depending upon the content of items. It was decided that similar to the CH-RLSq, initial two items should be used to screen most important symptoms of RLS

diagnostic criteria, i.e., restlessness in legs and urge to move legs.[6] These items were included in Section I and had dichotomous responses—Yes or No. Only an affirmative answer to at least one of these items allowed the respondent to go through Sections II–V. Section II contained items related to the circadian variation of RLS symptoms, effect of quiescence, and improvement with activity. To improve the understanding of symptoms, these items were provided with multiple responses. For some of the items, respondents were allowed to choose more than one option while for others only one. Sections III and IV had items related to mimics of RLS, viz., anxiety, leg edema, leg cramps, positional discomfort, habitual foot tapping, arthralgia, myalgia, paresthesia, burning feet syndrome, and venous stasis. Since available literature and clinical experience of the authors (R.G. and N.K.) suggested that many patients may have RLS mimics comorbid with RLS, in the response sections they were provided with a choice to identify both the conditions together.[4,14] Last section contained items related to the duration, frequency, and number of episodes of RLS so as to understand course of RLS.[12] Items of this section were not included in the diagnostic scoring. This was termed as m-RLS-DQ v 1.1.

C. **Evaluation by experts**: Modified Delphi method was used during this process. Ten international and national experts who had extensive clinical and research experience with the patients of RLS were chosen through purposive sampling and approached through e-mail. They were explained about the rationale of the study and requested to participate in the process of evaluation.

Each version of m-RLS-DQ was converted in a Google Form and shared with experts. Experts were requested to provide their feedback regarding comprehensibility and clarity of each item on a four points Likert's scale (1 = Needs revision; 2 = Need some revision; 3 = Clear/comprehensible but require minor revision; 4 = very clear or comprehensible).[22] In addition, space was provided to share their concerns (deletion, modification of language, and addition of new item) about each item. Based on the feedback from experts (see below), items were revised (rewording, language correction), explanations were added to the items to make their meaning clearer, and illustrations were added, wherever required. This process was repeated till each item scored 3 or 4 on the Likert's scale for comprehensibility and clarity.

D. **Content Validation**: Along with the comprehensibility and clarity, experts were also requested to provide their opinion regarding relevance of the each of the items on a four point Likert's scale (1 = Needs revision; 2 = Needs some revision; 3 = Relevant but requires minor revision; 4 = very relevant).[22] This process was repeated for all versions. Three content validity indices (CVIs) were calculated—item-content validity index (I-CVI) for each item, average content validity index for the

scale (S-CVI-Av), and universal content validity index for the scale (S-CVI-UA).[17] After three rounds of evaluation and content validation, m-RLS-DQ v. 1.4 was developed and was translated in Hindi.

E. **Hindi Translation of Final English Version:** Hindi translation of the English version was done following the standard guidelines.[23] It was done in seven steps: (i) independent forward (Hindi) translation by two bilingual clinicians proficient in source and target languages (versions FH1 and FH2); (ii) preparation of the final Hindi version (version FH3) by comparing both translations to ascertain conceptual equivalence and consistency of language with m-RLS-DQ v. 1.4; (iii) back (English) translation of FH3 independently by two bilingual experts (versions BE4 and BE5); (iv) preparation of the final English version (version BE6) by comparing both back translations; (v) comparison of version BE6 with m-RLS-DQ v. 1.4 for conceptual equivalence and consistency of languages; (vi) discussion of discrepancies with the subject expert and consequent changes in version FH3 till harmonization of version BE6 with m-RLS-DQ v. 1.4 was reached (version FH7 in Hindi); (vii) testing of version FH 7 in small set of patients (n = 3) having RLS for assessment of comprehensibility of the items. Since no issue was raised by the participants, version FH7 was considered as final Hindi m-RLS-DQ. During the Hindi translation, care was taken to use words from vernacular language rather than having literal translation in Hindi.[23]

### *Scoring method of m-RLS-DQ*

Since this was not a severity assessment questionnaire, diagnosis of RLS was based on the responses to individual items that were considered positive or negative for RLS. Key to the diagnosis of RLS is provided in the supplementary file.

## Phase 2

This phase included determination of face validity, concurrent validity, and psychometric properties of m-RLS-DQ v. 1.4 in Hindi and assessment of its discriminant validity against clinically significant anxiety, somatic symptoms disorder, insomnia, and osteoarthritis.

Participants were included from the out-patient departments of psychiatry, orthopedics, and sleep clinic. All participants (both RLS and controls) were examined for the presence of RLS by experts (RG and NK) following IRLSSG criteria *(see below)*.[19] Insomnia, anxiety disorder, depression, leg cramps, akathisia, and somatic symptoms disorders were diagnosed by qualified psychiatrists (RG, AD, VK) following DSM-5 criteria.[24] Osteoarthritis was diagnosed by an orthopedist following clinical and radiological criteria. In addition, patients having other RLS mimics (varicose veins, burning feet syndrome (BFS)) were also included.

Healthy controls were recruited from the relatives accompanying the patients and from the staff working in the hospital after ascertaining that they were not meeting criteria for RLS or mimics of RLS. All participants were also examined by experts (RG and NK) for the presence of RLS. However, participants aging less than 18 years, those not able to communicate for any reason (aphasia, dementia) and pregnant women were excluded from the study.

Consecutive eligible subjects were explained the rationale of the study and were requested to participate. Since there is no agreement for the intended sample size for the scale development and study was carried out amidst COVID-19 pandemic, as a rule of thumb, 40 patients were included in each group.[16]

While making the clinical diagnosis, participants were categorized in three categories—those having RLS, those not having RLS, and those having RLS along with RLS mimics.[19] Since this study was intended to assess the psychometric properties of m-RLS-DQ, patients having RLS or RLS mimics or both and controls were subjected to complete m-RLS-DQ in presence of one author (RK) who was blind to the clinical diagnosis. Hindi version of the International RLS group rating scale (IRLS) was administered in all participants who were positive for RLS.[25,26]

A. **Assessment of face validity**: Face validation of the Hindi m-RLS-DQ was done by recruiting a small sample of patients having RLS and through the feedback from the experts. This helped us to find out if respective domains of Hindi RLS-DQ were close to the construct for which it was intended, i.e., RLS. Respondents were asked to provide their response regarding two components: evaluation of the degree to which items were reflecting a particular domain of RLS (urge to move legs, dysesthesia, circadian variation, effect of quiescence, and relief by movement) or mimics of RLS (phenomenology, topography, and signs) and second, evaluation of the degree to which the responses given to various items of Hindi m-RLS-DQ produced a logical measurement of the domains. This was done using the qualitative method.[16]

B. **Assessment of concurrent validity**: Diagnosis of RLS was ascertained following the International RLS Study Group criteria on clinical interview.[19] Diagnosis was made following the clinical interview. Clinical interview was conducted using open ended questions to avoid chances of misdiagnosis. In many cases, diagnosis could not be ascertained on initial clinical visit because of three reasons—first, patients were suffering from RLS mimics alone; second, they were experiencing a combination of RLS mimics along with RLS symptoms; and third, patients of anxiety and somatic symptoms disorders were not able to differentiate the symptoms. Such patients were explained the symptoms of RLS in a story format and were requested to pay attention to their nighttime symptoms. Diagnosis of RLS in such cases was ascertained during follow-up visits.

C. **Assessment of Psychometric properties**: Psychometric properties—sensitivity, specificity, PPV, negative predictive value (NPV), and accuracy for the m-RLS-DQ— were calculated against the clinical diagnosis of RLS. Since prevalence of disease may affect these values,

especially the PPV, it was also calculated considering the prevalence of RLS as 2.5%, 5%, 10%, 15%, and 20%, which have been reported in different geographical areas and disease populations.[1–3,12,27–29]

D. **Assessment of Discriminant validity:** Since there may be overlap of symptoms across psychiatric disorders, to have a uniform group, clinically significant symptoms were considered rather than diagnostic categories according to DSM-5. Severity of depressive symptoms, somatic symptoms, insomnia, and anxiety was assessed using scores on Patient Health Questionnaire 9 (PHQ-9), Patient Health Questionnaire 15 (PHQ-15), Insomnia Severity Index (ISI and), and Hamilton Anxiety Rating scale (HAM-A).[30–33] Using cut-off scores of 10 on PHQ-9, PHQ-15, and ISI and 17 on HAM-A, participants were divided in two groups—those with and without clinically significant depressive symptoms, somatic symptoms, insomnia, and anxiety.[30–32,34]

## Statistical analysis

Statistical analysis was conducted using the statistical package for Social Sciences v 28.0.1.0 (IBM Corp. Released 2021. IBM SPSS Statistics for MacIntosh, Version 28.0. Armonk, NY: IBM Corp). Descriptive statistics was calculated. For assessment of concurrent and discriminant validity, Chi-square analysis was done, and correlation between nominal variables was ascertained using Phi statistics. For comparison of continuous variables between two groups, the independent sample t test was used and one way ANOVA with post-hoc Tukey was used to compare continuous variables among >2 groups.

For the calculation of CVI, scores on Likert's scale for "relevance" were dichotomized, where scores of 1, 2 were rescored as "0" and 3 and were converted to "1." To calculate, I-CVI, the number of experts that scored respective item as 1 were divided by the total number of experts. S-CVI-Av was calculated by adding I-CVI for all items and then dividing it by the number of items in the questionnaire. S-CVI-UA was calculated by dividing the number of items that were scored as 1 by the total number of items. Items were revised till I-CVI reached >0.78 for each item and S-CVI-Av 0.9.[35] Psychometric properties, i.e., sensitivity, specificity, PPV, NPV, and accuracy, were analyzed using online MedCalc software (Available at https://www.medcalc.org/calc/diagnostic _test.php. Last accessed on 25 May 2022) since it allowed to calculate PPV across different prevalences of RLS.

## RESULTS

This study included a total of 209 subjects. Among these 59.3% were women; 39 subjects had clinical diagnosis of RLS, 40 had osteoarthritis, 41 with somatic-symptoms-disorder, 42 with anxiety disorder, and 16 patients had other RLS mimics (akathisia, varicose veins, BFS, leg-cramps, chronic insomnia). In addition, 30 healthy control subjects were also present in the sample. Participants in osteoarthritis group were older (51.18 ± 14.79 years), while healthy controls were younger (22.6 + 1.4 years) compared to other

groups ($F = 22.07$; $P < 0.001$). Subjects in each group had a number of other comorbidities [Suppl Table 1] Table 1 depicts the comparison of participants having clinical diagnosis of RLS with those without RLS. Proportion of participants having clinical and m-RLS-DQ diagnosis of RLS was comparable with regards to clinically significant anxiety, depression, insomnia, and somatic symptoms [Figure 1].

## Phase 1
### *Questionnaire development and content validation*
A number of comments were obtained by the experts to improve the content of RLS-DQ [Suppl Table 2]. S-CVI-Av for this version was 0.85 while S-CVI-UA was just 0.38. First revision of RLS-DQ (m-RLS-DQ v. 1.1) improved S-CVI-Av to 0.92 and S-CVI-UA to 0.69; these score further improved in third revision (m-RLS-DQ v 1.2) and both S-CVI-Av and S-CVI-UA achieved a score of 1. After making minor corrections, m-RLS-DQ v. 1.4 was obtained [Appendix 1]. Major differences between RLS-DQ and m-RLS-DQ v. 1.4 were: (i) for most of the items, dichotomized responses were made multi-optional; (ii) explanations were added to the items for better understanding; (iii) illustrations were added, wherever considered important; (iv) conditions that mimic RLS were included; and (v) provisions were provided so that RLS can be diagnosed along with RLS mimics.

### *Hindi Translation of m-RLS-DQ v. 1.4*
Conceptual issues with the translation were not found during forward or backward translations. However, at places, relatively uncommon words were used during Hindi translation, which were changed to words used in vernacular language after discussion [Suppl Table 3]. Since common back-translated version (version 6) was conceptually close to the m-RLS-DQ v. 1.4 and language also appeared consistent, version 3 was considered as final m-RLS-DQ in Hindi.

## Phase 2
### *Face validation*
Patients having RLS confirmed that items included in the questionnaire were matching with their lived experiences. Experts also endorsed the face validity of m-RLS-DQ v. 1.4. Only negative comment that was obtained from some of the experts and patients was length of m-RLS-DQ v. 1.4.
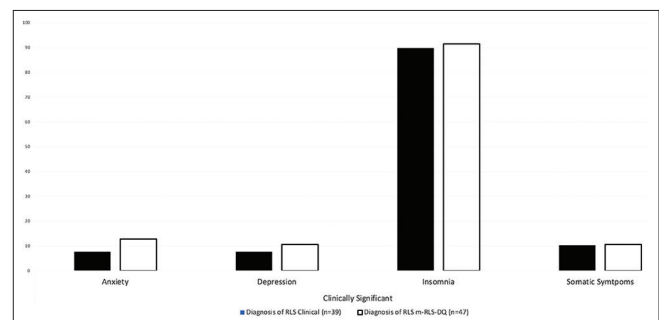


**Figure 1:** Proportion of anxiety, depression, insomnia and somatic symptoms among subjects diagnosed as RLS through clinical interview and m-RLS-DQ

**Table 1: Comparison of demographic and clinical characteristics between participants with and without RLS as per clinical diagnosis (*n*=209)**

| Characteristic | With RLS (*n*=39) | Without RLS (*n*=170) | *P* |
|---|---|---|---|
| Age (mean+SD) | 45.3+13.1 | 39.7+15.3 | $t$=-2.33; $P$=0.02 |
| Male Gender *n* (%) | 14 (35.9%) | 71 (41.8%) | $\chi^2$=0.45; $P$=0.50 |
| Comorbidities *n* (%)@ | | | |
| Insomnia | 8 (20.5%) | 23 (13.5%) | $\chi^2$=1.22; $P$=0.26 |
| MDD | 6 (15.4%) | 7 (4.1%) | $\chi^2$=6.9; $P$=0.009 |
| Hypertension | 6 (15.4%) | 14 (8.2%) | $\chi^2$=1.8; $P$=0.17 |
| DM | 6 (15.4%) | 7 (4.1%) | $\chi^2$=6.9; $P$=0.009 |
| Migraine | 4 (10.3%) | 2 (1.2%) | $\chi^2$=9.3; $P$=0.002 |
| RLS mimics@ | | | |
| Osteoarthritis | 2 (5.1%) | 41 (24.1%) | $\chi^2$=7.0; $P$=0.008 |
| Varicose veins | 3 (7.7%) | 1 (0.6%) | $\chi^2$=8.5; $P$=0.003 |
| Exertional Myalgia | 1 (2.6%) | 2 (1.2%) | $\chi^2$=0.43; $P$=0.51 |
| Nocturnal leg cramps | 1 (2.6%) | 2 (1.2%) | $\chi^2$=0.43; $P$=0.51 |
| Anxiety Disorder | 4 (10.3%) | 43 (25.3%) | $\chi^2$=4.1; $P$=0.04 |
| Somatic Symptoms Disorders | 2 (5.1%) | 41 (24.1%) | $\chi^2$=7.0; $P$=0.008 |
| Burning Feet Syndrome | 2 (5.1%) | 4 (2.4%) | $\chi^2$=0.87; $P$=0.34 |
| Clinically significant symptoms of | | | |
| Insomnia (ISI >10) | 35 (89.7%) | 36 (21.2%) | $\chi^2$=66.4; $P$<0.001 |
| Somatic Symptoms (PHQ 15 >10) | 4 (10.3%) | 42 (35.6%) | $\chi^2$=9.08; $P$=0.003 |
| Depression (PHQ 9 >10) | 3 (7.7%) | 5 (2.9%) | $\chi^2$=1.94; $P$=0.16 |
| Anxiety (HAM-A >17) | 3 (7.7%) | 34 (20%) | $\chi^2$=3.29; $P$=0.06 |

@Many participants had more than one comorbidity

### Assessment of concurrent and discriminant validity

Table 2 depicts that m-RLS-DQ v. 1.4 had excellent concurrent validity in the total sample with mixed population. However, correlation (Phi) reduced in anxiety and insomnia subgroups and the number of false positive cases increased. But even in present of somatic symptoms, anxiety, and insomnia, m-RLS-DQ could identify most of the cases with true RLS.

Table 3 depicts the results of discriminant validity of the m-RLS-DQ v. 1.4. Though the correlation coefficients reached statistical significance, their magnitude was small suggesting that m-RLS-DQ was able to discriminate between RLS with somatic symptoms, arthritis, and anxiety.[36] However, discrimination with clinically significant insomnia was poor. Discriminant validity with the healthy population could not be calculated as this group did not report any false positive response on m-RLS-DQ v. 1.4.

### Psychometric properties of m-RLS-DQ

Sensitivity and specificity of m-RLS-DQ v. 1.4 were 94.9% (95%CI = 82.7%–99.3%) and 94.1% (95%CI = 89.4%–97.1%), respectively. PPV was 78.7% (95%CI = 66.9%–88.1%) and NPV was 98.7% (95%CI = 95.4%–99.7%) with an accuracy of 94.3% (95%CI = 90.2% to 97%). Since some of these properties are dependent on the prevalence of the disease, PPV, NPV, and accuracy were calculated depending upon different prevalence of RLS [Figure 2].

### Assessment of false positive and false negative cases of RLS

Ten participants had false positive RLS according to m-RLS-DQ v. 1.4. Their clinical diagnosis included chronic
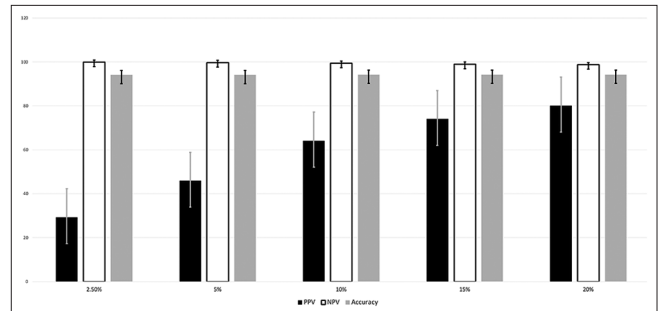


**Figure 2:** Positive Predictive Value (PPV), Negative Predictive Value (NPV) and Accuracy of m-RLS-DQ based on different prevalences of RLS

insomnia (n = 8), anxiety (n = 2), burning feet syndrome (n = 2), nocturnal leg cramps (n = 2), exertional myalgia (n = 1), and depression (n = 3). Many participants had more than one diagnosis [Suppl Table 1]. Among these three reported mild, six moderate, and remaining one severe symptoms of RLS.

Two patients having RLS were false negative according to m-RLS-DQ v. 1.4. Their clinical diagnosis included depression, osteoarthritis, and anxiety. Among these, one reported moderately severe while other reported severe RLS on IRLS.

### Additional diagnoses picked using m-RLS-DQ

Out of 39 patients with clinical diagnosis of RLS 35 patients reported that RLS mimics were co-occurring [Suppl Table 1]. Their information was confirmed by asking about the reported symptoms in detail again. In this group, 25 participants identified these conditions correctly and reported

**Table 2: Concurrent validity of RLS-DQ against the clinical diagnosis of RLS in study group and sub-groups**

| | Total Sample | | | | |
| --- | --- | --- | --- | --- | --- |
| | Clinical Diagnosis of RLS | | *n* | $\chi^2$; *P* | *Phi* |
| | **Positive** | **Negative** | | | |
| Diagnosis of RLS using RLSDQ | | | | | |
| Positive | 37 (94.8%) | 10 (5.8%) | 47 | 144.12; <0.001 | 0.83; *P*<0.001 |
| Negative | 2 (5.2%%) | 160 (94.2%) | 162 | | |
| Total | 39 | 170 | 209 | | |
| Sub-group 1: Clinically significant somatic symptoms | | | | | |
| Positive | 4 (100%) | 1 (2.4%) | 5 | 35.9: <0.001 | 0.88: <0.001 |
| Negative | - | 41 (97.6%) | 41 | | |
| Total | 4 | 42 | 46 | | |
| Sub-group 2: Clinically significant anxiety symptoms | | | | | |
| Positive | 3 (100%) | 3 (9.9%) | 6 | 16.8; <0.001 | 0.67; <0.001 |
| Negative | - | 31 (91.1%) | 31 | | |
| Total | 3 | 34 | 37 | | |
| Sub-group 3: Clinically significant insomnia symptoms | | | | | |
| Positive | 33 (94.2%) | 10 (27.8%) | 43 | 32.86; <0.001 | 0.68; <0.001 |
| Negative | 2 (5.8%) | 26 (72.2%) | 28 | | |
| Total | 35 | 36 | 71 | | |

**Table 3: Discriminant validity of RLS-DQ from other conditions that may mimic RLS based on RLS diagnosis by m-RLS-DQ**

| | RLS Positive as per m-RLS-DQ (*n*=47) | RLS Negative as per m-RLS-DQ (*n*=162) | Chi-square | *P* | Phi | *P* |
| --- | --- | --- | --- | --- | --- | --- |
| Clinically significant somatic symptoms (PHQ 15 >10) | | | | | | |
| Present | 5 (10.6%) | 41 (25.3%) | 4.568 | 0.033 | -0.14 | 0.03 |
| Absent | 42 (89.4%) | 121 (74.7%) | | | | |
| Clinically significant Insomnia (ISI >10) | | | | | | |
| Present | 43 (91.4%) | 28 (17.3%) | 89.432 | <0.001 | 0.65 | <0.001 |
| Absent | 4 (8.5%) | 134 (82.7%) | | | | |
| Clinically significant Anxiety (HAM-A >17) | | | | | | |
| Present | 6 (12.7%) | 31 (19.1%) | 1.015 | 0.314 | -0.07 | 0.31 |
| Absent | 41 (87.3%) | 131 (80.9%) | | | | |
| Osteoarthritis | | | | | | |
| Present | 1 (2.1%) | 42 (25.8%) | 12.626 | <0.001 | -0.24 | <0.001 |
| Absent | 46 (97.9%) | 120 (74.2%) | | | | |

that they were experiencing both conditions on different occasions. Commonly co-occurring mimics were exertional myalgia (20.5%); anxiety (17.9%), arthritis (15.3%), burning feet syndrome, positional discomfort, paraesthesia (10.2% each), leg oedema, and nocturnal leg cramps (7.6% each). However, ten participants identified mimics incorrectly on m-RLS-DQ. In this group, 12.8% reported anxiety; positional discomfort, leg oedema (5.1% each); and 2.5% reported BFS. These percentages have been calculated considering 39 (all participants with clinical RLS) as denominator.

## DISCUSSION

This study showed that m-RLS-DQ v. 1.4 is a valid tool with acceptable psychometric properties for the diagnosis of RLS in clinical population. In addition, it allowed diagnosis of comorbid conditions (RLS mimics) that may at times accompany the RLS. Major limitation of m-RLS-DQ was poor

differentiation between patients having chronic insomnia as seen by moderate, positive correlation during assessment of discriminant validity, and proportion of chronic insomnia in false positive cases according to m-RLS-DQ v. 1.4. Length of the questionnaire was another limitation, as indicated by participants as well as experts.

A number of questionnaires are available for diagnosis of RLS, which are valid and have acceptable psychometric properties.[15] Some of the available questionnaires have reported either comparable, better or poorer psychometric properties than m-RLS-DQ v. 1.4.[6–9] For example, while sensitivity of HDTI and RLS-DI is comparable, that of ARQIP slightly better; specificity of RLS-DI is slightly better, that of HDTI, RLD-DI comparable and for ARQIP lower; reported PPV of RLS-DI and single question is better, but that of ARQIP comparable; NPV of RLS-DI is slightly inferior but that of single question and ARQIP—comparable and accuracy of RLS-DI and ARQIP

are comparable.[6–9,11] These differences could be related to the items included in the questionnaire, scoring method and choice of control population as these issues vary across studies that have assessed different questionnaires (see below). Validation of single question was done in patients attending Neurology Clinics while study validating HDTI included patients with RLS and their relatives. Contrarily, validation of CH-RLSq was done in a population of blood donors that are likely to healthy and free of mimics.[6] Patients with insomnia were present in the control population during validation of RLS-DI in decent proportion.[9] However, these patients were taking treatment for the same, and for this reason could be probably asymptomatic. Thus, it appears that during validation of earlier diagnostic instruments for RLS, control population was healthy which reduced false positivity and resulted in better specificity and PPV. Inclusion of clinical population is expected to have significant proportion of RLS mimics as was seen in present study; however, details regarding proportion of "active" RLS mimics during validation of single-question and HDTI are not available.[7,8]

PPV is a major issue with the diagnostic instruments for RLS considering the low prevalence of this disease.[12] A recent meta-analysis reported that studies where an index test was compared with the clinical diagnosis of RLS, predicted $PPV_5$ (considering the prevalence of RLS as 5%) was as low as 31%.[12] For m-RLS-DQ v. 1.4 calculated $PPV_5$ was 45.9% (95%CI = 30.6-60.8%), which was greater than one reported in previous studies.[12] However, $PPV_5$ of m-RLS-DQ v. 1.4 was still below the expected level.[12] PPV depends upon number of false positive cases. In the present study, proportion of false positive cases was high (n = 10) and 80% of them were suffering from chronic insomnia. Insomnia not only affected PPV but also the discriminant validity [Tables 2 and 3]. High false positivity among patients having insomnia could be related to the experience of cognitive as well as motor arousal.[37,38] While not able to sleep, many of them keep tossing and turning in bed and experience psychic as well as motor restlessness. This restlessness can be confused with the symptoms of RLS, particularly if the attention is not paid by the respondents. This could be one reason for low PPV found in this study and suggests that m-RLS-DQ may not be a good instrument to assess RLS in this population. However, the positive likelihood ratio, which is not affected by the population prevalence, was 15.83, and the negative likelihood ratio was 0.05 suggesting that with this instrument cases with RLS are times more likely to be diagnosed as RLS compared to those without.

Whether an item explaining restlessness that occurs during insomnia should be added in m-RLS-DQ is a debatable issue. While insomnia and RLS are fundamentally two different constructs, yet they overlap clinically for two reasons- first cognitive and motor arousal and proportion of RLS patients experiencing initial and middle insomnia.[4] Assessment of performance of m-RLS-DQ v. 1.4 may be done in future studies after adding an item related to insomnia.

m-RLS-DQ v. 1.4 had excellent concurrent validity with the clinical diagnosis in the whole sample and in the subgroups of clinically significant somatic symptoms, arthritis, and anxiety [Table 1], which are often comorbid and, also act as mimics of RLS.[4] Similarly, it was also able to discriminate true RLS from clinically significant somatic symptoms, anxiety, and arthritis [Table 2]. S-CVI-Av as well as S-CVI-UA of the m-RLS-DQ v. 1.4 also reached score of 1. These properties make it a good instrument to diagnose RLS. Concurrent validity, discriminant validity, and content validation have not been reported during validation of previous questionnaires; hence, this cannot be comment upon.[6–9,11]

Several other medical conditions may mimic RLS.[13,14] These conditions need to be carefully ruled out as while making the diagnosis of RLS as they may be source of false positive diagnosis of RLS.[13–15,39] However, RLS and RLS mimics are not mutually exclusive conditions. RLS mimics may occur along with RLS.[4,14] HDTI[7] and CH-RLSq[6] included only two mimics—leg cramps and positional discomfort; on the other hand, single question[8] and RLS-DI[9] do not have items related to RLS mimics. m-RLS-DQ overcomes both these issues and include most of the mimics of RLS. Moreover, its diagnosis of RLS is not dependent solely on the exclusion of the mimics, rather it allows diagnosis of co-morbid mimics. This was evident from the fact that 71.4% of the participants made the additional diagnosis of comorbidities correctly using m-RLS-DQ as subjects having RLS with or without RLS mimics were included in the study. This could be related to the fact that contrary to the existing RLS diagnostic questionnaires, explanations were provided for the RLS mimics along with illustrations wherever possible, as suggested in the past.[15] This quality also suggests that m-RLS-DQ v. 1.4 is a good instrument for the screening and diagnosis of RLS.

Like any other scientific investigation, the present study also had limitations. First, it is still to be ascertained whether clinical diagnosis of RLS, which was considered as reference is indeed a gold standard.[12] Since the diagnosis of RLS depends upon the a number of patient related factor, viz., subjective experience, which varies with severity and frequency of RLS symptoms; presence of RLS mimics, if any; understanding of the questions asked by the physician as well as experience of "expert" in diagnosing RLS, false positive and negative cases could not be ruled out. This could have affected the results. Second, the sample was taken from one center and was small. It limits the validity of m-RLS-DQ. A multicentric study in a larger population will be able to better delineate the psychometric properties of m-RLS-DQ. Third, both the assessments for RLS were done in one sitting only. This could have affected the motivation and responses of participants on m-RLS-DQ and affected the results. Fourth, participants (except for the healthy group) had several RLS mimics, which could have affected the results. Future studies should compare larger group of RLS and healthy participants so that it's utility in epidemiological studies can be ascertained. Fifth, the length of m-RLS-DQ

could be an issue, which could also affected the motivation to provide correct information.

Despite the limitations, this study had some strengths. First, included participants represent patients encountered in clinical practice. Second, m-RLS-DQ allows comorbid diagnosis of RLS mimics, which was observed in this study and thus can guide about the management planning. Third, predicted $PPV_5$ was better than the available instruments for the same purpose.[12]

In conclusion, m-RLS-DQ v. 1.4 is a valid instrument with acceptable psychometric properties, which can be used for the screening as well as diagnosis of RLS in clinical practice and research studies.

### Conflicts of interest
There are no conflicts of interest.

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**Suppl. Table 1. Other medical and Psychiatric comorbidities in each group of study participants ($n=209$)**

| Diagnosis | Insomnia | HTN | DM | BFS | NLC | MDD | OSA | SUB (Tobacco) | Anxiety | Migraine | OA | Varicose vein | Exertional myalgia | SSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Restless legs syndrome | 8 (20.5%) | 6 (15.4%) | 6 (15.4%) | 2 (5.1%) | 1 (2.60%) | 6 (15.4%) | 8 (20.5%) | 1 (2.6%) | 4 (10.30%) | 4 (10.3%) | 2 (5.1%) | 3 (7.7%) | 1 (2.6%) | 2 (5.1%) |
| Somatic symptoms disorder | 3 (7.5%) | 1 (2.5%) | - | - | - | - | - | - | - | 1 (2.5%) | 1 (2.5%) | - | - | 40 (100.0%) |
| Anxiety disorder | 7 (16.7%) | 5 (11.9%) | 2 (4.8%) | 1 (2.4%) | - | 2 (4.8%) | 2 (4.8%) | - | 42 (100.00%) | - | - | - | - | 1 (2.4%) |
| Osteoarthritis | - | 3 (7.5%) | 2 (5.0%) | - | - | - | 1 (2.5%) | - | - | - | 40 (100%) | - | - | - |
| Others | | | | | | | | | | | | | | |
| Varicose vein | 1 (100.0%) | - | - | - | - | 1 (100%) | - | - | - | - | - | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| Nocturnal leg cramps | - | - | - | - | 2 (100%) | 1 (50.0%) | 1 (50.0%) | 1 (50.0%) | - | - | - | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Insomnia disorder | 9 (100%) | 4 (44.4%) | 2 (22.2%) | - | - | 1 (11.1%) | 1 (11.1%) | 1 (11.1%) | - | 1 (11.1%) | - | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Exertional myalgia | 1 (50.0%) | 1 (50.0%) | 1 (50.0%) | - | - | 1 (50.0%) | 1 (50.0%) | 1 (50.0%) | - | - | - | 0 (0.0%) | 2 (100.0%) | 0 (0.0%) |
| Burning feet syndrome | 2 (66.7%) | - | - | 3 (100%) | - | 1 (33.3%) | 1 (33.3%) | 3 (100%) | - | - | - | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Akathisia | - | - | - | - | - | - | - | - | 1 (100%) | - | - | - | - | - |

**Suppl. Table 2: Feedback and content validation of Restless Legs Syndrome-Diagnostic Questionnaire (RLS-DQ)**

| S. No. | Items | Suggestions/Comments from Feedback Instrument-1 | I-CVI |
|---|---|---|---|
| Do you have any (A1 or A2) of the following feeling in the legs when you go to bed or when you are rest | | | |
| A1. | Restlessness in legs | • Explain restlessness also in other words, using common language, to make it understandable to everyone.<br>• Elaboration to make it clear about when you and also elaborate restlessness at legs describing it more so that applicants can identify. For example, restlessness such as feel uncomfortable while resting, etc.<br>• Allow multiple descriptors as examples to this.<br>• May use other synonymous words along with the term restlessness.<br>• Nevertheless, the symptoms can arise from limbs, and legs are usually dominant in the clinical presentation. For a screening tool would be ok.<br>• Restlessness in the lower part of the legs | 1 |
| A2. | Urge to move legs | • Give examples of how an urge to move legs would manifest, e.g., get up and walk, get legs pressed | 1 |
| B1. | Does this restlessness occur in mind or leg or both? | • Should be clarified what restlessness in the mind is<br>• Give example of how it would be mind or leg<br>• May be including "feel anxious" there are cultural differences how to interpret the wording | 0.7 |
| B2. | Do you get these feelings in the muscles or joints or sole? | • In my experience, RLS patients might have symptoms in the sole. I would suggest to use other aspects to distinguish RLS from burning feet syndrome, e.g., circadian rhythmicity of symptoms and/or characteristic of the sensations.<br>• Clarify sole of the foot.<br>• Having three possibilities may be confusing; may need to reword as Do you get these feelings in the muscles vs in the ankle/knee joints or the bottom of the feet? This is a tough one.<br>• May be skin can be made an option.<br>• It needs to differentiate upward ascent of tingling and burning which has no evening propensity | 0.7 |
| B3. | Do you feel like walking or urge to move legs when you have these feelings? | • Do you feel a need/an urge to walk and/or move your legs when you have these feeling?<br>• Some arthralgias are improved by walking, so again this is a tough one. You may want to stick to "urge" rather than question about walking. | 1 |
| B4. | Do you get any relief, till you keep moving or when somebody massages your legs? | • Do you get any relief when moving, at least as long as you keep moving? I would suggest not mentioning massage, this is much less specific for RLS.<br>• Massage and movement of these two components should be separately assessed.<br>• Poor grammar here. "Do you get relief from moving your legs, while you are moving? See questions in 'Hening Telephone Diagnostic Inventory'?"<br>• Do you get any relief, even if transitory when you keep moving, etc. | 1 |
| B5. | What brings the relief in this feeling- movement or the rest? | • Refer to the statement in B4 and then ask this question; else relevance appears lost.<br>• It does not mean just to change the position<br>• Do not understand what is being meant | 0.9 |
| B6. | If I forbid you from moving legs, would it worsen these symptoms? | • If you avoid moving your legs, does this worsen the symptoms?<br>• Forbid may be replaced with a simpler structure, e.g., If someone told you that you cannot move/stopped you from moving- can redraft this part. | 1 |
| B7. | Do these feelings reduce when you start moving your legs in bed or start walking or when somebody massages your legs? | Reduce might be misinterpreted. I would suggest "Do these feeling improve when you start moving your legs in bed or start walking?" I would not mention massage.<br>Refer to these feeling as a statement to make it clearer. | 0.9 |

| Suppl. Table 2: Contd... | | | |
|---|---|---|---|
| S. No. | Items | Suggestions/Comments from Feedback Instrument-1 | I-CVI |
| B8. | If I ask you to compare the intensity of these feelings, when do they get worse - morning, noon, evening or night? | • If more answers are possible, it is ok as it is. Otherwise, I would suggest instead of "when do they worsen" "when are the at worst."<br>• Which feelings-describe again.<br>• Or sitting at one place or always.<br>• Would rephrase as "which time of day are these feelings the worst: morning, etc."<br>• Multiple answers are allowed? or hierarchical responses?<br>• Are these abnormal feelings worse at a particular time of the day? | 0.7 |
| B9. | If they are of similar intensity throughout the day, during initial days of these symptoms did you notice any difference in their intensity in a given day? | • Not clear cannot understand-I think what is required to understand from the person is-Do you notice any difference in its intensity as the day progresses, meaning does it become more later in the day; or does it remain the same intensity throughout<br>• See B8.<br>• Difference with what? | 0.8 |
| B10. | If you do not work throughout a day and you are not tired, do you still get these feelings at night? | • This feeling of.(explain the feeling).<br>• This is interesting and maybe of value, but the word "work" may be misleading as most people work at a desk<br>• What about a sedentary work | 0.6 |
| B11. | Do these feelings ever start to occur while you are walking? | • Do these feelings commonly start to occur while you are walking. Ever could means literally once in a life. | 0.8 |
| Generalized | | • Please check grammar of the sentences.<br>• This instrument seems to be too large in general practice, but might be used in the science of RLS.<br>• See previous answers<br>• Cultural differences are of the utmost importance, great effort<br>• The instrument seems quite clear to understand | |
| Additional Items | | • Few patients have only restless arms without legs symptoms<br>• I look forward to your preliminary results, but make sure to compare the results of the questionnaire (blindly) to clinical interviews (see our recent review in Fulda Sleep Medicine Reviews) best of luck, John.<br>• Not sure but if the pattern of sensory phenomenon can be captured. I know it is difficult but that would help further improve it.<br>• May be used in science but too comprehensive in general practice by doctors who are not experts in this field.<br>• Give specific situation like confined to airline seat or chair immobile. | |

**Suppl. Table 3: Forward (Hindi) translation of final version of modified RLS Diagnostic Questionnaire (m-RLS-DQ)**

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| I | Do you experience any of the following in your legs and/or arms when you go to bed or when you are at rest: | जब आप बिस्तर पर जाते हैं या जब आप आराम कर रहे होते हैं तो क्या आपको अपने पैरों और/या बाहों में निम्न में से कोई अनुभव होता है: <br>पैरों और/या बाहों <br>अनुभव | जब आप बिस्तर में लेटे होते हैं या आराम कर रहे होते हैं, तो पैरों एवं/अथवा बाहों में आपको निम्न में से कुछ महसूस होता है: <br>लेटे होते हैं <br>पैरों एवं/अथवा बाहों <br>महसूस | जब आप बिस्तर में लेटे होते हैं या आराम कर रहे होते हैं, तो पैरों एवं/अथवा बाहों में आपको निम्न में से कुछ महसूस होता है: <br>लेटे होते हैं <br>पैरों एवं/अथवा बाहों <br>महसूस |
| 1. | Restlessness in legs and/or arms <br>People usually explain it as follows: <br>• Restlessness <br>• A discomfort <br>• Sensation as if something is crawling, tickling in the muscles <br>• Painful sensations in muscles | पैरों और/या बाहों में बेचैनी <br>लोग आमतौर पर इसे इस परकार समझाते हैं: <br>• बेचैनी <br>• असहजता <br>• ऐसा महसूस होना जैसे कि कुछ रेंग रहा है, मांसपेशियों में बुदबुदा रहा है <br>• मांसपेशियों में दर्द महसूस होना <br>पैरों और/या बाहों <br>समझाते <br>असहजता <br>रेंग <br>महसूस | पैरों और/या बाहों में बेचैनी <br>लोग अक्सर "बेचैनी"को इस तरह बताते हैं <br>• बेचैनी <br>• हड़कल <br>• ऐसा लगना जैसे मांसपेशियों में कुछ चल रहा है, गुदगुदी सी हो रही है <br>• मांसपेशियों में दर्द अनुभूति होना <br>पैरों एवं/अथवा बाहों <br>बताते <br>हड़कल <br>चल <br>अनुभूति | पैरों और/या बाहों में बेचैनी <br>लोग अक्सर "बेचैनी" को इस तरह समझाते हैं <br>• बेचैनी <br>• हड़कल <br>• ऐसा लगना जैसे मांसपेशियों में कुछ चल रहा है, गुदगुदी सी हो रही है <br>• मांसपेशियों में दर्द महसूस होना <br>पैरों एवं/अथवा बाहों <br>समझाते <br>हड़कल <br>चल <br>महसूस |
| 2. | Urge to move legs <br>People usually explain it as follows: <br>• They feel a need to keep moving their legs <br>• Intense desire to get up and walk | पैर हिलाने की तीव्र इच्छा <br>लोग आमतौर पर रिपोर्ट करते हैं कि: <br>• उन्हें अपने पैर हिलाते रहने की आवश्यकता महसूस होती है <br>• उठने और चलने की तीव्र इच्छा <br>• उनके पैर हिलाते रहें <br>आमतौर पर रिपोर्ट करते हैं <br>पैर हिलाते रहने की आवश्यकता <br>महसूस | पैंव हिलाने की तीव्र इच्छा <br>लोग अक्सर कहते हैं: <br>• उन्हें अपने पांव हिलाते रहने की जरूरत महसूस होती है <br>• उठकर चलने की तीव्र इच्छा होती है <br>• पाँव दबाते रहते हैं <br>अक्सर कहते है <br>पांव हिलाते रहने की जरूरत <br>अनुभूति | पाँव हिलाने की तीव्र इच्छा <br>लोग आमतौर पर इसे इस तरह समझाते हैं <br>• उन्हें अपने पाँव हिलाते रहने की जरूरत महसूस होती है <br>• उठकर चलने की तीव्र इच्छा होती है <br>• पाँव दबाते रहते हैं <br>आमतौर पर इसे इस तरह समझाते हैं <br>पाँव हिलाते रहने की जरूरत <br>महसूस |
| II | If you have answered yes to any one of the above questions, please provide following details. <br>Otherwise you may go to section "F". | यदि आपने उपरोक्त में से किसी एक प्रश्न का उत्तर हां में दिया है, तो कृपया निम्नलिखित विवरण प्रदान करें। <br>अन्यथा आप अनुभाग "एफ" पर जा सकते हैं। <br>यदि <br>उपरोक्त <br>निम्नलिखित <br>विवरण प्रदान करें <br>अनुभाग | अगर आपने ऊपर लिखे प्रश्नों में से किसी का भी जवाब हाँ दिया है तो नीचे लिखे प्रश्नों का भी उत्तर दें <br>अन्यथा आप भाग "F" पर जाएं <br>अगर <br>ऊपर <br>नीचे लिखे <br>उत्तर दें <br>भाग | अगर आपने ऊपर लिखे प्रश्नों में से किसी का भी जवाब हाँ दिया है तो नीचे लिखे प्रश्नों का भी उत्तर दें अन्यथा आप भाग "VI" पर जाएं <br>अगर <br>ऊपर <br>नीचे लिखे <br>उत्तर दें <br>भाग |
| 1. | As long as you keep moving your legs or walk, do you experience any relief, even transient in "restlessness" and/or "urge to move legs (as you described above)? | क्या आप किसी राहत का अनुभव करते हैं यहां तक कि "बेचैनी" और/या "पैरों को हिलाने की इच्छा को ऊपर वर्णित है) में क्षणिक भी, जब तक आप अपने पैरों को हिलाते या चलते रहते हैं? <br>किसी राहत <br>वर्णित <br>क्षणिक | जितनी देर आप पाँव हिलाते रहते हैं या चलते रहते हैं, उतनी देर क्या आपको हड़कल और/या पाँव हिलाने की तीव्र इच्छा (जैसे आपने ऊपर बताया था) में थोड़ा भी आराम मिलता है भले ही थोड़ी देर के लिए हो। <br>थोड़ा भी आराम <br>बताया <br>भले ही थोड़ी देर के लिए हो। | जितनी देर आप पाँव हिलाते रहते हैं या चलते रहते हैं, उतनी देर क्या आपको हड़कल और/या पाँव हिलाने की तीव्र इच्छा (जैसे आपने ऊपर बताया था) में थोड़ा भी आराम मिलता है भले ही थोड़ी देर के लिए हो। <br>थोड़ा भी आराम <br>बताया <br>भले ही थोड़ी देर के लिए हो। |

**Suppl. Table 3:** Contd...

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 2. | If you stop moving your legs or if someone asks you not to move your legs or when you are compelled to sit for a long time (e.g., while travelling or sitting in your work-place) do the "restlessness" and/or "urge to move legs" (as you described above) recur or worsen? | यदि आप अपने पैरों को हिलाना बंद कर देते हैं या यदि कोई आपको अपने पैरों को नहीं हिलाने के लिए कहता है या जब आपको लंबे समय तक बैठने के लिए मजबूर किया जाता है (उदाहरण के लिए, यात्रा करते समय या अपने कार्यस्थल पर बैठे) तो "बेचैनी" और/या "पैर हिलाने के लिए "आग्रह" करें पैर हिलाने के लिए (जैसा कि ऊपर वर्णित) ख़राब हो जाता है? <br><br>यदि <br>नहीं हिलाने के लिए कहता <br>मजबूर किया <br>यात्रा <br>कार्यस्थल <br>ऊपर वर्णित <br>आग्रह <br>ख़राब | अगर आप पांव हिलाना बंद कर दें या कोई आपको पांव हिलाने से मना करे या आपको मजबूरी में लंबे समय तक बैठा रहना पड़े (जैसे सफर करते हुए या काम करने की जगह पर) तो क्या यह "हड़कल" और/या पांव हिलाने की तीव्र इच्छा (जैसे आपने ऊपर बताया था) बढ़ती है? <br><br>अगर <br>मना करे <br>मजबूरी में <br>सफर <br>काम करने की जगह <br>ऊपर बताया <br>तीव्र इच्छा <br>बढ़ती | अगर आप पांव हिलाना बंद कर दें या कोई आपको पांव हिलाने से मना करे या आपको मजबूरी में लंबे समय तक बैठा रहना पड़े (जैसे सफर करते हुए या काम करने की जगह पर) तो क्या यह "हड़कल" और/या पांव हिलाने की तीव्र इच्छा (जैसे आपने ऊपर बताया था) बढ़ती है? <br><br>अगर <br>मना <br>मजबूरी में <br>सफर <br>काम करने की जगह <br>ऊपर बताया <br>तीव्र इच्छा <br>बढ़ती |
| 3.a | Which time of the day, do you usually experience the "restlessness" and/or urge to move legs (as you described above) | दिन के किस समय, क्या आप आमतौर पर "बेचैनी" का अनुभव करते हैं और/या पैरों को हिलाने का आग्रह करते हैं (जैसा कि ऊपर वर्णित है)? <br><br>दिन के किस समय, <br>अनुभव <br>ऊपर वर्णित <br>आग्रह | यह "हड़कल" और/या पांव हिलाने की तीव्र इच्छा (जैसा आपने ऊपर बताया था) आपको अक्सर दिन में किस समय महसूस होती है? <br><br>अक्सर दिन में किस समय <br>महसूस <br>ऊपर बताया <br>तीव्र इच्छा | यह "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" (जैसा आपने ऊपर बताया था) आपको अक्सर दिन में किस समय महसूस होती है? <br><br>अक्सर दिन में किस समय <br>महसूस <br>ऊपर बताया <br>तीव्र इच्छा |
| 3b | If you have chosen more than one responses in above question, kindly state at which time of the day, "restlessness" and/or "urge to move legs" (as you described above) are usually worst? | यदि आपने उपरोक्त प्रश्न में एक से अधिक उत्तर चुने हैं, तो कृपया बताएं कि दिन के किस समय, "बेचैनी" और/या "पैर हिलाने की इच्छा" आमतौर पर सबसे ख़राब होती है? <br><br>यदि <br>उपरोक्त <br>एक से अधिक <br>चुने हैं <br>ख़राब | अगर आपने ऊपर वाले प्रश्न में एक से ज्यादा जवाब दिए है तो कृपया यह बताएं कि "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" (जैसा आपने ऊपर बताया था) दिन के किस समय जयादातर होती है <br><br>अगर <br>ऊपर <br>ज्यादा <br>जवाब दिए <br>ज्यादा | अगर आपने ऊपर वाले प्रश्न में एक से ज्यादा जवाब दिए है तो कृपया यह बताएं कि "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" (जैसा आपने ऊपर बताया था) दिन के किस समय जयादातर होती है <br><br>अगर <br>ऊपर <br>ज्यादा <br>जवाब दिए <br>ज्यादातर |
| 3c | When for the first time you started experiencing "restlessness" and/ or "urge to move legs" (as you described above), which part of the day were these symptoms worst? | जब आपने "बेचैनी" और/या "पैर हिलाने की इच्छा" का अनुभव करना शुरू किया, तो दिन के किस हिस्से में ये लक्षण सबसे खराब थे? <br><br>अनुभव <br>दिन के किस हिस्से <br>खराब | जब आपने हड़कल और/या पांव हिलाने की तीव्र इच्छा महसूस करना शुरू किया, था उस वक्त, दिन के किस समय यह लक्षण सबसे ज्यादा होते थे? <br><br>महसूस <br>दिन के किस समय <br>ज्यादा <br>उस वक्त | जब आपने "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" (जैसा आपने ऊपर बताया था) महसूस करना शुरू किया, उस वक्त, दिन के किस समय यह लक्षण सबसे ज्यादा होते थे ? <br><br>महसूस <br>दिन के किस समय <br>ज्यादा <br>उस वक्त |

*Contd...*

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 4a | Do you experience "restlessness" and/or "urge to move legs" (as you described above) only when you start to walk or while walking? | क्या आप "बेचैनी" और/या "पैर हिलाने की इच्छा" का अनुभव तभी करते है जब आप चलना शुरू करते है या चलते समय? | क्या यह हड़कल और/या पाँव हिलाने की तीव्र इच्छा, आप केवल उसी समय महसूस करते है जब आप चलना शुरू कर देते है या चल रहे होते है? | क्या यह "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" (जिसा आपने ऊपर बताया था), आप केवल उसी समय महसूस करते है जब आप चलना शुरू कर देते है या चल रहे होते है? |
| | | आप | यह | यह |
| | | अनुभव | महसूस | महसूस |
| | | तभी | उसी समय | उसी समय |
| | | चलते समय? | चल रहे होते है?" | चल रहे होते है?" |
| 4b | If you have responded "yes" to question (4a), kindly compare the severity of symptoms to a situation when you are taking rest. | यदि आपने ऊपर "हाँ" में उत्तर दिया है, तो कृपया लक्षणों की गंभीरता की तुलना उस स्थिति से करें जब आप आराम कर रहे हों। | अगर आपने ऊपर वाले प्रश्न का उत्तर हाँ दिया है तो कृपया लक्षणों की तीव्रता की तुलना उस समय से करें जब आप आराम कर रहे होते है। | अगर आपने ऊपर वाले प्रश्न (4a) का उत्तर 'हाँ' दिया है तो कृपया लक्षणों की तीव्रता की तुलना उस समय से करें जब आप आराम कर रहे होते है। |
| | | यदि | अगर | अगर |
| | | गंभीरता | तीव्रता | तीव्रता |
| | | उस स्थिति | उस समय | उस समय |
| | | रहे हों" | रहे होते है | रहे होते है |
| | | | प्रश्न | प्रश्न |
| III | Please provide following information so that we can have a better understanding of your symptoms: | कृपया निम्नलिखित जानकारी प्रदान करें ताकि हम आपके लक्षणों को बेहतर ढंग से समझ सकें: | कृपया निम्न जानकारी दें ताकि हम आपके लक्षणों को बेहतर तरीके से समझ सकें | कृपया निम्न जानकारी दें ताकि हम आपके लक्षणों को बेहतर तरीके से समझ सकें |
| | | निम्नलिखित | निम्न | निम्न |
| | | प्रदान | ताकि | ताकि |
| | | ढंग | तरीके | तरीके |
| 1. | Besides moving the legs or walking, what provides you relief in "restlessness" and/or "urge to move legs" (as you described above) | पैरों को हिलाने या चलने के अलावा, आपको "बेचैनी" और/या "पैर को हिलाने की इच्छा" में क्या राहत देता है | पाँव हिलाने या चलने के अलावा इस 'हड़कल' और/या पाँव हिलाने की तीव्र इच्छा में आपको ऊपर बताया था में क्या राहत दे सकते है ? | पाँव हिलाने या चलने के अलावा इस 'हड़कल "और/या "पाँव हिलाने की तीव्र इच्छा" (जिसा आपने ऊपर बताया था) में आपको और किस तरह से आराम मिलता है? |
| | You may choose more than one responses: | आप एक से अधिक प्रतिकिरयाएँ चुन सकते हैं: | आप एक से ज्यादा उत्तर दे सकते है- | आप एक से ज्यादा उत्तर दे सकते है- |
| | • Arms/leg massage | • अंग/पैर की मालिश | • हाथों/पाँव की मालिश | • हाथों/पाँव की मालिश |
| | • Pressure on legs as by tying cloth on it or keeping a heavy pillow on it | • पैरों पर दबाव डालना जैसे कि उस पर कपड़ा बांधकर या उस पर भारी तकिया रखकर | • पाँव को किसी तरह से दबाना जैसे कपड़ा बांधकर या भारी तकिया रखकर | • पाँव को किसी तरह से दबाना जैसे कपड़ा बांधकर या भारी तकिया रखकर |
| | | • कुछ और, कृपया साझा करें | • किसी और तरह, कृपया बताएं: | • किसी और तरह, कृपया बताएं: |
| | • Soaking in warm water/oil | क्या राहत देता है | कसि तरह से आराम मिलता है | किस तरह से आराम मिलता है |
| | • Anything else, please share: ................. | अधिक प्रतिकिरयाएँ | और | और |
| | | अंग/पैर | ज्यादा उत्तर | ज्यादा उत्तर |
| | | दबाव डालना | हाथों/पाँव | हाथों/पाँव |
| | | कुछ और | दबाना | दबाना |
| | | कृपया साझा करें | किसी और तरह | किसी और तरह |
| | | | कृपया बताएं: | कृपया बताएं: |

**Suppl. Table 3: Contd...**

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 2a | Please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने की इच्छा" की व्याख्या करते हैं: | कृपया नीचे लिखे कथन पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल और/या पाँव हिलाने की इच्छा" को स्पष्ट रूप से बताते हैं | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं |
| | • Too many and distressing thoughts are common during anxiety. | • घबराहट के साथ-साथ दौड़ने और परेशान करने वाले विचार एक ही स्थान पर बैठने में कठिनाई और पेसिंग के दौरान आम हैं | • बहुत सारे एवं परेशान करने वाले विचार घबराहट/चिंता के दौरान आम हैं | • बहुत सारे एवं परेशान करने वाले विचार घबराहट/ चिंता के दौरान आम हैं |
| | • These symptoms of anxiety are often accompanied by sweating, palpitations, shortness of breath. | • ये लक्षण अक्सर पसीना, धड़कन, सांस की तकलीफ के साथ होते हैं | • चिंता एवं घबराहट के दौरान अक्सर दिल की धड़कन बढ़ जाती है सांस में दिक्कत होती है एवं पसीना आता है | • चिंता एवं घबराहट के दौरान अक्सर दिल की धड़कन बढ़ जाती है सांस में दिक्कत होती है एवं पसीना आता है |
| | • Such people feel it difficult to sit at one place and keep pacing. However, during anxiety restlessness is primarily experienced in mind rather than in the muscles. | • ऐसी व्यक्ति एक जगह बैठने में भी दिक्कत महसूस करते हैं एवं घूमते रहते हैं हालांकि चिंता के दौरान बेचैनी मांसपेशियों में ना होकर मन में ज्यादा होती है | • ऐसे व्यक्ति एक जगह बैठने में भी दिक्कत महसूस करते हैं एवं घूमते रहते हैं हालांकि चिंता के दौरान बेचैनी मांसपेशियों में ना होकर मन में ज्यादा होती है | • ऐसे व्यक्ति एक जगह बैठने में भी दिक्कत महसूस करते हैं एवं घूमते रहते हैं हालांकि चिंता के दौरान बेचैनी मांसपेशियों में ना होकर मन में ज्यादा होती है |
| | • I experience "restlessness" and/or "urge to move legs" only during anxiety | • यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है | • कृपया एक उत्तर चुनें | कृपया नीचे से केवल एक उत्तर चुनें :-मुझे "हड़कल और/या पाँव हिलाने की तीव्र इच्छा" केवल घबराहट/ चिंता के समय होती है। |
| | • I experience anxiety as well as "restlessness" and/or "urge to move legs," though these are different problems | • जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूँ | • मुझे हड़कल और/या पाँव हिलाने की तीव्र इच्छा केवल घबराहट/चिंता के समय होती है | • मुझे घबराहट/चिंता एवं "पाँव हिलाने की तीव्र इच्छा" दोनों ही महसूस होती है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होती है हालांकि दोनों अलग-अलग तकलीफ हैं |
| | • I do not experience anxiety but feel "restlessness" and/or "urge to move legs" | • मुझे इसका बिल्कुल भी अनुभव नहीं है | • मुझे यह भी महसूस होता है एवं साथ में हड़कल और/या पाँव हिलाने की तीव्र इच्छा (जैसे ऊपर बताया है) भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफ हैं • मैं कभी चिंता एवं घबराहट महसूस नहीं करता | मैं कभी चिंता एवं घबराहट महसूस नहीं करता लेकिन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" होती है। |
| | | निम्नलिखित | नीचे लिखि | नीचे लिखि |
| | | विचार करें | यह बताएं | यह बताएं |
| | | व्याख्या | स्पष्ट रूप | स्पष्ट रूप |
| | | दौड़ने | बहुत सारे | बहुत सारे |
| | | कठिनाई | दिक्कत | दिक्कत |
| | | पेसिंग | घूमते | घूमते |
| | | मुख्य | ज़्यादा | ज़्यादा |
| | | अनुभव | महसूस | महसूस |
| | | लक्षण | चिंता | चिंता |
| | | तकलीफ | दिक्कत | दिक्कत |
| | | | घबराहट | घबराहट |

Suppl. Table 3: Contd...

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 2b | Please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने का आग्रह" की व्याख्या करते हैं: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं: |
|  | • Some people experience above symptoms when they have swelling in their legs and/or arms. | • कुछ लोगों को इन लक्षणों का अनुभव तब होता है जब उनके पैरों और/या बाहों में सूजन आ जाती है। | • कुछ लोगों को ऊपर लिखे लक्षण आने पर महसूस होते हैं। | • कुछ लोगों को यह लक्षण हाथों और या पांव में सूजन आने पर महसूस होते हैं। |
|  | • These symptoms disappear when swelling disappears. | • सूजन गायब होने पर ये लक्षण गायब हो जाते हैं। | • कुछ लोगों को ऊपर लिखे लक्षण आने पर महसूस होते हैं। जैसे ही सूजन खत्म हो जाती है, लक्षण भी खत्म हो जाते हैं। | • जैसे ही सूजन खत्म हो जाती है, लक्षण भी खत्म हो जाते हैं। |
|  | • I experience "restlessness" and/or "urge to move legs" only during swelling of legs | • यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है | कृपया एक उत्तर चुनें | कृपया नीचे से केवल एक उत्तर चुनें :- |
|  | • I experience swelling of legs as well as "restlessness" and/or "urge to move legs," though these are different problems | • जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने" के रूप में अनुभव करता हूं | • मुझे हड़कल और/या पांव हिलाने की तीव्र इच्छा केवल पांव में सूजन के समय होती है | • मुझे हड़कल और/या पांव हिलाने की तीव्र इच्छा केवल पांव में सूजन के समय होती है |
|  | • I do not experience swelling of legs but feel "restlessness" and/or "urge to move legs" | • मुझे इसका बिल्कुल भी अनुभव नहीं है | • मुझे यह भी महसूस होता है एवं साथ में "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" (जैसे ऊपर बताया है) भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफें हैं | • मुझे हाथों और/या पांव में सूजन भी होती है एवं साथ में "हड़कल" और या "पांव हिलाने की तीव्र इच्छा" भी महसूस होती है हालांकि दोनों अलग-अलग तकलीफें हैं |
|  |  |  | • मेरे पांवों में कभी भी सूजन नहीं आई | • मेरे पांवों में कभी भी सूजन नहीं आई लेकिन "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" होती है |
|  |  | आ जाती है | आने पर महसूस होते | आने पर महसूस होते |
|  |  | गायब | खत्म | खत्म |
| 2c | Please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने की इच्छा" की व्याख्या करते हैं: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं: |
|  | • Some people develop a "knot" in their muscles that is extremely painful. | • कुछ लोगों की मांसपेशियों में जो बेहद दर्दनाक होती है पेशी में "गांठ" अक्सर पूरे पैर और/या हाथ या | • कुछ लोगों की मांसपेशियों में बॉयंटे आते हैं/नस पर नस चढ़ जाती है, जिसे दौरान असहनीय दर्द होता है | • कुछ लोगों की मांसपेशियों में बॉयंटे आते हैं/नस पर नस चढ़ जाती है, जिसे दौरान असहनीय दर्द होता है |
|  | • "Knot" in the muscle often lead to abnormal posture of entire leg and/or arm or a part of it. | • कुछ लोगों की मांसपेशियों में एक "गांठ" विकसित हो जाती है जो बेहद दर्दनाक होती है उसके एक हिस्से की असामान्य मुद्रा को ले जाती है | • जब मांसपेशियों में बॉयंटे आते हैं/नस पर नस चढ़ जाती है तो पांव और/या हाथ की मुद्रा असामान्य हो जाती है | • जब मांसपेशियों में बॉयंटे आते हैं/नस पर नस चढ़ जाती है तो पांव और/या हाथ की मुद्रा असामान्य हो जाती है |
|  | • I experience "restlessness" and/or "urge to move legs" only during knot in muscles | • यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है | कृपया एक उत्तर चुनें | कृपया नीचे से केवल एक उत्तर चुनें :- |
|  | • I experience knot in muscles as well as "restlessness" and/or "urge to move legs," though these are different problems | • जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूं | • मुझे हड़कल और/या "पांव हिलाने की तीव्र इच्छा" केवल नस पर नस चढ़ने के समय होती है | • मुझे "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" केवल नस पर नस चढ़ने के समय होती है |
|  | • I do not experience knot in muscles but feel "restlessness" and/or "urge to move legs" | • मुझे इसका बिल्कुल भी अनुभव नहीं है | • मुझे नस पर नस भी चढ़ती है एवं साथ में "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" भी महसूस होता है (जैसे ऊपर बताया है) भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफें हैं | • मुझे नस पर नस भी चढ़ती है एवं साथ में "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफें हैं |
|  |  |  | • मेरे कभी नस पर नस नहीं चढ़ी | • मेरे कभी नस पर नस नहीं चढ़ती लेकिन "हड़कल" और/या "पांव हिलाने की तीव्र इच्छा" होती है |
|  |  | व्याख्या | संपष्ट रूप | संपष्ट रूप |
|  |  | "गांठ" विकसित | बॉयंटे आते | बॉयंटे आते |
|  |  | बेहद दर्दनाक | असहनीय दर्द | असहनीय दर्द |
|  |  |  | नस पर नस चढ़ | नस पर नस चढ़ |

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 2d | Please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने की इच्छा" की व्याख्या करते हैं: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को स्पष्ट रूप से बताते हैं: |
| | • Some people experience pain and/or discomfort when leg and/or arm is kept in one position for long time. | • पैर और/या हाथ को लंब समय तक एक ही स्थिति में रखने पर कुछ लोगों को दर्द और/या बेचैनी का अनुभव होता है। | • जब हाथ/पाँव को एक ही स्थिति में लंब समय तक रखा जाता है तो कुछ लोगों को हाथ/पाँव में दर्द या तकलीफ महसूस होती है। | • जब हाथ/पाँव को एक ही स्थिति में लंब समय तक रखा जाता है तो कुछ लोगों को हाथ/पाँव में दर्द या तकलीफ महसूस होती है। |
| | • This pain/discomfort improves as soon as or sometimes after the position of leg and/or arm is changed. | • पैर और/या हाथ की स्थिति बदलते ही यह दर्द/ अनुचिंता ठीक हो जाती है। | • जैसे ही हाथ/पाँव की स्थिति को बदल दिया जाता है, इस तकलीफ/दर्द में आराम मिल जाता है। | • जैसे ही हाथ/पाँव की स्थिति को बदल दिया जाता है, इस तकलीफ/दर्द में आराम मिल जाता है। |
| | • However, usually it does not make you move the legs and/ or arms repeatedly. | • हालांकि, यह आपको बार-बार टांगों और/या बाहों को हिलाने नहीं देता। | • हालांकि इस वजह से आपको हाथ/पाँव बार-बार नहीं हिलाने पड़ते हैं। | • हालांकि इस वजह से आपको हाथ/पाँव बार-बार नहीं हिलाने पड़ते हैं। |
| | • It is usually transient and infrequent. | • यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है। | | • इसे स्थितिय पीड़ा कहते हैं। |
| | • This is known as positional discomfort. | | • कृपया एक उत्तर चुनें | • कृपया नीचे से केवल एक उत्तर चुनें :- |
| | • I experience "restlessness" and/or "urge to move legs" that improves by change in posture once only | • जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूं। | • मुझे "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" में पाँव की स्थिति को एक बार बदलने से ही आराम मिल जाता है | • मुझे "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" में पाँव की स्थिति को एक बार बदलने से ही आराम मिल जाता है |
| | • I experience positional discomfort as well as "restlessness" and/or "urge to move legs," though these are different problems | • मुझे इसका बिल्कुल भी अनुभव नहीं है। | • मुझे यह भी महसूस होता है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" (जैसे ऊपर बताया है) भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफ हैं | • मुझे स्थितिय पीड़ा भी महसूस होती है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होती है हालांकि दोनों अलग-अलग तकलीफ हैं |
| | • I do not experience positional discomfort but feel "restlessness" and/or "urge to move legs." | | • मुझे ये बायें तरफ दिए गए लक्षण कभी महसूस नहीं होता | • मुझे स्थितिय पीड़ा नहीं होती लेकिन "हड़कल और/या "पाँव हिलाने की तीव्र इच्छा" होती है |
| | | बेचैनी | हड़कल | हड़कल |
| | | अनुभव | महसूस | महसूस |
| | | ठीक | कुछ लोगों को | कुछ लोगों को |
| | | बदलते ही | आराम | आराम |
| | | यह आपको | बदल दिया जाता है | बदल दिया जाता है |
| | | हिलाने नहीं देता | इस वजह | इस वजह |
| | | | नहीं हिलाने पड़ते | नहीं हिलाने पड़ते |
| 2e | Please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | कृपया निम्नलिखित कथनों को पढ़ाएं, और बताइये कि ये किस हद तक आपकी हड़कल या/और पाँव हिलाने की तीव्र इच्छा को वर्णित करते हैं | कृपया नीचे लिखे वाक्यों को पढ़ें और सोच कर ये बतायें की वो "घबराहट" और "पैर हिलाने की इच्छा" को कसि सीमा तक समझा पाते है: | कृपया नीचे लिखे कथन/लक्षण पढ़ें एवं यह बताएं कि किस हद तक यह हड़कल और/या पाँव हिलाने की तीव्र इच्छा को स्पष्ट रूप से बताते हैं: |
| | • Some people keep moving their legs whenever sitting. | • कुछ लोग जब भी बैठे होते है, पैर हिलाते रहते है। | • कुछ लोग जब भी बैठे होते है वो अपना पैर हिलाते रहते हैं। | • कुछ लोग जब भी बैठे होते है तब अपना पाँव हिलाते रहते हैं। |
| | • Usually, this habit is present since childhood. | • अक्सर यह आदत बचपन से होती है। तनाव के समय में पाँव हिलाना बढ़ जाता है। | | |

Suppl. Table 3: Contd...

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
|  | • Moving of legs increase during periods of stress.<br>• No changes are observed in it in relation to morning or evening.<br>• Usually, such persons are not aware of this habit and never experience "restlessness" and/ or "urge to move legs."<br>• This is known as Habitual foot tapping. | • इसमें सुबह या शाम के अनुसार कोई परिवर्तन नहीं आता है।<br>• परन्तु; इन लोगों को इस आदत की जानकारी नहीं होती है, और कभी "हड़कल" या "पाँव हिलाने की तीव्र इच्छा" अनुभव नहीं होती है।<br>• इसे आदतन पाँव चलाना कहा जाता है।<br><br>निम्नलिखित<br>कथनों<br>तीव्र इच्छा<br>वर्णित<br>अक्सर<br>अनुसार<br>आदतन पाँव चलाना | • अधिकतर यह आदत बचपन से पायी जाती है।<br>• तनाव में यह पैर हिलाना बढ़ जाता है।<br>• सुबह और शाम के सम्बंधित इसमें कोई बदलाव नहीं देखा गया है।<br>• अधिकतर, ऐसे व्यक्ती इन आदतों से अनजान होते है और कभी "एबघरहट" और "पैर हिलाने की इच्छा" को अनुभव नहीं कर पाते है।<br>• इसको "हैबिचुअल फूट टैपिंग" कहते है।<br><br>नीचे<br>वाक्यों<br>इच्छकषा<br>समझा<br>अधिकतर<br>सम्बंधित<br>हैबिच्अल फूट टैपिंग | • अक्सर यह आदत बचपन से होती है।<br>• तनाव के दौरान यह पाँव हिलाना बढ़ जाता है।<br>• इसमें सुबह शाम के समय के हिसाब से कुछ बदलाव नहीं आता है।<br>• ऐसे लोग अक्सर इस आदत से अनजान होते है और कभी भी हड़कल और/या पाँव हिलाने की तीव इच्छा महसूस नहीं करते है।<br>• इसे आदतन पाँव हिलाना बोलते है।<br>• कृपया नीचे से केवल एक उत्तर चुनें:-<br>आदतन पाँव हिलाना मेरी "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह बताती है।<br>• मुझे आदतन पाँव हिलाना एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव इच्छा" भी महसूस होता है। हालांकि दोनो अलग-अलग तकलीफें है।<br>• मुझे आदतन पाँव हिलाना नहीं है, लेकिन "हड़कल" और/या "पाँव हिलाने की तीव इच्छा" महसूस होती है।<br><br>नीचे<br>कथन/लक्षण<br>तीव्र इच्छा<br>बतातें<br>अक्सर<br>हिसाब<br>आदतन पाँव हिलाना |
| 3 | For the picture | संलग्न<br>बताएं<br>संवेदनाओं<br>अधिक<br>अनुभव | नीचे वाले<br>बताएं<br>लक्षण<br>ज्यादा<br>महसूस | नीचे वाले<br>बताएं<br>लक्षण<br>ज्यादा<br>महसूस<br>चिन्हित करें कि |
| a | If you have marked (A) in above picture, please read the following statements, consider to what extent they explain "restlessness" and/ or "urge to move legs":<br>• Some people experience pain in joints of legs and/or arms due to arthritis, but this pain usually increases with movement of legs.<br>• This pain reduces or disappears when they spend most of the day in rest | यदि आपने उपरोक्त चित्र में (ए) चिह्नित किया है, तो कृपया निम्नलिखित कथनों को पढ़ें एवं विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने का आग्रह" की व्याख्या करते हैं:<br>• गठिया के कारण कुछ लोगों को पैरों के जोड़ों में दर्द का अनुभव होता है, लेकिन यह दर्द आमतौर पर पैरों के हिलने-डुलने से बढ़ जाता है। | अगर आपने उपर वाले चित्र में 'A' चिन्हित किया है तो निम्न कथनों को पढ़ें एवं बताएं कि ये "हड़कल" और/या पाँव हिलाने की तीव इच्छा को किस हद तक वर्णित करते हैं:<br>• कुछ लोग हाथ पाँव के जोड़ों में आर्थराइटिस की वजह से दर्द महसूस करते है, लेकिन यह दर्द हाथ पाँव चलाने से बढ़ जाता है। | अगर आपने उपर वाले चित्र में 'क' चिन्हित किया है तो नम्बित कथनों को पढ़ें एवं बताएं कि ये "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को किस हद तक बतातें है:<br>• कुछ लोग हाथ पाँव के जोड़ों में गठिया की वजह से दर्द महसूस करते है, लेकिन यह दर्द हाथ पाँव चलाने से बढ़ जाता है। |

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Suppl. Table 3: Contd...

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
|  | • Although the pain reduced with rest, patient may develop stiffness in the involved joints which may improve with movement of the joints.<br>Considering it, kindly provide your response.<br>• Pain in joints completely explains "restlessness" and/or "urge to move legs."<br>• I experience joint pain as well as "restlessness" and/or 'urge to move legs, though these are different problems<br>• I do not experience pain in joints but feel "restlessness" and/or "urge to move legs." | • जब वे दिन का अधिकांश समय आराम में बिताते हैं तो यह दर्द कम हो जाता है या गायब हो जाता है<br>• हालांकि आराम के साथ दर्द कम हो जाता है, रोगी शामिल जोड़ों में अकड़न विकसित कर सकता है जो जोड़ों की गति में सुधार कर सकता है।<br>• यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है<br>• जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूं<br>• मुझे इसका बिल्कुल भी अनुभव नहीं है<br><br>गठिया<br>कारण<br>अनुभव<br>हिलने-डुलने<br>अधिकांश समय<br>बिताते<br>गायब<br>अकड़न विकसित<br>चाल<br>सुधार | • अगर आप दिन भर आराम करते हैं ये दर्द कम हो जाता है या खत्म हो जाता है<br>• हालांकि आराम से दर्द कम हो जाता है, लेकिन कुछ लोगों में जोड़ों में अकड़न हो जाती है जो जोड़ों को हिलाने से कम हो जाती है।<br>• इसे ध्यान में रखकर कृपया जवाब चुनें<br>• कृपया एक उत्तर चुनें<br>• गठिया के लक्षण 'हड़कल' और/या पाँव हिलाने की तीव्र इच्छा को पूरी तरह से बताते हैं<br>• मुझे गठिया भी महसूस होता है एवं साथ में "हड़कल" और/या पाँव हिलाने की तीव्र इच्छा (जैसे ऊपर बताया है) भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफ है<br>• मैंने कभी गठिया के लक्षण महसूस नहीं किए<br><br>आर्थराइटिस<br>वजह<br>महसूस<br>पाँव चलाने<br>दिन भर<br>करते<br>खत्म<br>जकड़न हो जाती<br>हिलाने<br>कम | • अगर आप दिन भर आराम करते हैं तो ये दर्द कम हो जाता है या खत्म हो जाता है।<br>• हालांकि आराम से दर्द कम हो जाता है लेकिन कुछ लोगों में जोड़ों में जकड़न हो जाती है जो जोड़ों को हिलाने से कम हो जाती है।<br>• इसे ध्यान में रखकर कृपया जवाब दें<br>• कृपया नीचे से केवल एक उत्तर चुनें :<br>• गठिया के लक्षण "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताते हैं<br>• मुझे गठिया भी महसूस होता है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफें है।<br>• मुझे गठिया के लक्षण कभी महसूस नहीं हुए लेकिन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" महसूस होती है<br><br>गठिया<br>वजह<br>महसूस<br>पाँव चलाने<br>दिन भर<br>करते<br>खत्म<br>जकड़न हो जाती<br>हिलाने<br>कम |
| b | • If you have marked (B) in above picture, please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs":<br>• Some people experience pain in muscles after heavy exercise (e.g., standing for long hours, walking for long distances, lifting weights for long duration).<br>• In such cases, using the muscles (for any movement or walking) increases the pain further.<br>• This is known as exertional myalgia. | यदि आपने उपरोक्त चित्र में (बी) चिह्नित किया है तो कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने का आग्रह" की व्याख्या करते हैं:<br>• कुछ लोगों को भारी व्यायाम के बाद मांसपेशियों में दर्द का अनुभव होता है (जैसे, लंबे समय तक खड़े रहना, लंबी दूरी तक चलना, लंबी अवधि के लिए वजन उठाना)।<br>• ऐसे मामलों में, मांसपेशियों का उपयोग (किसी भी हलचल या चलने के लिए) दर्द को और बढ़ा देता है। | अगर आपने उपर वाले चित्र में 'B' चिन्हित किया है तो निम्न कथनों को पढ़ें एवं बताए कि ये "हड़कल" और/या पाँव हिलाने की तीव्र इच्छा को किस हद तक वर्णित करते हैं<br>• कुछ लोग मेहनत करने पर (जैसे लंबे समय खड़े रहना/लंबी दूरी तक चलना/लंबे समय तक वजन उठाना) मांसपेशियों में दर्द महसूस करते हैं<br>• इन लोगों में मांसपेशियों के उपयोग (जैसे चलना) से यह दर्द और बढ़ जाता है<br>• इसे ध्यान में रखकर कृपया जवाब चुनी | अगर आपने उपर वाले चित्र में "(ख)" चिन्हित किया है तो निम्न कथनों को पढ़ें एवं बताए कि ये "हड़कल" और/या पाँव हिलाने की तीव्र इच्छा को कैसे वर्णित करते हैं:<br>• कुछ लोग मेहनत करने पर (जैसे लंबे समय खड़े रहना/लंबी दूरी तक चलना/लंबे समय तक वजन उठाना) मांसपेशियों में दर्द महसूस करते हैं<br>• इन लोगों में मांसपेशियों के उपयोग (जैसे चलना) से यह दर्द और बढ़ जाता है<br>• इसे ध्यान में रखकर मांसपेशियों का दर्द कहते हैं<br>• इसे ध्यान में रखकर कृपया जवाब दें कृपया नीचे से केवल एक उत्तर चुनें: |

Suppl. Table 3: Contd...

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
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| | Considering it, kindly provide your response. | • यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है | • मेहनत करने से मांसपेशियों में होने वाला दर्द, "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताता है | • मेहनत करने से मांसपेशियों में होने वाला दर्द, "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताता है |
| | Exertional myalgia completely explains "restlessness" and/or "urge to move legs. | • जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूँ | • मुझे यह भी महसूस होता है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा (जैसे ऊपर बताया है) भी महसूस होता है | • मुझे मेहनत करने पर मांसपेशियों का दर्द महसूस होता है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफ है |
| | I experience exertional myalgia as well as "restlessness" and/or "urge to move legs," though these are different problems | • मुझे इसका बिल्कुल भी अनुभव नहीं है | • मुझे ये बायें तरफ बताये गए लक्षण कभी महसूस नहीं होता | • मुझे मेहनत करने पर मांसपेशियों का दर्द महसूस नहीं हुए लेकिन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" होती है |
| | I do not experience exertional myalgia but feel "restlessness" and/ or "urge to move legs." | भारी व्यायाम अनुभव होता अवधि ऐसे मामलों किसी भी हलचल | मेहनत महसूस करते समय इन लोगों | महिनत महसूस करते समय इन लोगों |
| c | If you have marked (C) in above picture, please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | यदि आपने उपरोक्त चित्र में (सी) चिह्नित किया है, तो कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने का आग्रह" की व्याख्या करते हैं: | अगर आपने उपर वाले चित्र में 'C' चिन्हित किया है तो नमिन कथनों को पढ़ें एवं बताएं कि ये "हड़कल" और/या पाँव हिलाने की तीव्र इच्छा को किस हद तक वर्णाित करते है | अगर आपने उपर वाले चित्र में 'ग' चिन्हित किया है तो नमिन कथनों को पढ़ें एवं बताएं कि ये "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को किस हद तक बताते है |
| | • Some people experience "pins and needle" or "tingling" sensations in the skin of arms and/or legs. | • कुछ लोग हाथ और/या पैरों की त्वचा में "पिन और सुई" या "झुनझुनी" संवेदनाओं का अनुभव करते हैं | • कुछ लोगों को हाथ/पाँव की त्वचा/चमड़ी पर सुईयां सी चुभती हुई या झनझनाहट महसूस होती है | • कुछ लोगों को हाथ/पाँव की त्वचा/चमड़ी पर सुईयां सी चुभती हुई या झनझनाहट महसूस होती है | 
| | • Considering it, kindly provide your response. | इस पर विचार करते हुए कृपया अपनी परतिकृरिया दें | इसे ध्यान में रखकर कृपया जवाब दें कृपया एक उत्तर चुनें | इसे ध्यान में रखकर कृपया जवाब दें कृपया नीचे से केवल एक उत्तर चुनें : |
| | • Pins and needles sensations completely explains "restlessness" and/or "urge to move legs. | • यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है | • त्वचा/चमड़ी पर सुईयां सी चुभती हुई या झनझनाहट "हड़कल" और/या पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताता है | • त्वचा/चमड़ी पर सुईयां सी चुभती हुई या झनझनाहट "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताता है |
| | • I experience pins and needles sensations as well as "restlessness" and/or "urge to move legs," though these are different problems | • जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूँ | • मुझे यह भी महसूस होता है एवं साथ में "हड़कल" और/या पाँव हिलाने की तीव्र इच्छा (जैसे ऊपर बताया है) भी महसूस होता है | • मुझे त्वचा/चमड़ी पर महसूस सी चुभती हुई या झनझनाहट भी महसूस होती है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होती है हालांकि दोनों अलग-अलग तकलीफ है |
| | • I do not feel pins and needles sensations but feel "restlessness" and/or "urge to move legs." | • मुझे इसका बिल्कुल भी अनुभव नहीं है | • मैं ऐसा कभी महसूस नहीं करता | • मुझे त्वचा/चमड़ी पर सुईयां सी चुभती हुई या झनझनाहट नहीं महसूस होती लेकिन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" होती है |
| | | पिन और सुई झुनझुनी अनुभव करते | सुईयां सी चुभती झनझनाहट महसूस करते | सुईयां सी चुभती झनझनाहट महसूस होती |

# Suppl. Table 3: Contd...

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
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| d | If you have marked (D) in above picture, please read the following statements, consider to what extent they explain "restlessness" and/or "urge to move legs": | यदि आपने उपरोक्त चित्र में (डी) चिह्नित किया है तो कृपया निम्नलिखित कथनों को पढ़ें, विचार करें कि वे किस हद तक "बेचैनी" और/या "पैर हिलाने का आग्रह" की व्याख्या करते हैं: | अगर आपने उपर वाले चित्र में 'D' चिन्हित किया है तो निम्न कथनों को पढ़ें एवं बताएं कि ये 'बेचैनी' और/या पाँव हिलाने की तीव्र इच्छा को किस हद तक वर्णित करते हैं: | अगर आपने उपर वाले चित्र में 'घ' चिन्हित किया है तो निम्न कथनों को पढ़ें एवं बताएं कि ये 'बेचैनी' और/या पाँव हिलाने की तीव्र इच्छा को किस हद तक बताते हैं जिसमें |
|  | Some people experience a "burning or tingling sensation" in soles of feet which improves by pouring water on the sole or keeping it on a cool surface or by keeping a wet cloth on sole. Considering it, kindly provide your response. | कुछ लोगों को पैरों के तलवों में "जलन" का अनुभव होता है जो तलवों पर पानी डालने या ठंडी सतह पर रखने या तलवों पर गीला कपड़ा रखने से ठीक हो जाता है। | कुछ लोग तलवों में जलन महसूस करते हैं जिसमें तलवों में पानी डालने पर/तलवों को ठंडी सतह पर रखने पर राहत महसूस होती है। | कुछ लोग तलवों में जलन महसूस करते हैं जिसमें पानी डालने पर/तलवों को ठंडी सतह पर रखने पर राहत महसूस होती है। |
|  | Burning sensations in palms and/or soles completely explains "restlessness" and/or "urge to move legs." | यह पूरी तरह से मेरे लक्षणों की व्याख्या करता है | इसे ध्यान में रखकर कृपया जवाब दें कृपया एक उत्तर चुनें | इसे ध्यान में रखकर कृपया जवाब दें कृपया नीचे से केवल एक उत्तर चुनें : |
|  | I experience burning sensations in palms and/or soles as well as "restlessness" and/or "urge to move legs, though these are different problems | जैसा कि ऊपर बताया गया है, मैं इसे "बेचैनी" और/या "पैर हिलाने का आग्रह" के रूप में अनुभव करता हूं | तलवों में जलन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताती है | तलवों में जलन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" को पूरी तरह से बताती है |
|  | I do not experience burning sensations in palms and/or soles but feel "restlessness" and/or "urge to move legs." | मुझे इसका बिल्कुल भी अनुभव नहीं है | मुझे तलवों में जलन भी महसूस होता है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होता है हालांकि दोनों अलग-अलग ऊपर बताया है) भी महसूस होता है में ऐसा कभी महसूस नहीं करता | मुझे तलवों में जलन भी महसूस होता है एवं साथ में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" भी महसूस होता है हालांकि दोनों अलग-अलग तकलीफें है। |
|  |  |  |  | मुझे तलवों में जलन नहीं होती लेकिन "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" महसूस होती है। |
|  |  | व्याख्या | वर्णित | किस हद तक बताते हैं |
|  |  | अनुभव | महसूस | महसूस |
|  |  | ठीक | राहत | राहत |
| IV | To help us to understand your symptoms better, kindly provide following additional information: | कृपया एक नज़र डालें अपने लक्षणों को बेहतर ढंग से समझने के लिए, कृपया निम्नलिखित अतिरिक्त जानकारी प्रदान करें | हमें अपने लक्षणों को और बेहतर तरह से समझने में मदद करने के लिए कृपया निम्न जानकारी दें- | हमें अपने लक्षणों को और बेहतर तरह से समझने में मदद करने के लिए कृपया निम्न जानकारी दें- |
|  |  | ढंग | तरह | तरह |
|  |  | निम्नलिखित | निम्न | निम्न |
|  |  | अतिरिक्त | मदद | मदद |
| 1a | Do you have engorged veins in the legs? | क्या आपके पैरों में नसों में सूजन है? | क्या आपके पावों में खून की नसें फूली हुई हैं? | क्या आपके पावों में खून की नसें फूली हुई हैं? |
|  |  | पैरों | पावों | पावों |
|  |  | सूजन | फूली | फूली |
|  |  |  | खून | खून |
|  | It may lead to discoloration of skin in some people. |  | कुछ लोगों में इसकी वजह से त्वचा का रंग भी बदल जाता है | कुछ लोगों में इसकी वजह से त्वचा का रंग भी बदल जाता है |
|  | In some cases ulcers may occur. |  | कुछ मामलों में इसमें घाव भी हो जाता है | कुछ मामलों में इसमें घाव भी हो जाता है |

*Contd...*

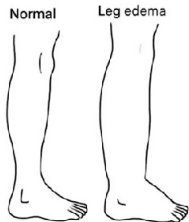| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 1b | If you have responded "yes" to above question, please choose one response that best explains the relationship between engorged veins and Restlessness" and/or "urge to move legs in your case?<br><br>• Restlessness" and/or "urge to move legs" appeared after venous engorgement in legs<br><br>• "Restlessness" and/or "urge to move legs were present before, but worsened after venous engorgement in legs<br><br>• "Restlessness" and/or "urge to move legs were present before, and did not worsen after venous engorgement in legs | यदि आपने उपरोक्त प्रश्न का उत्तर "हां" में दिया है तो कृपया एक उत्तर चुनें जो नसों और बेचैनी के बीच संबंध को सबसे अच्छी तरह समझाता है और/या "आपके मामले में पैर हिलाने का आग्रह करता है?<br><br>• बेचैनी" और/या "पैर हिलाने की इच्छा" पैरों में शारीरिक उभार के बाद प्रकट हुई<br><br>• "बेचैनी" और/या "पैरों को हिलाने की इच्छा पहले मौजूद थी, लेकिन पैरों में शारीरिक उभार के बाद खराब हो गई।<br><br>• "बेचैनी" और/या "पैर हिलाने की इच्छा पहले मौजूद थी, और पैरों में शारीरिक उभार के बाद खराब नहीं हुई<br><br>यदि<br>उपरोक्त<br>उत्तर चुनें<br>प्रकट<br>मौजूद थी<br>खराब<br>शारीरिक उभार<br>खराब नहीं आया | अगर आपने ऊपर वाले प्रश्न का उत्तर 'हाँ' में दिया है तो कृपया बताएं कि कौनसा कथन 'फूली हुई खून की नसों' एवं 'हड़कल' और/या 'पाँव हिलाने की तीव्र इच्छा' के संबंध को सबसे अच्छी तरह समझता है? कृपया एक उत्तर चुनें<br><br>• हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" पाँव में खून की नसें फूलने के बाद महसूस हुआ<br><br>• हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा"पहले भी होती थी लेकिन खून की नसें फूलने के बाद बढ़ गई<br><br>• पाँव में खून की नसें फूलने के बाद भी इसमें कोई बदलाव नहीं आया।<br><br>अगर<br>ऊपर<br>बताएं<br>महसूस<br>होती थी<br>बढ़<br>नसें फूलने<br>कोई बदलाव नहीं आया | अगर आपने ऊपर वाले प्रश्न का उत्तर 'हाँ' में दिया है तो कृपया बताएं कि कौनसा कथन 'फूली हुई खून की नसों' एवं 'हड़कल' और/या 'पाँव हिलाने की तीव्र इच्छा' के संबंध को सबसे अच्छी तरह समझता है। कृपया नीचे से केवल एक उत्तर चुनें :<br><br>• "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" केवल पाँव में नसें फूलने के बाद महसूस हुआ।<br><br>• "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" पहले भी होती थी लेकिन खून की नसें फूलने के बाद बढ़ गई<br><br>• "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" के बाद भी इसमें कोई बदलाव नहीं आया।<br><br>अगर<br>ऊपर<br>बताएं<br>महसूस<br>होती थी<br>बढ़<br>नसें फूलने<br>कोई बदलाव नहीं आया |
| V | To further understand the symptoms, we need to know about frequency and duration of "restlessness" and/or "urge to move legs" reported by you. Please furnish the following information: | लक्षणों को और समझने के लिए, हमें आपके द्वारा बताई गई "बेचैनी" और/या "पैर हिलाने की इच्छा" की आवृत्ति और अवधि के बारे में जानना होगा कृपया निम्नलिखित जानकारी प्रस्तुत करें.<br><br>जानना होगा<br>निम्नलिखित | आपके लक्षणों को और बेहतर तरीके से समझने के लिए हमें आपके द्वारा बताई गई हड़कल और/या पाँव हिलाने की तीव्र इच्छा की आवृत्ता एवं अवधि को जानना जरूरी है, कृपया निम्न में जानकारी दें-<br><br>आपके<br>बेहतर<br>जानना जरूरी है,<br>निम्न | आपके लक्षणों को और बेहतर तरीके से समझने के लिए हमें आप द्वारा बताई गई "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" की आवृत्ता एवं अवधि को जानना जरूरी है, कृपया निम्न में जानकारी दें-<br><br>आपके<br>बेहतर<br>जानना जरूरी है,<br>निम्न |
| 1 | When did you first notice "restlessness" and/or "urge to move legs"? | आपने पहली बार "बेचैनी" और/या "पैर हिलाने का आग्रह" कब देखा?<br><br>देखा | आपने हड़कल और/या पाँव हिलाने की तीव्र इच्छा पहली बार कब महसूस की थी ?<br><br>महसूस | आपने "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" पहली बार कब महसूस की थी ?<br><br>महसूस |
| 2 | How frequent do you experience "restlessness" and/or "urge to move legs" in a given week? | किसी दिए गए सप्ताह में आप कितनी बार "बेचैनी" और/या "पैर हिलाने की इच्छा" का अनुभव करते हैं?<br><br>किसी दिए गए सप्ताह<br>अनुभव | एक हफ्ते में आप हड़कल और/या "पाँव हिलाने की तीव्र इच्छा" कितनी बार महसूस करते हैं ?<br><br>एक हफ्ते<br>महसूस | एक हफ्ते में आप "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" कितनी बार महसूस करते हैं ?<br><br>एक हफ्ते<br>महसूस |
| 3 | Once started, how long do "restlessness" and/or "urge to move legs" last in a given day? | एक बार शुरू करने के बाद, किसी दिन में बेचैनी और/या "पैर हिलाने की इच्छा" कितने समय तक चलती है?<br><br>कितने समय | एक बार शुरू हो जाए तो एक दिन में हड़कल और/या पाँव हिलाने की तीव्र इच्छा कितनी देर रहती है?<br><br>कितनी देर | एक बार शुरू हो जाए तो एक दिन में "हड़कल" और/या "पाँव हिलाने की तीव्र इच्छा" कितनी देर रहती है?<br><br>कितनी देर |

**Suppl. Table 3: Contd...**

| Item no. | Item | Translator 1 (Version 1) | Translator 2 (Version 2) | Final (Hindi) (Version 3) |
|---|---|---|---|---|
| 4 | In some people these "restlessness" and/or "urge to move legs" occur intermittently. Once started they last for few days and then even without treatment it disappears for few days/month/years. Then again it comes back for few days<br><br>If you have experienced multiple episodes of restlessness" and/or "urge to move legs," how many episodes have you experienced so far? | यदि आपने बेचैनी के कई पुरकरणों का अनुभव किया है" और/या "पैर हिलाने की इच्छा", तो आपने अब तक कितने पुरकरणों का अनुभव किया है?<br><br><br><br><br>कई पुरकरणों<br>कितने पुरकरणों | "कई लोगों में 'बेचैनी' और/या 'पाँव हिलाने की तीव्र इच्छा' समय-समय पर होती है एक बार होने पर यह कुछ दिन रहती है एवं कई कई दिनों/महीनों/सालों तक ठीक हो जाती है फिर से यह कुछ दिनों के लिए महसूस होने लगती है<br>अगर आपको 'बेचैनी' और/या पाँव हिलाने की तीव्र इच्छा' कई बार महसूस हुई है तो आपको यह अब तक कितनी बार हो हो चुकी है?"<br>कई बार<br>कितनी बार | "कई लोगों में 'बेचैनी' और/या पाँव हिलाने की तीव्र इच्छा' समय-समय पर होती है एक बार होने पर यह कुछ दिन रहती है एवं फिर बिना दवा के भी कई दिनों/महीनों/सालों तक ठीक हो हो जाती है फिर से यह कुछ दिनों के लिए महसूस होने लगती है<br>अगर आपको 'बेचैनी' और/या पाँव हिलाने की तीव्र इच्छा' कई बार महसूस हुई है तो आपको यह अब तक कितनी बार हो हो चुकी है?"<br>कई बार<br>कितनी बार |
| F | Thank you for providing the information. | जानकारी पुरदान करने के लिए धन्यवाद। | आपका<br>जानकारी पुरदान करने के लिए आपका धन्यवाद। | जानकारी पुरदान करने के लिए आपका धन्यवाद। |

## Restless Legs Syndrome - Diagnostic Questionnaire {RLS-DQ}

Name:                    Age:        Gender :     Contact No.              UHID:

| [I] | **Do you experience any of the following in your legs and/or arms when you go to bed or when you are at rest?** |
|---|---|

| (1) | **Restlessness in legs and/or arms** | o   Yes |
|---|---|---|
| | People usually explain it as follows: | o   No |
| | • restlessness | |
| | • a discomfort | |
| | • sensation as if something is crawling,   tickling  m  the muscles. | |
| | • Painful sensations in muscles. | |

| (2) | **Urge to move legs** | o   Yes |
|---|---|---|
| | People usually explain it as follows: | o   No |
| | • they feel a need to keep moving their legs | |
| | •  intense desire to get up and walk | |

| |II| | **If you have answered 'Yes' <u>to any one</u> of the above questions, please provide foilowing details. Otherwise, you may go to section "VI".** |
|---|---|

| (1) | As long as you **keep moving your legs or walk,** do you experience **any relief, even transient** in "restlessness" and/or "urge to move legs? (as you described above)** | o   Yes |
|---|---|---|
| | | o   No |

| (2) | If you **stop moving your legs** or if someone asks you **not to move your legs** or when you are **compelled to sit for a long time** (e.g., while travelling or sitting in your work-place) do the "restlessness" and/or "urge to move legs" (as you described above) **recur** or **worsen?** | o   Yes |
|---|---|---|
| | | o   No |

| (3a) | Which time of the day, do you **usually experience** the "restlessness" and/or urge to move legs (as you described above)? | (You may mark <u>more than one</u> <u>responses</u> from below):  o Night  o Evening  o Afternoon  o Morning |
|---|---|---|

| (3b) | If you have chosen **more than one responses in above question,** kindly state at which time of the day, "restlessness" and/or "urge to move legs" (as you described above) are **usually worst?** | (Please choose only one response from below):  o Night  o Evening  o Afternoon  o Morning |
|---|---|---|

| (3c) | When for the first time you **started experiencing** "restlessness" and/or "urge to move legs"(as you described above), which part of the day were these **symptoms worst?** | (Please choose only one response from below):  o Night  o Evening  o Afternoon  o Morning |
|---|---|---|

| (4a) Do you experience "restlessness" and/or "urge to move legs" (as you described above) **only when you start to walk or while walking?** | o Yes<br>o No |
| --- | --- |
| (4b) If you have responded **"Yes"** to question (4a), kindly **compare the severity of symptoms** to a situation when you are taking rest. | o No Symptom at rest.<br>o More severe while walking.<br>o More severe at rest.<br>o Equally severe whether I am at rest or walking. |

| III | **Please provide following information so that we can have a better understanding of your symptoms:** |
| --- | --- |

| (1) Besides moving the legs or walking, what provides you relief in **"restlessness" and/or "urge to move legs"** (as you described above). | You may choose <u>more than one response:</u><br>o Arms/leg massage.<br>o Pressure on legs as by tying cloth on it or keeping a heavy pillow on it.<br>o Soaking in warm water/ oil.<br>o Anything else, please share:.................................... |
| --- | --- |
| (2a) Please read the following statements, consider **to what extent they explain** "restlessness" and/or "urge to move legs":<br><br>• Too many and distressing thoughts are common during anxiety.<br>• These symptoms of anxiety are often accompanied by sweating, palpitations and shortness ofbreath.<br>• Such people feel it difficult to sit at one place and keep pacing. However, during anxiety restlessness is **primarily experienced in mind rather than in the muscles.** | (Please mark **only** <u>one responses</u> from below):<br><br>o I experience "restlessness" and/or "urge to move legs" **only** during anxiety.<br>o I experience anxiety **as well as** "restlessness" and/or "urge to move legs",**though these are different problems.**<br>o I **do not experience** anxiety **but** feel "restlessness" and/or "urge to move legs". |
| (2b) Please read the following statements, consider **to what extent they explain** "restlessness" and/or "urge to move legs":<br><br>• Some people experience above symptoms when they have swelling in their legs and/or arms.<br>• These symptoms disappear when swelling disappears. | (Please mark **only** <u>one responses</u> from below):<br><br>o I experience "restlessness" and/or "urge to move legs" **only** during swelling of legs.<br>o I experience swelling of legs **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.**<br>o I **do not experience** swelling of legs **but** feel "restlessness" and/or "urge to move legs". |

| | |
|---|---|
| (2c) Please read the following statements, consider **to what extent they explain** "restlessness" and/or "urge to move legs": <br><br> • Some people develop a "knot" in their muscles that is extremely painful. <br> • "Knot" in the muscle often lead to abnormal posture of entire leg and/or arm or a part ofit. | (Please mark **only** <u>one responses</u> from below): <br><br> o I experience "restlessness" and/or "urge to move legs" **only** during knot in muscles. <br><br> o I experience knot in muscles **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o I **do not experience** knot in muscles **but** feel "restlessness" and/or "urge to move legs". |
| (2d) Please read the following statements, consider **to what extent they explain** "restlessness" and/or "urge to move legs": <br><br> • Some people experience pain and/or discomfort when leg and/or arm is kept in one position for long time. <br> • This pain/discomfort improves as soon as or some times after the position ofleg and/or arm is changed. <br> • However, usually it does not make you move the legs and/or arms repeatedly. <br> • It is usually transient and infrequent. <br> • This is known as **Positional discomfort.** | (Please mark **only** <u>one responses</u> from below): <br><br> o I experience "restlessness" and/or "urge to move legs" **that improves by change in posture once only.** <br><br> o I experience positional discomfort **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o I **do not experience** positional discomfort **but** feel "restlessness" and/or "urge to move legs". |
| (2e) Please read the following statements, consider **to what extent they explain** "restlessness" and/or "urge to move legs": <br><br> • Some people keep moving their legs whenever sitting. <br> • Usually, this habit is present since childhood. <br> • Moving oflegs increase during periods of stress. <br> • No changes are observed in it in relation to morning or evenmg. <br> • Usually, such persons are not aware of this habit and never experience"restlessness"and/or "urge to move legs". <br> • This is known as **Habitual foot tapping.** | (Please mark **only** <u>one responses</u> from below): <br><br> o Habitual foot tapping **completely explains** "restlessness" and/or "urge to move legs" that I expenence. <br><br> o I experience habitual foot tapping **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o I **do not experience** habitual foot tapping **but** feel "restlessness" and/or "urge to move legs". |

**(3)  Please indicate in the attached figure, where do you experience these sensations most?**
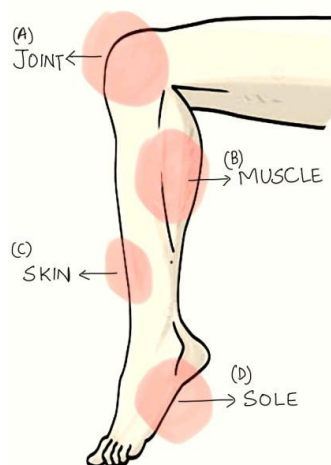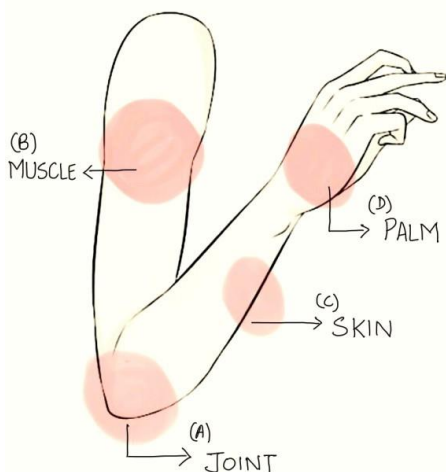


| (a)  If you have marked (A) in above picture, please read the following statements, consider **to what extent they explain** "restlessness" and/or "urge to move legs": | (Please mark **only** <u>one responses</u> from below): |
|---|---|
| Some people experience pain in joints oflegs and/or arms due to arthritis, but this pain usually increases with movement oflegs. <br><br> This pain reduces or disappears when they spend most of the day in rest <br><br> Although the pain reduced with rest, patient may develop stiffness in the involved joints which may improve with movement of the joints. <br><br> *Considering it, kindly provide your response.* | o   Pain in joints **completely explains** "restlessness" and/or "urge to move legs". <br><br> o   I experience joint pain **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o   I **do not experience** pain in joints **but** feel "restlessness" and/or "urge to move legs". |
| (b)  If you have marked **(B)** in above picture, please read the following statements, consider **to what extent they explain** "restlessness"and/or "urge to move legs": | (Please mark **only** <u>one responses</u> from below): |
| Some people experience pain in muscles after heavy exercise (e.g., standing for long hours, walking for long distances, lifting weights for long duration). <br><br> In such cases, using the muscles (for any movement or walking) increases the pain further. <br><br> This is known as exertional myalgia. <br><br> *Considering it, kindly provide your response.* | o   Exertional myalgia **completely explains** "restlessness" and/or "urge to move legs". <br><br> o   I experience exertional myalgia **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o   I **do not experience** exertional myalgia **but** feel "restlessness" and/or "urge to move legs". |

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| (c) If you have marked **(C)** in above picture, please read the following statements, consider **to what extent they explain** "restlessness"and/or "urge to move legs": <br><br> Some people experience **"pins and needle" or "tingling"** sensations in the skin of arms and/or legs. <br><br> ***Considering it, kindly provide your response.*** | (Please mark **only** <u>one responses</u> from below): <br><br> o Pins and needles sensations **completely explains** "restlessness" and/or "urge to move legs". <br><br> o I experience pins and needles sensations **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o I **do not feel** pins and needles sensations **but** feel "restlessness" and/or "urge to move legs". |
| (d) If you have marked **(D)** in above picture, please read the following statements, consider **to what extent they explain** "restlessness"and/or "urge to move legs": <br><br> Some people experience a **"burning or tingling sensation"** in soles of feet which improves by pouring water on the sole or keeping it on a cool surface or by keeping a wet cloth on sole. <br><br> ***Considering it, kindly provide your response.*** | (Please mark **only** <u>one responses</u> from below): <br><br> o Burning sensations in palms and/or soles **completely explains** "restlessness" and/or "urge to move legs". <br><br> o I experience burning sensations in palms and/or soles **as well as** "restlessness" and/or "urge to move legs", **though these are different problems.** <br><br> o I **do not experience** burning sensations in palms and/or soles **but** feel "restlessness" and/or "urge to move legs". |

| **[!y] To help us to understand your symptoms better, kindly provide following additional information:** | |
|---|---|
| (la) Do you have engorged veins in the legs? <br> • It may lead to discoloration of skin in some people. <br> • In some cases ulcers may occur. | o Yes <br> o No |
| (1b) If you have responded **"Yes" to above** question, please **choose one response that best explains the relationship between** engorged veins and "restlessness" and/or "urge to move legs" in your case? | o "Restlessness" and/or "urge to move legs" **appeared only after** venous engorgement in legs. <br><br> o "Restlessness" and/or "urge to move legs"were **present before, but worsened** after venous engorgement in legs. <br><br> o "Restlessness" and/or "urge to move legs"were **present before, and did not worsen** after venous engorgement in legs. |

| **IV** | **To further understand the symptoms, we need to know about frequency and duration of "restlessness" and/or "urge to move legs" reported by you. Please furnish the following information:** | |
|---|---|---|
| (1) | When did you **first notice** "restlessness"and/or "urge to move legs"? | o Years back<br><br>o ..................... Months back |
| (2) | **How frequently** do you experience "restlessness" and/or "urge to move legs" in a given week? | o ................... days in a week |
| (3) | Once started, how long do "restlessness" and/or "urge to move legs" **last in a given day?** | o hours<br>o minutes |
| (4) | In some people these "restlessness" and/or "urge to move legs" occur intermittently. Once started they last for few days and then even without treatment it disappears for few days/months/ years. Then again it comes back for few days<br><br>If you have **experienced multiple episodes** of "restlessness" and/or "urge to move legs" **how many episodes** have you experienced so far? | o    ............................................. |

## Thank you for providing the information.