Vocal Hygiene Awareness in Street Vendors

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Abstract - Purpose: To evaluate the effectiveness of vocal hygiene awareness program in street vendors from Kerala

Method: 30 participants (street vendors) who are native Malayalam speakers, from Ernakulam district, Kerala. The selected participants were ranged between 40-60 years. The parameter includes age which involves both male and female participants. 15 closed set of questionnaires were performed and analysed among the participants before and after the demonstration programme.

Result: The result was obtained based on the analysis of the questionnaire responded by the participants. Analysis was acquired from Mc Nemer test and t test. This indicate that 7.37% awareness was present before the test and was raised with 14.67% after the vocal hygiene awareness programme.

Conclusion: This study was focusing on predominance of adults educating the street vendors with the vocal hygiene tips is considered as a necessity. vocal hygiene strategies promote a strong and healthy voice and contribute to efficient voice production in the midst of street vendor

INTRODUCTION

Voice is a strong, useful, and creative medium for communication. The voice has the ability to express not only complex and challenging ideas but also subtle emotional undertones.

Voice is the primary instrument through which an individual personality is projected, and compatriots are influenced. (Sataloff, 2006)

Voice is the laryngeal alteration of the pulmonary air stream, which is further affected by the vocal tract architecture. Professional voice users are those who require their voice to do their job duties. Because they use their voices more frequently and vigorously than non-professional voice users, professional voice users are also referred to as athletic voice users. "Those who directly rely on vocal communication for a living are considered professional voice users" (Stemple, 1995). Vocal hygiene focuses on healthy use of vocal organs. The importance of increased hydration, elimination of

throat clearing, is parts of good vocal hygiene program. A clear understanding of how the vocal mechanism works, and the ways in which it can be injured, is also part of vocal hygiene program. A proper vocal hygiene program coupled with voice therapy can change behaviour so that the vocal folds are not damaged. Vocal misuse and abuse were predominant causative factors for voice problems in vocations involving high demands on vocal mechanism, alone or in combination with biologic and psychosomatic factors, which may result in chronic or acute symptoms of vocal attrition (overall reduction of vocal capabilities, wear and tear of vocal mechanism) such as vocal fatigue, hoarseness, throat discomfort or pain and benign mucosal lesions. Sapir (1993)

Increasing awareness of various aspects of voice production is typically one of the objectives of vocal hygiene, however awareness by itself might not be sufficient to ensure the necessary changes in vocal practises. The objectives of a vocal hygiene programme are to teach people the best techniques to ensure vocal health, preserve the tissue free of lesions, balance muscles for improved vocal production, and achieve optimal voice, according to a study of the literature on the subject (Behlau and Oliveira 2009)

It has been reported that the vocal symptom mainly seen in professional and nonprofessional voice users are vocal fatigue. It is usually described as negative sensory vocal symptom that corresponds to change in vocal response, contrary to and intended and usually quality or response. (Sataloff, 2006)

Personality factors, health issues like systemic illnesses, hormonal problems, gastrointestinal reflux, untimely food, fasting (for personal and religious reasons), food culture, and consumption of alcohol and tobacco, caffeinated and carbonated drinks are other associated aggravating factors for voice problems (Boominathan, Chandrasekhar, Nagarajan, Madraswala & Rajan 2008)

A voice disorder exists when a person's voice quality, pitch and loudness differ from those of similar age,

gender, cultural background and geographic location. A voice disorder may also exist when either the structure, function or both of the laryngeal mechanism no longer meet the voicing requirements established for the mechanism by the speaker.

Street vendors are at high risk for developing voice problems due to their professional demands for excessive voice usage. Hence the present study helps in creating awareness about the vocal problems and other vocal pathology

Sheyona and Devadas (2020) investigated the prevalence of self-reported voice problems and their effects on nonprofessional voice users, a significant proportion of nonprofessional voice users experience voice problems, which have a significant negative impact on their ability to perform their jobs.

Divya, Venkat, Ramasamy (2019) gave 'An Insight to Vocal Hygiene for Radio Jockeys - A Survey'. The results reveal about their awareness level and habits in each domain, this will in turn give a scope about the need for the awareness of vocal hygiene to maintain the timbre of their voice.

Bolbol, Zalat, hammam (2017) studied Risk Factors of Voice Disorders and Impact of Vocal Hygiene Awareness Program Among Teachers in Public Schools in Egypt their result suggest that three months after application of vocal hygiene awareness program, the teachers who were studied showed a statistically significant increase in their awareness about vocal hygiene tips.

Boominathan, Chandrasekhar, Ravi & Krupa (2009) evaluated the impact of Vocal Hygiene Awareness Program (VHAP) based on knowledge gained, implementation of vocal hygiene practices and concern for prevention of voice problems. Thirty-two teachers who attended VHAP two years back were asked to complete a questionnaire, which was based on the contents of VHAP. The authors found that the majority of teachers followed dietary modifications, vocal tips and were not following classroom modifications. The authors concluded that VHAPs were effective in increasing knowledge, modifying practices and adapting a positive attitude. The above study addressed the impact of the VHAP and had not assessed the immediate sensitivity of the program.

Boominathan, Rajendran, Nagarajan, Seethapathy & Gnanasekar (2008)

conducted vocal hygiene awareness program aimed at educating professional voice users regarding prevalent voice use, abuse, and misuse and address ways to prevent voice problems. Their study investigated the efficacy of a program on vocal hygiene education designed for schoolteachers in Chennai. Sixty-five teachers were asked to complete a questionnaire twice i.e., before and after one month (post education) and the results showed teachers had better awareness after the program.

METHODOLOGY

The habits of the different levels of vocal users must be described in depth in order to create a vocal hygiene programme that is tailored to their needs. The present study aimed to evaluate the effectiveness of vocal hygiene awareness program in street vendors from Ernakulam, Kerala. Also, this study was not intended to measure any behavioural changes because of vocal hygiene lecture.

The current study was carried out in two phases.

- 1) Development of the questionnaire to assess the effectiveness of orientation program to the participants.
- 2) Administration of the developed questionnaire followed by a detailed presentation on voice anatomy, causes of voice disorders and prevention and care of voice with demonstration. And re-administration of the questionnaire soon after the sensitization program.

PHASE 1: Development of the questionnaire

To learn more about the street vendors' awareness on vocal hygiene, a questionnaire consisting of 15 questions was prepared. All the questions were close ended and rated by Five experienced speech-language pathologists. The questionnaire was divided into the 2 sections including demographic data and the questions to assess their awareness.

- 1) Are you concerned about vocal hygiene?
- 2) Do you have any voice problem?
- 3) Did you have any history of diagnosis related with vocal disorder?
- 4) Have you ever felt breakage in your voice during conversation?
- 5) Do you have difficulty in swallowing?
- 6) Do you have gastric problems?
- 7) Do you consume excessive caffeine/carbonated drinks regularly?

(More than 2 cups)

- 8) Do you consume alcohol often?
- 9) Do you consume any kind of relaxational drugs?

- 10) Do you have knowledge regarding the voice disorders and vocal hygiene tips?
- 11) Have you considered taking voice rest?
- 12) Do you have a habit of screaming or yelling?
- 13) Do you consume more of spicy or junk foods?
- 14)Do you think gargle can reduce vocal strain?
- 15) Do you clear your throat frequently?

PHASE-2 Administration of the questionnaire Participants:

30 random participants (street vendors) who are native Malayalam speakers, from Ernakulam district, Kerala participated in the study. They were not having any speech, language and neurological problems. The age of the participant ranged from 40 years to 60 years. Anonymity was maintained in order to not share the information revealing their identity,

Procedure:

In order for the participants to respond appropriately to the questions posed, it was explained to them. Forced choice, close ended questions with a Yes/No response format made up the questionnaire. The participants of the program were asked to complete questionnaire before and questionnaire after the lecture and demonstration program. The aim was to measure the baseline awareness level on different aspects of voice and voice production system. The filled questionnaires were collected back after the subjects attended vocal hygiene lectures, which were conducted by experienced speech language pathologists. The pretest was given for evaluating the prior knowledge of vocal hygiene. The participants took 10-15 minutes to complete the questionnaire. The efficacy was assessed based on participants ability to answer the same questions, before and after vocal hygiene lecture and demonstration programme. The questionnaire's responses were tallied and summarised.

Analysis

Responses of the 30 participants were separately scored for pre and post-test. Each participant's responses were further analysed and graded as "1" for "yes" and "0" for "no." Finally, to understand the awareness inferential statistical analysis were done.

RESULT

The present study aims to evaluate the effectiveness of vocal hygiene programme in street vendors. Also, this study was intended to measure any behavioural changes because of vocal hygiene lecture. The scores obtained were subjected to statistical analysis. Mc Nemer test and t test was done and the results obtained are discussed below.

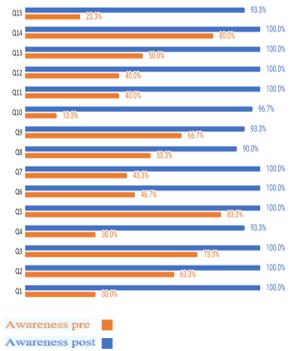
Table 1 shows the pre and post values significance for each question.

	Pre		Post		Mc Nemer		
					test	р	
	Freq	%	Freq	%	value	value	
Q1	9	30.0%	30	100.0%	5.68	0.000	HS
Q2	19	63.3%	30	100.0%	3.67	0.001	HS
Q3	22	73.3%	30	100.0%	3.04	0.004	HS
Q4	9	30.0%	28	93.3%	5.05	0.000	HS
Q5	25	83.3%	30	100.0%	2.34	0.023	Sig
Q6	14	46.7%	30	100.0%	4.67	0.000	HS
Q7	13	43.3%	30	100.0%	4.87	0.000	HS
Q8	16	53.3%	27	90.0%	3.15	0.003	HS
Q9	20	66.7%	28	93.3%	2.58	0.012	Sig
Q10	4	13.3%	29	96.7%	6.49	0.000	HS
Q11	12	40.0%	30	100.0%	5.07	0.000	HS
Q12	12	40.0%	30	100.0%	5.07	0.000	HS
Q13	15	50.0%	30	100.0%	4.47	0.000	HS
Q14	24	80.0%	30	100.0%	2.58	0.012	Sig
Q15	7	23.3%	28	93.3%	5.50	0.000	HS

HS – High significant Sig – Significant

From the table 1 the result indicates that there are significant variations in Q5, Q9, Q14 and high significant variation for rest of the 12 questions

Figure 1 Shows the percentage value before and after the awareness programme.



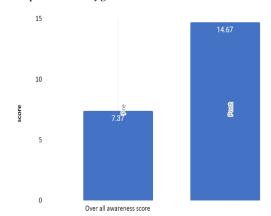
From the Figure 1 it can be seen that most of the participants had an average vocal hygiene awareness level during the pre-test. According to the percentage data, there were 7 questions out of 15 with scores obtained above 50% (50-100) and 8 questions with scores obtained below 50% (40-0) during the pre-test. And the results suggest post- test awareness level was considerably high (above 90%) for each of the participant

Table 2 shows the overall mean, standard deviation, t value and p value score

Overa	ll awa	reness sc				
	N	Mean	Std. Deviation	t value	p value	
Pre	30	7.37	2.06	18.863	0.000	HS
Post	30	14.67	0.55	10.003	0.000	пъ

From table 2 it can be inferred that there is a high significant difference pre and post awareness programme with a p value 0.000

Figure 2 shows the overall percentage score of pre and post vocal hygiene awareness.



Result from the above graph indicate that 7.37 percent awareness was present before the test and it has increased to 14.67 percent after the vocal hygiene awareness programme.

DISCUSSION

During the pre-vocal hygiene programme lack of awareness among street vendors was noticed. Due to the lack of awareness, measures taken for vocal hygiene is less and leads to major voice problem. The measures that are taken are the foremost requirement to increase the awareness. However, after the vocal hygiene programme, the predominant knowledge on

vocal awareness seems to be high. Hence, street vendors were able to take right measures for vocal hygiene. While discussing about the following vocal hygiene programme with street vendors, the virtue on the awareness programme was highly reassured for street vendors. The SLP acts as a counter part as they have efficient knowledge regarding vocal hygiene.

CONCLUSION

The design of our study was to compare vocal hygiene in street vendors before and after providing awareness. Based on the result there was high variation in significance before and after educating with awareness. This explains that awareness plays an important role in vocal hygiene.

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