Research Article

Tinnitus reaction index: A Measure to assess quality of life in individuals with tinnitus

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Key Words

Functional
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Predictor

Abstract

The aim of the present study was to develop self-report questionnaire in Marathi which assess quality of life in individuals with tinnitus. Method involved selection of various questions for the development of "Tinnitus Reaction Index" after reviewing various earlier questionnaire and the problems frequently faced by the individuals with tinnitus observed during case history. Initially 34 questions were included related to functional, emotional, and catastrophic reactions of the patient with tinnitus. It also had a new domain named "predictor indicator" which suggests about fluctuations in the tinnitus/ variations in the level of tinnitus due to certain factors. After a pilot study on 15 individuals with tinnitus, the number of questions were filtered down to 20 in order to minimize the ambiguity and redundancy of the questionnaire. Second part of the study involved administering the questionnaire in 100 native Marathi speakers' with complaint tinnitus. Test- retest reliability and split half reliability was found to be 0.834 and 0.742 respectively. Similarly validity was also found to be high (r = 0.84). Thus the developed tool TRI-Marathi is a reliable and valid subjective measure to assess the impact of tinnitus in Marathi speaking individuals and categorize the severity of their tinnitus into different degrees.

Introduction

Tinnitus can be defined as the continuous perception of a sound without the presence of an external source (Jastreboff, 1990). Global epidemiologic studies have estimated the prevalence of tinnitus to be between 10-15% in normal individuals without significant hearing loss (Sindhusake, Mitchell, Newall, Golding & Rubin, 2003). Similarly Department of Industrial Health evaluated 647 noise exposed workers and revealed that 151 workers suffered from tinnitus, yielding a prevalence rate of 23.3% among noise induced population.

Wilson and Henry (1998) stated that tinnitus is a "clinically significant" symptom which may cause functional impairment to such a degree that clinical intervention or rehabilitation becomes necessary. Although there are no drugs specifically meant for tinnitus, drugs are often used to treat associated mental health conditions such as depression and anxiety (Dobie, 2004; Andersson, & McKenna, 2006; Cima, Vlaeyen, Maes, Joore & Anteunis, 2011). Cognitive problems such as attention and concentration are also highly reported in the literature but uniformly underlying cause has not yet discovered (Cima, Vlaeyen, Maes, Joore & Anteunis, 2011).

Earlier literature has reported that around 20% of population with tinnitus have severe disturbance in their daily life that require special treatment such as masking (Vernon & Meikle, 2000). Various disabling effects of severe tinnitus includes sleep interference, cognitive difficulties (particularly with concentration), and difficulties at work and at home as observed by numerous investigators (Tyler & Baker, 1983; Axelsson, & Sandh, 1985; Axelsson & Ringdhal, 1989). It also contains disturbance in social relationships and negative emotional reactions such as anxiety, frustration, anger and depression (Stouffer & Tyler 1990; Erlandsson, Hallberg & Axelsson, 1992; Meikle 1992; Newman, 1999; Dobie, 2004).

Self report questionnaire are useful measurement tools to quantify the psychosocial consequences of tinnitus and to assess the problem subjectively. Recent advance has lead to develop various psychophysical methods in the assessment of tinnitus like masking curves, pitch match, loudness match to evaluate the tinnitus problem. However, these assessment tools do not exhibit the true suffering or the actual handicap in individuals with tinnitus. Thus self-report measures are an important clinical tool in Audiology that provides greater and more detailed insight into areas that cannot

be assessed by other audiological tools. They also explore the problems faced by the individuals and serve as a baseline for assessing treatment outcomes. Even though it is difficult to accurately identify and quantify each patient's tinnitus but still literature reveals that most of the self report questionnaires as mentioned below provides an index score to quantify the impact of tinnitus on an individual's daily life. The total and the subscale score provides a clinician an overall idea of the impact faced by the tinnitus sufferers. Moreover, many researchers have stated that the use of questionnaire guarantees greater reliability in the assessment of tinnitus when compared to other methods (Nunnally & Bernstein, 1994).

The below mentioned are few more questionnaires developed between 1988 to 1999, collected from approximately 5000 individuals with tinnitus to the best of researcher's knowledge.

Wilson, Henry, Bowen and Haralambous (1991) developed Tinnitus Reaction Questionnaire (TRQ) that included 26 aspects of tinnitus which covers various items of personal and social handicap due to tinnitus and its impact on quality of life, yielding a score between 0 and 104. Kuk, Tyler, Russell and Jordan (1990) developed Tinnitus Handicap Questionnaire (THQ) which was directly based on the responses of tinnitus sufferers to the Tyler and Baker (1983) open ended questions. Furthermore Erlandsson, Hallberg and Axelsson (1992) devised Tinnitus Handicap/ Support Scale (TH/SS) to assess the attitude of the family and friends towards the person with tinnitus. The TH/SS comprises 28 items forming three factors of similar weight: reaction of others (largely negative), support from others, personal and social handicaps due to tinnitus. Thus, it was focused more on the others reaction towards the individuals with tinnitus, ignoring the individuals sensitivity towards tinnitus. Meikle, Henry, Griest, Steward, Abrams, McArdle and Rchronic (2012) developed a new self report questionnaire Tinnitus Functional Index (TFI) for American individuals with intrusive tinnitus to quantify the handicap of chronic tinnitus. The scale includes both the severity and negative impact of tinnitus which helps in assessing and measuring treatment-related changes in individuals with tinnitus (responsiveness).

Similarly Newman, Jacobson and Spitzer (1996) developed Tinnitus Handicap Inventory (THI) in English language. The questionnaire consists of 25 questions in three subscale categories: functional, emotional and catastrophic. The functional subscale (10 items with a maximum score of 40), evaluates role limitations in the areas of mental, social/occupational, and physical functioning. The emotional subscale (10 items with a maximum score of 40), includes items representing a broad range of affective responses to tinnitus including anger, frustration, irritability and depression. The catastrophic subscale (5 items with a maximum score of 20) probes the most severe reaction to tinnitus such as depression, loss of hope, inability to cope and fear of a grave disease. Among the self rating questionnaire described above, the THI is most widely used and has been translated into languages such as Danish (Zachariae et al., 2000), Brazalian-Portuguese (Schmidt, Teixeira, Dall'lgna, Dallagnol & Smith, 2006), German (Langguth, Kleinjung, Fischer, Hajak, Eichhammer & Sand, 2007), Italian (Monzani, Genovese & Marrara, 2008) and Tamil (Ramkumar & Swaminathan, 2010). SR-THQ is another similar self assessment questionnaire which was developed in Kannada by Shanbal and Manjula (2002).

The existing questionnaires have been proven useful for measuring quality of life in individuals with tinnitus. However, as per the researcher's best knowledge, none of these scales provide information regarding tinnitus increase or decrease due to some factors reported in the earlier literature (Vernon & Meikle 2000, Lynn, Bauch, Williams, Beatty, Mellon & Weaver, 2003; Lobarinas et al., 2006). Secondly, responses to self-report questionnaires are most accurate when administered in the native language of the individual (Zachariae et al., 2000; Shanbal & Manjula, 2002; Ramkumar & Swaminathan, 2010). Nonetheless, self-report questionnaire in Marathi which assess degree of tinnitus handicap and predictor indicators related to alternations in the tinnitus is not been developed yet. Thus there was an urge to develop a questionnaire to represent the subjective perception of handicap, disability and stress due to tinnitus and to give an indication regarding quality of life status in individuals with tinnitus.

Aim of the Study was to develop Tinnitus Reaction Index (TRI) first in English followed by translation and validation of it in Marathi. Establishing a rating scale based on the correlation of individual's response on TRI scores was also a part of study.

Method

Total 100 participants were selected on a random basis with the age range of 18 to 60 years. All the participants had primary complaint of tinnitus for minimum of 3 months irrespective of their hearing loss. Of the 100 participants, 50 were fluent in both English and Marathi (at least 12^{th} Grade) while the rest 50 were proficient in Marathi (mother tongue) only. Participants with any known psychiatric or neurological disturbances were excluded from the study based on the detailed case history taken for all the participants. Study was conducted with the understanding and written consent of all the individuals with tinnitus. All of

them were provided information regarding the aim, method of the research and the approximate duration of the test in the language he/she preferred (English/Marathi).

Tinnitus Reaction Index was developed in two stages. First stage involved development of the TRI (English) based on the review and summarization of earlier questionnaire such as THI, SR-THQ etc followed by translating it in Marathi. Second stage consisted of administration of this developed questionnaire on patients with tinnitus. The questions were also included related to the problems faced by individuals with tinnitus mentioned in case history from 2010-2012 at the school of Audiology and Speech Language and Pathology, Pune.

A total of 34 random questions were initially included in the study which was later filtered into 20 questions depending on the response obtained from the pilot study carried on 15 individuals with tinnitus and the feedback given by four audiologists. Feedback from the patient's and audiologist helped the researchers to analyse the scale in terms of its holistic and comprehensive content, familiarity, redundancy and ambiguity of items used in the questionnaire. It was ensured that scale had included questions related to functional, emotional, catastrophic reactions of the patient with tinnitus with equal importance in an individuals' life with tinnitus. The Tinnitus Reaction Index (TRI) had a new domain named "Predictor Indication" which can give an indication about certain factors contributing to increment / reduction of tinnitus. Thus the questions in the TRI were grouped under four subscales: functional subscale (5 items/questions), emotional subscale (6 items), and catastrophic subscale (5items) and prediction Indicator (4 items). The scorings of the items were such that each 'Yes' response was rewarded 5 points, 'Sometimes' was 2.5 points and 'No' was given 0 points. Thus, developed scale had all together 20 questions and total score ranged from 0 to 100 (attached in Annexure I).

This was initially developed in English and was translated later into Marathi, using "forward-backward" translation procedure (attached in Annexure II). The developed Marathi version of the TRI scale was finally given to five native speakers of Marathi who were fluent in (12^{th} grade English medium schooling) English for confirming its appropriate translation in Marathi. When the translated questions were confirmed for its accuracy, questionnaire in Marathi was considered for further research.

The functional subscale was determined by the questions pertaining to stress, loss of concentration and sleep, interference with job, household responsibilities and social activities (Newman, 1999). They were asked to read the questionnaire properly and encircle their response in the form of yes/no/sometimes. They were provided help when questions were not understood. For emotional subscale, the impact of tinnitus usually affects the emotional substrate of an individual. The emotional subscale was assessed in the study by adding the questions related to depression, anger, anxiety, irritability, frustration, insecurity etc. Catastrophic reactions are common in advance stages of tinnitus sufferers. Questions related to a sense of desperation, perception of having a terrible disease, lack of control and inability to escape or cope were included in the catastrophic domain of questionnaire. Predictor indicator which was added to the present study in addition to other subscales related to increment/ decrement in tinnitus due to the use of any medicine or food item, listening to music etc.

The questions of the above domains were developed and randomized so that the individuals do not get adapted and confused. The instruction was provided verbally while giving the questionnaire and also was clearly mentioned above the questionnaire. Functional and emotional subscale had included total five and six questions, while catastrophic and predictor indicators included 5 and 4 questions respectively.

Second stage of the study consisted of taking detail case history and administering developed questionnaire. Case history had included all the demographic detail such as subjects name, age, gender, occupation, IP OP number and contact number. A detailed case history was obtained from each individual with tinnitus which included their occupation, duration of the tinnitus, medical treatment, and duration of noise exposure, vertigo, headache and nausea. Administration of the questionnaire was done soon after the case history. Re-administration of questionnaire was also done after a week in the clinic in a random order. The responses were obtained and categorized according to the classification of the degree.

Results and Discussion

The present investigation was aimed to develop a quality tool, Tinnitus Reaction Index (TRI) for the subjective assessment of tinnitus. Data obtained after administering TRI was processed further through item analysis, factor analysis, reliability measures and validity measures.

Item Analysis

Table 1 reveals Cronbach's Alpha for all the 20 questions. The rule of thumb states that 0.7 is required for any scale to be called reliable. Since Cronbach's Alpha value does not increase beyond 0.7 even after deletion of that particular item, all the items were retained for the tool.

Table 1: Item total correlation

Q.no	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q1- Q5	40-42.900	256.0 to 260. 80	0.351- 0.527	0.262 -0.388	0.710-0.720
Q6	***42.000***	***292.424***	***-0.132***	***0.165***	***0.760***
Q7	42.850	254.295	0.487	0.515	0.710
Q8	41.075	241.951	0.599	0.576	0.697
Q9	41.575	240.108	0.592	0.499	0.696
Q10	40.275	278.775	0.079	0.331	0.740
Q11	43.225	262.285	0.412	0.462	0.717
Q12	41.100	264.813	0.220	0.148	0.731
Q13	***42.575***	***296.522***	***-0.187***	***0.232***	***0.762***
Q14	***42.300***	***288.722***	***-0.083***	***0.148***	***0.755***
Q15	41.125	243.860	0.556	0.435	0.701
Q16	42.900	265.116	0.282	0.383	0.725
Q17	43.175	274.350	0.150	0.181	0.735
Q18	42.425	261.674	0.282	0.286	0.725
Q19	42.425	251.825	0.425	0.452	0.712
Q20	40.850	252.301	0.495	0.409	0.708

Table 2: Item total correlation

Severity sub-scales	F.S Score: 0-25	E.S Score: 0-30	C.S Score: 0-25	P.I.S Score: 0-20	Total Score: 0-100
Very mild (1)	0-5	0-6	0-5	0-4	0-20
Mild (2)	5-10	6-12	5-10	4-8	21- 40
Moderate (3)	10-15	12-18	10-15	8-12	41- 60
Moderately-severe (4)	15-20	18-24	15-20	12-16	61- 80
Severe (5)	20-25	24-30	20-25	16-20	81- 100

Factor Analysis: Factor analysis is used mostly for data reduction purpose. It was performed for all the 20 items which were selected for the present tool. Analysis states that if any item scores less than 0.4 on the factor analysis it should be discarded or re-written. The results showed that no item scored less than 0.4. Thus all the 20 items were retained.

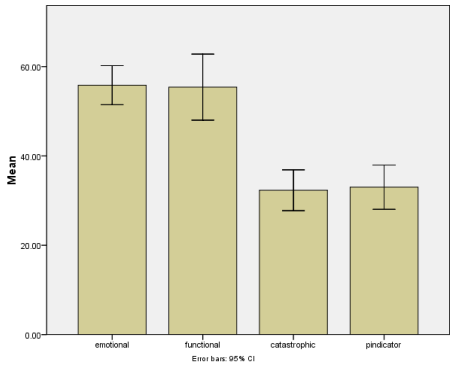

Figure 1: Average Mean (%) of each subscale.

Reliability: The reliability of test was measured using Cronbach's alpha and split-half reliability. The reliability measure was based on the response of Group 2 which had only Marathi individuals with tinnitus. Individuals in that group were given developed Marathi TRI twice with a gap of one week. The Cronbach's alpha was applied to assess the test-retest reliability of TRI and was found that test- retest reliability is good ($r = 0.834$) for the scale. The split-half reliability was also measured by dividing the total number of items (n=20) into two parts; Part 1 (n=10) and part 2 (n=10). The split-half reliability was also found to be favorable (r =0.742) for part 1 and for part 2 (r =0.716).

Validity: Validity checks the degree to which an instrument measures what it claims to measure. To check the validity i.e., whether the subscales consistently measure the attribute they intend to measure, Kendall's tau_b test of correlation was done based on the response obtained from Group 1 which included individual who were proficient in both English and Marathi. In Group 1 individuals were

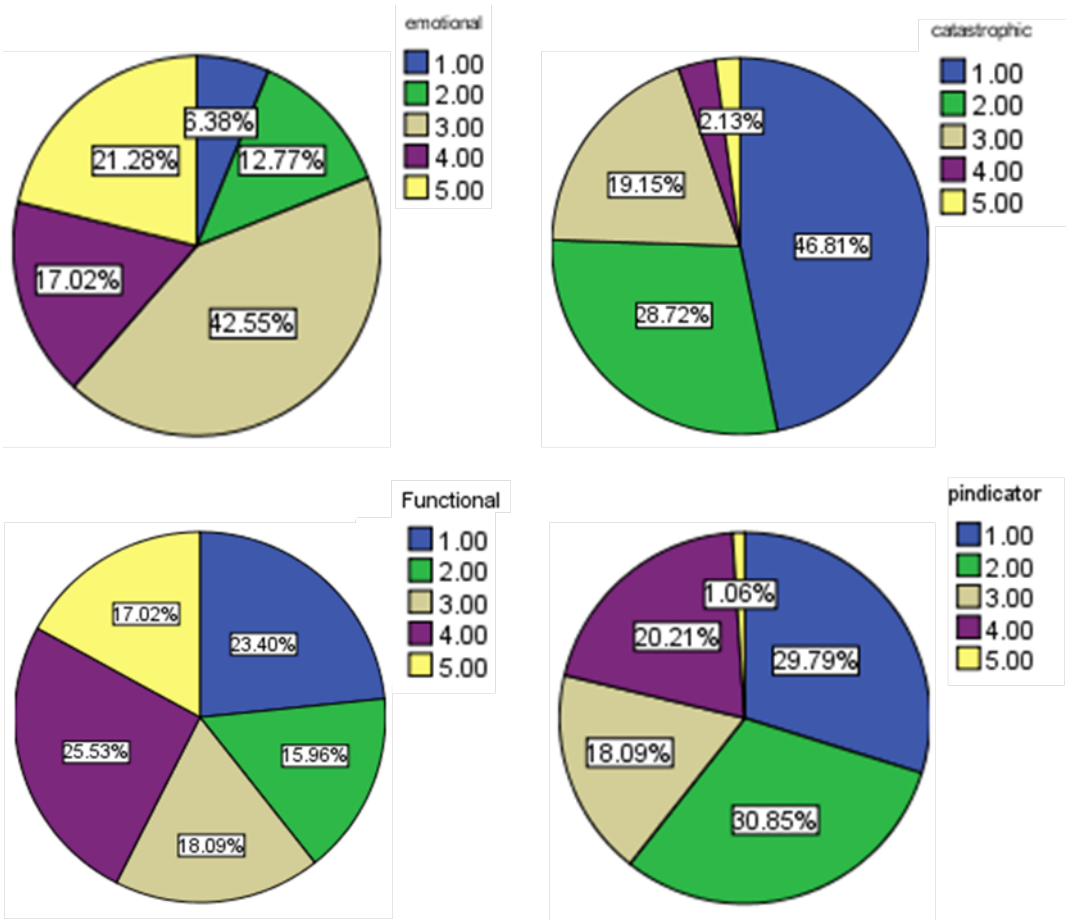

Figure 2: Distribution of subjects as per the severity of emotional, functional, catastrophic, Predictor Indicator domain.

given Marathi questionnaire and then English questionnaire with a gap period of one week. The arrangement of items in both English and Marathi were randomly altered so that there may not be any adaptation. The validity measures showed that there is a high positive correlation ($r = 0.892$, N= 50, $p < 0.0005$) between Marathi and English measure coefficient which reveals that the developed tool is valid for further subjective evaluation in individuals with tinnitus.

High correlation coefficient with satisfactory test-retest reliability and validity indicates that, the developed tool can be used for Marathi population to assess degree of handicap in individuals with tinnitus. As the reliability of the tool is found to be good, it can be included in the present test battery for individuals with tinnitus which has an advantage of being cost effective, less time consuming and easy to administer.

The developed TRI in the present study did not involve equally distributed items in each of its subscales. Hence, the maximum total score on each subtest was different. For the mean comparison of all the subscale the scores were converted into percentage. Figure 1 represents the average mean (%) scores obtained in each of the four subscales of TRI respectively. The mean and standard deviation of total TRI-Marathi and the individual subscale, was obtained on 50 participants. The mean and standard deviation were 43.82 $\pm$ 17.1 for total TRI-Marathi, 19.35 $\pm$ 7.04 for functional subscale, 11.55 $\pm$ 7.10 for the emotional subscale and 3.80 $\pm$ 3.88 for the catastrophic subscale and 9.59 $\pm$ 10.28 for the predictor indicator subscale.

These results suggested that perception of tinnitus handicap varies greatly among all the individuals with tinnitus as shown by high value of standard deviation for all the domains of THI. This could be due to more or less coping strategies or type of tinnitus such as peripheral versus central which may or may not get affected due to background music/noise or certain drugs (Newman, Jacobson & Spitzer, 1996; Zung, Fukuda & Kobayashi, 1983; Lynn, Bauch, Williams, Beatty, Mellon & Weaver, 2003; Lobanias et al., 2006)

Furthermore, among all the subsections of the developed tool, emotional domain has revealed maximum standard deviation compared to other domain. This signify that emotional reactions such as anger, frustration, depression are dissimilarly affected in individuals with tinnitus as it is associated with the personality of the person (Bartels, Laan,

Staal & Alberts, 2008). Consequently audiologists should be careful regarding analyzing each domain separately and providing treatment strategies accordingly. This reinforces the findings of earlier investigators who have also reported that emotional reactions has more variations than other domains in individuals with tinnitus (Tyler & Baker 1983; Axelsson & Sandh, 1985; Axelsson & Ringdhal, 1989; Stouffer & Tyler, 1990; Erlandsson, Hallberg & Axelsson, 1992; Meikle, 1992; Newman, 1999; Dobie 2004).

Subjective Evaluation (severity) of Tinnitus using TRI: The TRI has 4 sub-scales, the functional subscale- FS (consisting of five items), Emotional sub-scale- ES (consisting of six items), Catastrophic sub-scale- CS (consisting of five items), Predictor indicator- PIS (consisting of four items). In order to classify the severity of tinnitus using TRI, total score of TRI was divided into five groups. Groups were very mild, mild, moderate, moderately-severe and severe with the TRI score ranging from 0-20, 21-40, 41 - 60, 61- 8, 81-100 respectively. The severity of sub-scales and total severity scores are tabulated and represented in Table 2 and Figure 2 respectively.

Distribution of participants was quite uniform in functional domain across different severity categories as compared to emotional domain. Even distribution of participants in functional domain indicated that functional aspects get affected more often whenever there is any degree of tinnitus than other domains of THI. With respect to emotional domain, it can be seen that, it is affected more in moderate to moderately severe category. This shows that, if person has emotional responses to his/her tinnitus, it would most often result into significant reactions**.** These findings are partially in accordance with earlier investigators, Bartels, Laan, Staal & Alberts (2008) who have reported that there is a significant difference in self perceived Handicap between two groups of individuals with tinnitus who have associated anxiety and depression and those who do not have anxiety and depression due to tinnitus. Relationship between anxiety and depression with severity of tinnitus has been also well established by various authors in the past (Bartels, Middel, Laan, Staal & Alberts, 2008).

It was also observed that many participants had fluctuation in tinnitus as indicated by predictor indicator but in mild to moderate forms. In other words, few participants reporting severe fluctuations in the tinnitus shows that factors such as background music, & or certain drugs or some food items do not results into complete presence or absence of tinnitus but they may change it's intensity to some degree. This is in accordance with earlier studies who have also reported tinnitus may change it's intensity due to certain drugs or background noise but, it does not stop completely (Lynn, Bauch, Williams, Beatty, Mellon & Weaver, 2003; Lobarinas et al., 2006)

Conclusions

It can be concluded that the developed tool TRI-Marathi is a valid and reliable subjective measure to assess the impact of tinnitus in Marathi speaking individuals and categorize the severity of their tinnitus into different degrees. This questionnaire in the test battery may help to develop a better client-clinician relationship regarding understanding of their problem and direct the clinician to provide the best management of tinnitus especially in the initial counseling. An addition of a subscale " predictor indicator" may also help clinician in understanding factors that may cause increase/ decrease of tinnitus which may further assist clinician in intervention.

Studies comparing the impact of tinnitus between individuals with unilateral and bilateral tinnitus, individuals with varying type and degree of hearing loss can be done in future. An Effect of gender and age on the perception of tinnitus can be also be evaluated in future using TRI. Evidence based studies assessing the efficacy of various types of treatment using TRI can be performed in Marathi speaking individuals with tinnitus. Relationship between predictor indicator and mode of treatment can also be investigated in prospective research.

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APPENDIX-1
TINNITUS REACTION INDEX (TRI-ENGLISH)

NAME: **EDUCATION:**
AGE/GENDER: **OCCUPATION:**
PHONE No / E-MAIL: **REFERRED FROM:**
CONTACT ADDRESS:
IPD/ OPD NO:
LANGUAGE:

Kindly read all the questions and mark appropriately.

Sl.No	QUESTIONS	YES	NO	SOME TIMES
E 1	Does tinnitus cause irritability when dealing with spouse/ children/ parents/ work place?			
F 2	Does the loudness of your tinnitus make it difficult to carry out a conversation?			
C3	Because of your tinnitus do you feel desperate?			
E 4	Do you feel that you are irritated and angry because of tinnitus?			
F 5	Is your tinnitus bothersome at night time and troubles while falling to sleep?			
C 6	Visiting many professionals have made you confused or frustrated about your tinnitus problem?			
F7	Does your tinnitus make it difficult for you to enjoy life?			
P8	Does the loudness of your tinnitus fluctuate?			
F9	Is it difficult to participate in family functions or household duties whole heartedly?			
PI 10	Have you noticed any factor like food item/ any eatable that reduces or increases your tinnitus?			
E11	Do you feel that your tinnitus problem has placed stress on your relationship with members of your family/ friends?			
C12	Do you feel that you cannot escape from your tinnitus?			
E13	Is your tinnitus bothersome in all situations?			
PI 14	Does listening to soothing music reduce your tinnitus?			
E15	Are you too concerned (anxious) about your tinnitus?			
F16	Is it difficult to concentrate when you experience tinnitus?			
C17	Do you visit different doctors/ professionals to get help from bothersome tinnitus?			
PI 18	Do you take medicines by your own when you experience tinnitus?			
C19	Because of your tinnitus do you feel that you have terrible disease?			
E20	Does the increase in loudness of tinnitus makes you upset?			

APPENDIX IV
BHARATI VIDYAPEETH DEEMED UNIVERSITY
SCHOOL OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

Name **Age/Gender** **Date**
Case No.
Audio logical Interpretation:

कर्णनाद प्रतिक्रिया प्रश्नसंच

सुचना : कृपया प्रत्येक प्रश्नाचे उत्तर होय किंवा नाही कधी कधी यांच्या भोवती बरोबरची खुण करा. प्रत्येक प्रश्न आपल्या येणाऱ्या किंवा अस्थिरतेला जसा लागू असेल त्याप्रमाणेच त्याचे उत्तर द्या.

		5	0	2.5
१.	कर्णनादाच्या तीव्रतेमुळे तुम्हाला संभाषण करणे कठिण होते का ? **F**	होय	नाही	कधी कधी
२.	तुमच्या कर्णनादामुळे तुम्ही अधिक चिडचिडे झाला आहात का ? **E**	होय	नाही	कधी कधी
३.	जेव्हा तुम्ही कर्णनाद अनुभवता तेव्हा तुम्हाला लक्ष्य केंद्रित करणे कठिण होते का ? **F**	होय	नाही	कधी कधी
४.	कर्णनादा मुळे तुम्ही कुटुबियांशी व पालकांशी व नोकरीच्या ठिकाणी त्रस्त होता का ? **E**	होय	नाही	कधी कधी
५.	कर्णनादाचा ध्वनी कमी जास्त होतो असे वाटते का ? **P**	होय	नाही	कधी कधी
६.	कर्णनादामुळे घरगुती कार्यात सहभागी होण्यास अडथळे येतात का ? **F**	होय	नाही	कधी कधी
७.	कर्णनादाची वाढलेली तिव्रता तुम्हाला निराश करते का ? **E**	होय	नाही	कधी कधी
८.	कर्णनादाच्या त्रासामुळे तुम्हाला आनंदी जीवन जगणे कठिण वाटते का ? **F**	होय	नाही	कधी कधी
९.	तुम्हाला कर्णनादाचा त्रास रात्रीच्यावेळी जाणवतो का आणि त्यामुळे झोपायला त्रास होतो का ? **F**	होय	नाही	कधी कधी
१०.	कर्णनादाच्या त्रासामुळे ताण येवून नातेसंबंध जोडणे कठिण होते का ? **E**	होय	नाही	कधी कधी
११.	तुम्हाला कर्णनाद सगळ्या वेळीस त्रासदायक वाटतो का ? **C**	होय	नाही	कधी कधी
१२.	तुमची कर्णनादापासून सुटका होणार नाही असे वाटते का ? **C**	होय	नाही	कधी कधी
१३.	मंद संगितामुळे तुमच्या कानातील आवाज कमी झाल्यासारखा वाटतो का ? **P**	होय	नाही	कधी कधी