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Misophonia: Prevalence, impact and co-morbidity among Mysore University students in India - A survey

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Abstract: Misophonia is a sound tolerance disorder in which certain sounds trigger an intensely emotional or physiological response caused by an increased autonomic nervous system reaction to the triggers. Misophonia is a relatively new condition, and the assessment and management of this condition are not known yet. The epidemiological data of misophonia in the Indian scenario is unknown, without which better planning evaluation and management is not possible. Hence, our study aims to determine the prevalence of misophonia and its impact and co-morbidity among Mysore university students in India. A descriptive cross-sectional study was conducted on 172 students of Mysore University between the age ranges of 18 to 30 years through an online survey mode. The Amsterdam Misophonia Questionnaire (A-MISO-S) and Misophonia Assessment Questionnaire (MAQ) have been used to find the prevalence and severity of misophonia. Statistical analyses were carried out using SPSS 25.0 software. Data were analysed using descriptive statistics and a chi-square test to determine the variables' association. The prevalence of misophonia among Mysore university students has been documented. Almost 48.27% of participants reported misophonia symptoms, and 23.28% reported clinically significant misophonia. The result showed that misophonia could occur in isolation or with a co-morbid condition such as tinnitus and hyperacusis. Statistical analysis showed no association between gender and the occurrence of misophonia. Misophonia is a prevalent neurophysiological condition with a significant impact on the quality of life of the sufferers. This is the first study of this kind in an Indian scenario and can be a guiding tool for researchers to know about the prevalence of misophonia, its impact, and co-morbidity among the sufferers.

Keywords: Epidemiology; Misophonia; University; India; Impact

1.0 INTRODUCTION

Misophonia is derived from the Greek word misos (hate) and phone (voice), which means hatred of sound. Misophonia or sound selectivity syndrome is a sound tolerance disorder in which certain sounds trigger an intensely emotional or physiological response caused by an increased autonomic nervous system reaction to such triggers (Jastreboff & Jastreboff, 2014). The

aversive triggers can be the sound made by humans, like chewing, lip-smacking, breathing and swallowing, or they can also be the sounds produced by humans but not directly related to the human body, like pen clicking, rustling, and typing (Jastreboff et al., 2001). When exposed to specific auditory triggers; people with misophonia show different physiological and emotional reactions like increased heart rate, sweating, anxiety, anger, irritation, and disgust.

The adverse emotional reaction in the misophonic individual created by different triggers may be connected to a specific person making the sounds (Schröder et al., 2013). This type of connection may affect the interpersonal relationship with friends, family members, and relatives, which may impact the quality of life of sufferers. Also, the sufferers are never sure when the trigger sound might be heard and live in a perceptual state of anxiety. Due to this reason, they may start avoiding people, places, and situations that they think will cause the trigger sounds. Overall, the quality of life of the sufferers gets affected due to the physical and emotional discomfort they face daily.

Misophonia is a condition that can occur in isolation or conjunction with other psychiatric disorders such as obsessive-compulsive disorders (OCD), attention deficit hyperactivity disorder (ADHD) and mood disorders. Furthermore, misophonia frequently coexists with related sound disorders such as tinnitus, hyperacusis, and phonophobia, which must be distinguished (Jastreboff & Jastreboff, 2014). Tinnitus is the perception of sound in the absence of acoustic stimulation, which is mainly associated with hearing loss (Waechter, 2021). On the other hand, hyperacusis is the increased sensitivity to the sounds, which results in pain or the sufferers feeling uncomfortable and related to the intensity (Tyler et al., 2014). However, misophonia is distinct from these disorders, although there is some overlap in symptoms, and an individual may present with more than one condition (Jastreboff & Jastreboff, 2001; Jastreboff & Hazell, 2004).

Evidence shows that misophonia is associated with the enhanced auditory, limbic and autonomic nervous systems (Jastreboff & Hazell, 2004). Jastreboff & Jastreboff (2002) described misophonia using the neurophysiological model as the dislike/hatred of sound, which reflects abnormally strong reactions of the autonomic and limbic systems. This results enhanced connections between the auditory, limbic and autonomic systems or enhanced reactivity of the limbic and autonomic systems to sound. The neurophysiological structure involved in processing the sounds at the higher auditory level may be affected due to the nature of misophonia (Moeller, 2011).

The onset of the problem in misophonia patients has been reported variably across the literature. Few studies have reported that the onset is during adolescence (Palumbo et al., 2018) or adulthood (Sanchez & Silva, 2018). Some studies report no age criteria for misophonia, as it can happen at any age (Potgieter et al., 2019). Very few studies have been reported regarding the prevalence of misophonia. The prevalence of misophonia in non-clinical populations is not known. A case study by Hadjipavlou et al. (2008) reported that the prevalence of misophonia is between 10-60% in patients with tinnitus. In a study conducted by Naylor et al. (2021), clinically significant misophonia was found in 49.1% of the study sample population of UK undergraduate medical students. Similarly, Wu et al. (2014) used an online questionnaire survey to find that 19.9% of 483 US undergraduate students had misophonia. Misophonia was shown to be prevalent in 20% of 415 Chinese graduates, as reported by Zhou et al. (2017). Hence, it can be stated that the prevalence of misophonia does not differ by age, gender or ethnicity.

In India, no investigation has been conducted to determine the prevalence of misophonia. This will be the first study of its kind and will be extremely useful in demonstrating the prevalence of misophonia in the Indian context and motivating professionals to develop assessment and management procedures. The aims of this study include: 1.) To determine the prevalence of misophonia among Mysore university students. 2.) To provide descriptive information regarding the symptoms of misophonia (frequency and severity of symptoms) 3.) Discuss misophonia co-morbidity with other auditory and psychiatric disorders; 4.) To describe the impact of misophonia on daily life, and 5.) To focus the discussion on raising misophonia awareness among the general audience.

2.0 MATERIALS AND METHODS

A descriptive cross-sectional study was undertaken among Mysore University's undergraduates and post-graduate students. Data was obtained from 172 participants who were literate and had good English language competency. The study was conducted over a period of three months, from October 2021 to December 2021. The participants were all between 18 and 30 years, with a mean age of 22 years and a standard deviation of 2.5 years. The study comprised participants from various educational fields such as law,

business, medicine, audiology, and speech-language pathology.

2.1 Design of the Questionnaire

A survey questionnaire was prepared regarding the prevalence, impact, and co-morbidity of misophonia. Amsterdam Misophonia Questionnaire (Schröder et al., 2013) and Misophonia assessment questionnaire (Wu et al., 2014) were adopted to find the severity of the misophonia. Amsterdam Misophonia Questionnaire is the first questionnaire designed for assessing misophonia by Schröder et al. (2013). Translation and validation of this questionnaire are done in several languages, such as English and Turkish, to determine its reliability and validity (Naylor et al., 2021; Sarigedik & Gulle, 2021). In the UK population, where the native language is English, this questionnaire has been found to be reliable, with Chronbach's alpha value of 0.814 (Naylor et al., 2021).

Similarly, Johnson developed the Misophonia Assessment Questionnaire (MAQ) and revised Dozier to evaluate the severity of misophonia in the adult population (Dozier, 2015). Recently, this questionnaire has been validated in the Turkish language and found to be reliable, with Chronbach's alpha value of 0.94 (Altın, 2021). There is a lack of misophonia questionnaires in the native Indian language, so the English version of these two questionnaires was used in the study. The survey questionnaire was written in English and included sections on consent and demographic information, hearing issues, sound disorders, the A-MISO-S questionnaire, the Misophonia evaluation questionnaire, co-morbidity, and coping strategies. A total of 48 questions make up the survey. The first five questions dealt with the patient demographics, and the next ten were related to hearing issues and the presence of other sound disorders, such as tinnitus/hyperacusis. It also had six questions of the A-MISO-S scale, 21 questions from MAQ and the final six were related to co-morbidity of other health problems, misophonic sound coping strategies, and patient motivation to learn about misophonia.

At the Amsterdam Medical Centre, the Amsterdam Misophonia Questionnaire (A-MISO-S) scale was created to determine the severity of misophonia. The questionnaire comprises six questions with a score range of 0 to 24. The scale measures how much time an individual spends occupied by misophonic sounds, how much misophonic sounds interfere with the individual's work and social functioning, the individual's level of anger in response to sounds, level of resistance to the impulse, level of control over thoughts and anger, and how much time an individual spends avoiding misophonia situations. Subclinical misophonic symptoms are rated 0–4, mild symptoms are rated 5–9, moderate symptoms are rated 10–14, severe symptoms are rated 15–19, and extreme symptoms are rated 20-24.

The Misophonia Assessment Questionnaire (MAQ) is a 21-item questionnaire with a four-point Likert-type rating scale that assesses the impact of misophonia in a person's life. This questionnaire has a score range of 0-63, with 0-11 indicating subclinical symptoms, 12-24 mild, 25-37 moderate, 38-50 severe, and 51-63 extreme misophonia.

The researchers distributed the final version of the questionnaire as an e-survey in the form of Google forms to university students using various social platforms, such as WhatsApp, and Gmail, using convenient sampling methods. A brief description of misophonia was included in the Google form. The poll received responses from 172 Mysore university students aged 18 to 30. Because two participants refused to consent, they were removed from the study, and only 170 participants were considered for analysis.

2.2 Statistical analysis

The investigator analysed the questionnaire responses and converted them to numbers using Microsoft Excel. Statistical program for social science (SPSS Version 25.) software was used to analyse the data collected. The sort of issues being addressed determined the use of descriptive statistical approaches such as frequency and percentages. A non-parametric Chi-square test was done to check the association among different variables.

2.3 Informed Consent and Ethical Guidelines

The study followed the ethical principles established by the All India Institute of Speech and Hearing (AIISH) in Mysore. All participants gave their informed consent by answering a question on the google form. The study omitted those participants who did not complete the survey.

3.0 RESULTS

3.1 Descriptive characteristics of participants

Data were analysed using descriptive statistics. Among 170 participants included in the study, 32 (18.8%) were male, and 138 (81.2%) were female. All the participants were literate with the minimum qualification of undergraduate. Out of 170 participants who were taken

randomly for the study, only 9 (5.29%) participants reported having an ear-related problem like Eustachian tube dysfunction, tympanic membrane perforation and reduced hearing sensitivity. Most of the participants, 62.94%, reported that they have a habit of listening to music at a loud volume. Only 4 (2.4%) participants reported the problem of hearing loss. The descriptive characteristics of all the participants are shown in **Table 1**.

Table 1: Descriptive characteristics of participants (N= 170).

Total (N) = 170 (100%)		
Gender	Male Female	32 (18.8%) 138 (81.2%)
Qualification	Under-graduation Post-graduation	123 (72.4%) 47 (27.6%
The habit of listening to music at a loud volume	Yes Sometimes No	16 (9.4%) 91 (53.5%) 63 (37.1%)
Ear related problems	Yes No	9 (5.3%) 166 (97.6%)
Hearing loss	Yes No	4 (2.4%) 166 (97.6%)

3.2 Tinnitus, Hyperacusis, and Misophonia

Among 170 participants who responded to the survey, 81 (47.6%) reported having misophonia based on their subjective experience. Among 81 (47.6%) participants who reported misophonia, 13 (16.05%) were male, and 68 (83.95%) were female. Similarly, 38 out of 170 participants (22.4%) reported having tinnitus, and 30 out of 170 (17.6%) reported having hyperacusis. After detailed analysis, the result showed that 21 participants out of 81 (25.93%) reporting misophonia also reported tinnitus as a co-morbid condition. Similarly, 22 out of 81 (27.16%) reporting misophonia also reported hyperacusis as a co-morbid condition. The results indicate that misophonia can occur in isolation or with other associated auditory disorders, such as tinnitus and hyperacusis. However, these data on tinnitus and hyperacusis are entirely based on the subjective description of the participants based on the single questions used in the survey. No separate questionnaires were used to assess tinnitus and hyperacusis in an individual with misophonia. There is a need to assess the association between tinnitus, hyperacusis and misophonia using separate questionnaires to validate the findings. This data also shows that misophonia is a more common disorder; many are unaware of this condition and are not seeking professional help.

3.3 Triggers of Misophonia

All the participants who reported the problem of misophonia responded to the Amsterdam Misophonia Questionnaire (A-MISO-S) and listed all the sounds that trigger misophonia.

Out of 81 (47.6%) participants who reported a problem of irritation with the sounds, most of the participants reported multiple sounds as a trigger. A total of 133 triggers were reported by 81 participants, and a few reported common triggers. After analysis, the result showed that individuals with misophonia reported 30 different triggers. Most participants, 30 (37.04%), reported chalk scratching as the trigger, followed by loud sounds 15 (18.52%) and chewing 12 (14.81%). The details about all the triggers reported by all the participants are shown in **Table 2**.

3.4 Severity of Misophonia

All 81 (48.27%) participants who reported misophonia symptoms answered all the Amsterdam Misophonia Scale Questionnaire questions. The severity of the misophonia was assessed by calculating the total scores obtained by each participant. The maximum score obtained was 14, and the minimum was one with a mean score of 5.36 and a standard deviation (SD) of 3.16. The score of 33 (19.41%) participants ranges from 0-4 and is classified as subclinical misophonia, the score of 38 (22.35%) participants ranges from 5-9 and is classified as Mild misophonia and the score of 10 (5.88%) participants ranges from 10-14 and classified as Moderate Misophonia. These scores showed that even though 81 (48.27%) among 170 participants reported misophonia symptoms, only 48 (23.28%) reported clinically significant misophonia that warrants treatment.

Misophonia assessment Questionnaire was also administered among 81 participants who reported misophonia symptoms. The maximum score obtained was 42, and the minimum was 0, with a mean score of 3.09 and a standard deviation (SD) of 7.18. The score of 65 participants (38.25%) ranged from 0-11 and were classified as having subclinical misophonia. The score of 10 participants (5.88%) ranged from 12-24 and were classified as having mild misophonia. Four participants

Table 2: Different triggers reported by individuals with misophonia (N=81)

Triggers for misophonia	Percentage (%)	Triggers for misophonia	Percentage (%)
Chalk scratching	30 (37.04%)	**Door knocks**	4 (4.94%)
Loud sounds	15 (18.52%)	**Slippers against dust**	1 (1.23%)
Chewing	12 (14.81 %)	**Vehicle horns**	4 (4.94%)
Teeth clicking	12 (14.81 %)	**Snoring**	1 (1.23%)
Benches moving	8 (9.88%)	**Plate and spoon sound**	1 (1.23%)
Nails scratching	6 (7.41%)	**Pen ticking**	1 (1.23%)
Fireworks	2 (2.47%)	**Any repeated sounds with the same pattern**	1 (1.23%)
Steel scratching	3 (3.70%)	**High-frequency beeps**	6 (7.41%)
Sound of dry leaves on concrete	1 (1.23%)	**Coin scratching**	1 (1.23%)
Cloth scratching	2 (2.47%)	**Crackers noise**	1 (1.23%)
Continuous bell ringing	2 (2.47%)	**Cricket sound**	4 (4.94%)
Hammering	1 (1.23%)	**High pitched laughter or giggles**	4 (4.94%)
Microphone screeching	1 (1.23%)	**Ribbon rubbing**	1 (1.23%)
Continuous honking	1 (1.23%)	**Shoe scraping**	1 (1.23%)
Paper rubbing agaist wall	4 (4.94%)	**Honey bees buzzing**	2 (2.46%)

(2.35%) had a score from 25-37 and were classified as having moderate misophonia. The score of two participants (1.18%) ranged from 38-50 and were classified as severe misophonia. The score obtained from the Misophonia assessment questionnaire showed that 9.41% of participants among 170 participants had clinically significant misophonia, which warrants treatment. The difference in the prevalence percentage among the administration of the Amsterdam Misophonia Scale Questionnaire and Misophonia Assessment questionnaire may be due to the pattern of the questionnaire and the different scoring systems used in the questionnaire. **Table 3** shows the comparison of the severity of the misophonia between the two questionnaires.

3.4 Co-morbidities of misophonia with other disorders

Out of 81 participants who reported misophonia symptoms, only 10 (12.35%) reported having additional health problems like headaches, migraines, hypothyroidism and asthma. Regarding the psychological issues, 16 participants (19.75%) reported they have psychological co-morbidities like anxiety, depression and mood disorders and 14 (17.28%) participants reported balance problems like dizziness, giddiness, vertigo and motion sickness.

Table 3: Categorisation of the severity of misophonia using both the Amsterdam misophonia scale questionnaire and Misophonia Assessment Questionnaire (N= 81)

SEVERITY OF MISOPHONIA					
Amsterdam Misophonia Scale Questionnaire			**Misophonia Assessment Questionnaire**		
Score range	**Percentage of participants**	**Severity degree**	**Score range**	**Percentage of participants**	**Severity degree**
0-4	33 (19.41%)	Sub-clinical	**0-11**	65 (38.25%)	Sub-clinical
5-9	38 (22.35%)	Mild	**12-24**	10 (5.88%)	Mild
10-14	10 (5.88%)	Moderate	**25-37**	4 (2.35%)	Moderate
15-19	0 (0%)	Severe	**38-50**	2 (1.18%)	Severe

3.5 Family History

Regarding family history, seven participants (8.64%) reported having other family members and suffering from misophonia. The rest of the participants did not have any family history of misophonia.

3.6 Coping strategies and motivation to learn about their problems

Out of 81 participants who reported misophonia, 10 participants (12.35%) reported using coping strategies to get rid of misophonia. Most of the participants reported using multiple coping strategies in different situations. Altogether 42 coping strategies were reported by 10 participants, and few coping strategies are common among the participants. After analysis, the results showed that individuals with misophonia report ten different coping strategies. Most participants, 8 (80%), reported avoiding people, situations, and places as the coping strategy, followed by Sleep, as reported by 60% of participants. The details of the coping strategies used by participants are shown in **Table 4**.

Among 170 participants who responded to the survey through various platforms, 87 participants (51.2%) reported they wanted to know about misophonia. Most participants wanted to know misophonia aetiology, mechanism, assessment, and treatment.

Table 4: Different Coping strategies used by individuals with misophonia (N=10)

Coping strategies used by individuals with misophonia	Percentage (%)
Avoid people, situation and places	8 (80%)
Ignore the sound	4 (40%)
Distract self with some other activity	4 (40%)
Sleep	6 (60%)
Listening to the songs with high volume	6 (60%)
Close ears with fingers	2 (20%)
Prevent such sound productions	4 (40%)
Doing works at late night	2 (20%)
Using earphones and earplugs	3 (30%)
Active avoidance of anticipated situation involving irritating sounds	3 (30%)

3.7 Association between the occurrence of misophonia and gender

The effect of gender on the occurrence of misophonia was assessed using the chi-square test. The test result showed that gender is not significantly associated with the occurrence of misophonia X^2 (1, N =170) = .58 (p > .05). The result of the chi-square test is illustrated in **Table 5**.

Table 5: Association between gender and occurrence of misophonia (N= 170).

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.100[a]	1	.58
Likelihood Ratio	1.126	1	.57
N of Valid Cases	170		

4.0 DISCUSSION

Misophonia is a condition that borders psychology and audiology. In psychology, researchers are trying to explain misophonia as a psychiatric disorder (Schröder et al., 2013). They try to assess and treat the patient with misophonia using the psychiatric approach. However, in audiology, misophonia is less explored and is a relatively new term. Nevertheless, the prevalence of misophonia is increasing with time, and many misophonia patients seek professional help (Zhou et al., 2017; Wu et al., 2014).

Naylor et al. (2021) reported clinically significant misophonia in 49.1% of the study sample population among UK undergraduate medical students. Similarly, a study done by Wu et al. (2014) reported a prevalence of misophonia at 19.9% in the sample of 483 US undergraduate students using an online questionnaire study. Another study by Zhou et al. (2017) found the prevalence of misophonia to be 20% among 415 Chinese graduates. Comparable to these studies, our study found the prevalence of misophonia to be 23.28% among 170 graduate students at Mysore University.

Jastreboff & Jastreboff (2002) reported that misophonia triggers need not be only related to the human body. The sound produced by people but not directly related to the human body, for example, pen clicking, rustling and tapping, can also trigger misophonia. Similar results were observed in the present study. Various triggers related to the human body, both directly and indirectly, have been noted. A chalk scratching sound, a sound not directly related to the human body, is the most common trigger reported by our study participants, as reported by 37.04 % of participants. Our findings are contrary to the findings of Jastreboff & Jastreboff (2014), who reported that most aversive triggers are the sounds

made by the human mouth or nose, such as chewing and breathing sounds. Brout et al. (2018) reported that acoustic characteristics of sounds do not impact emotional arousal. However, the impact of acoustical characteristics of the triggers on emotional arousal has not been explored, and there is a need to carry out such a study using the neurophysiological measure in the future.

Misophonia is a condition that occurs in isolation and with other psychiatric and auditory disorders. In our study, we found that among 47.6 % of participants reporting misophonia symptoms, almost one-fourth of the participants (25.93%) reported tinnitus in association, similar to the findings of Kochkin et al. (2011). Misophonia is a condition that can occur in isolation as a separate disorder. Misophonia also occurs in association with other psychiatric conditions like obsessive-compulsive disorders (OCD), attention deficit hyperactivity disorder (ADHD) and mood disorders. Schröder et al. (2013) proposed diagnostic criteria stating that misophonia is a separate psychiatric disorder due to the high occurrence of misophonia with psychiatric co-morbidities. In our study, among 81 participants reporting misophonia symptoms, only 19.75% of participants reported having psychiatric issues. These data show that misophonia does not always occur with psychiatric disorders, even though it can be a symptom of psychiatric disorders. However, the findings of our study about psychiatric co-morbidities are based on the subjective explanation of the participants based on the single question used in the survey. There is a need to carry out a more focused study using separate questionnaires related to psychiatric illness to validate the findings.

Edelstein et al. (2013) have reported that misophonia is a hereditary problem, as they found a family history in misophonic individuals. However, in our study, only 8.64% of participants reported having a family history of misophonia. These contradictory findings may be due to inadequate sample size, lack of a separate standardised questionnaire to assess the aetiology of the misophonia, and participants' lack of awareness about the misophonia. This result showed a need to explore the aetiology of misophonia, considering a larger sample size and using a focused methodology.

The literature states that the prevalence of misophonia is not associated with gender (Zhou et al., 2017; Wu et al., 2014). Results from our study also showed no association between gender and the occurrence of misophonia supporting these findings. However, the lack of association might be due to fewer male subjects participating in the study than female participants. To validate the conclusion, there is a need to survey the future with equal distribution of males and females.

There are few questionnaires developed for the assessment of misophonia. The Amsterdam misophonia scale (A-MISO-S) checklist developed by Schröder et al. (2013) and the Misophonia assessment questionnaire (MAQ) developed by Wu et al. (2014) is the two most commonly used. However, the psychometric properties of these questionnaires are not known much. In our study, the prevalence of misophonia is found to be significantly different among A-MISO-S and MAQ, which may be due to different scoring criteria or the poor psychometric properties of the questionnaire. Hence, there is a need to develop a standardised questionnaire in the native Indian language for assessing misophonia, which is lacking in the current scenario. In addition, we have to rule out the other diagnostic measures that may account for sound sensitivity by administering major diagnostic tools that may be necessary.

Various audiological and psychological approaches, such as tinnitus retraining therapy and Cognitive Behaviour Therapy, are used to manage misophonia. This study suggests that most individuals do not know about misophonia management and do not opt for management from professionals. However, they have been affected in their daily lives due to misophonia. Few participants reported using coping strategies for misophonia, and none of the participants reported that they were taking treatment from the concerned health professionals. This suggests that people are unaware of the effect of misophonia and do not see it as a significant concern, even though it impacts their daily lifestyle. This may be due to the hidden nature of the disorder and lack of awareness about misophonia among the general public. Hence, it is essential to carry out awareness programs about misophonia and its consequences among the general public.

5.0 CONCLUSIONS

Even though significant progress has been made in the field of misophonia, it is not regarded as a separate disorder by any official diagnostic system, either by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) or the International Classification of Diseases, Eleventh Edition (ICD-11). The result of our study showed that the prevalence of misophonia is high among Mysore university students. However, little research has been done on misophonia, exploring pathophysiology, assessment, and management.

People are unaware of misophonia management and are not seeking professional help. Therefore, it can be hypothesised that highlighting more epidemiological data will help recognise misophonia as a separate and genuine disorder. This would provide a path for investigating and managing misophonia using a team approach, including audiologists.

There is a shortage of studies on the epidemiological data on misophonia in the Indian context and worldwide, as this is a relatively new condition. As this is the first study of this kind in the Indian context, it can be a guiding tool for future researchers about the prevalence of misophonia, its impact, and co-morbidity among the sufferers. The sample size of our study is not adequate. Therefore, there is a need to carry out further studies in the future, considering the appropriate sample size. There are no questionnaires on misophonia developed and standardised in the Indian languages. This study was conducted by administering the English version of the misophonia questionnaire to the Indian population, which is the study's limitation. Hence, there is a need to develop the questionnaire in the native Indian language in the future, and more research has to be carried out using the questionnaires developed in the native language to replicate the findings. This study considered only young adults from Mysore University for participation. Future studies can further look into various age groups, compare the prevalence in all those age groups, and compare the awareness in different geographical areas across India so that appropriate awareness-generating programs about misophonia could be planned better.

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