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ORIGINAL ARTICLE

Awareness of Vocal Hygiene Education among Government Secondary School Teachers

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ABSTRACT

Background: The impact of voice disorders in professionals have a negative effect on the quality of life of those who suffer from them. Voice problems negatively affects their job performance. There is lack of awareness of voice disorders as a work-related disease in most common professionals but voice disorders have been accepted as occupational disorders in some other countries and health care and occupational safety for professional voice users are poor.

Objectives: The objective of study was to find out the awareness of vocal hygiene education among Government teacher.

Methodology: A cross sectional survey was conducted among the secondary school teachers of Islamabad. A sample of 100 female secondary school teachers was selected from the Government school of Islamabad. The participants were asked to rate their responses on a three point Likert rating scale. The version 16 was used to analyze the data. Graphical presentation and table were used to describe frequency, percentage and correlation of variables.

Results: The results showed that the awareness about vocal hygiene was 93.5% among the secondary school teachers. Awareness about the voice disorders is 80.2% but only 58% seek the treatment for voice disorders.

Conclusion: This study concluded that secondary school teachers were aware of the vocal hygiene but did not follow the protocol for management of voice problem. It was due to lack of time for their personal care due to general life stressor like family, socioeconomic status

Key Words: Vocal Hygiene, Voice Disorders, Daily Life Stressors, Teachers

INTRODUCTION

In some occupations voice is the primary tool of trade. Voice professionals often use their voice more intensively than the normal population, and are at high risk for work-related voice disorder. Most of the professions involve use of voice for their trade. The intensive use of voice may be the risk for work related voice problem. Number of professionals, including singers, telemarketers and teachers use their voice extensively. The large number of studies showed that the voice is used for trade in most of the professions [1-5].

Where voice is used as occupational tool, voice disorder are common in those professions. Voice disorders affect the quality of life as well as cause burden on healthcare expenses [6-9]. Voice disorder affects the job performance and 20% of teachers reported the voice problem due to which they missed their workday [8, 10, 11, 12]. Voice disorder becomes as occupational disorders which is an important issue in profession where there is high demand of vocal performance [13, 18, 19]. The primary risk factors for voice disorders are prolonged voice use and factors in the working environment that can have an effect on voice production [13,14,20].

As to voice disorders, teachers have been reported to be statistically over represented in treatment-seeking populations [5, 35]. Persons whose occupations places high demands on the voice might seek help for their voice problems more often than others [14, 35]. However, teachers are not necessarily very active in looking for help.Studies show that only a small percentage of teachers who report voice problems seek professional help [7, 11]. The reasons for this have not been explored but practical and economic causes have been suggested [11, 12]. Teachers might also be ignorant about where to get help, or perhaps help is not easily available. The results of a study by Roy, Merrill, Thibeault, Parsa, et al. (2004) [7] showed that about 14% of the teachers who reported past voice disorders had sought

professional help for their disorder. In some studies only about 1% of the teachers who reported voice problems had sought professional help [10,11].

Teachers might think that their voice problems are a normal inconvenience in their occupation [10, 11], which may account for why they do not seek help at an early stage. Another reason for ignoring to seek early help may be that persons adapt to such adverse vocal symptoms as hoarseness [38]. Voice disorders may also be difficult to diagnose.

The present study is designed to evaluate the vocal hygiene education among teachers. Teachers are more prone to have voice problems because of their work Teachers are at high risk of having voice problems and they have a less the awareness of vocal hygiene education. Teachers are a quite a big part of our population. This study will contribute the knowledge of vocal hygiene education which further helpful development to develop preventive adoptive behavior to reduce the impact or severity of problem.

METHODOLOGY

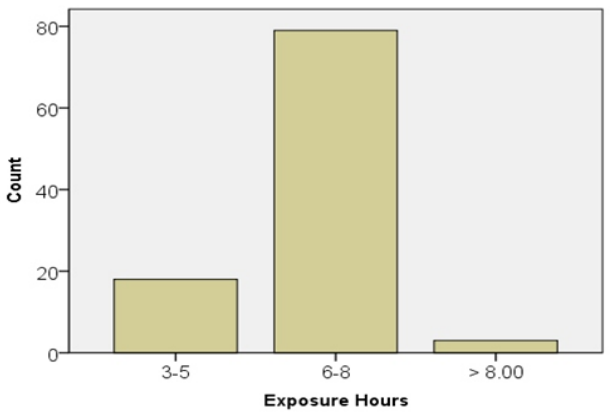
Study design was cross sectional survey. This study was conducted among the secondary school teachers of Islamabad schools. The questionnaire was filled out by the government secondary school teacher's .The Performa's was distributed among them in one setting and was collected after two days .Three Islamabad secondary schools were targeted for sample collection. The duration of this study was six months. The sample size of the study was 100 female Government secondary school teachers of Islamabad. Only Female teachers within the age bracket of 25-40 years having work experience of 5 to 10 years were included in study, whereas, the patients having any medical condition were excluded from study.

The consent form for the ethical purposes, history form for the eligibility criteria for the sample was filled out by the teachers. Awareness about the vocal care was measured by using the questionnaire inquiring about the self assessment of vocal care, vocal capabilities and general life style or stress. The participants were asked to rate their responses on a three point rating scale. Increase in number was shown the severity of responses. Treatment seeking behavior was interrogated with yes or no questions. The SPSS version 16 was used to analyze the data. Graphical presentation and table were used to describe frequency, percentage and correlation of variables.

RESULTS

The survey was designed to investigate the awareness of vocal hygiene education among teachers .A sample of 100 female teachers were selected from government school teachers Islamabad. A questionnaire was distributed along with its three parts of self assessment of vocal care, vocal capability, or stress or general life style. The participants were asked to rate their responses on a five point rating scale .Increase in number will show the severity of responses. Treatment seeking behavior was interrogated with yes or no questions. Following results are described under their headings.

Figure I: Distribution of Average Daily Exposure



The exposure hour is an ordinal variable with three categories. The most common is 6-8 hours exposure among the school teachers; followed by 3-5 hours. The frequency distribution for exposure of hours is given in Table I.

The table 1 showed the comparison of responses regarding the questions asked on vocal hygiene. The table showed the distribution of responses (in percentages) to each question regarding the vocal hygiene among school teachers. The overall awareness vocal hygiene is 61.6%. 26.5% don't

have any voice problem and 6.5% are unaware of vocal hygiene.

Table I: Awareness of Vocal Hygiene among Government Secondary School Teachers

S#	Statement	Agree	Disagree	Don't Know
1.	My voice tires or fatigue	93	5	2
2.	Take sips of water during lecture	28	72	0
3.	Do you speak in unnatural pitch	36	60	4
4.	Resting the voice	28	64	8
5.	Use gestures to attract attention	66	31	3
6.	Keep the head and neck relaxed	32	34	4
7.	Background noises have a impact on voice quality	85	10	5
8.	Speaking over a long distance without amplification	85	15	0
9.	The dust in my working environment has impact on voice quality	83	15	2
10.	Speak in a strained or forced way at class room	80	13	7
	Total Percentage (%)	**61.6**	**31.9**	**6.5**

The table 2 shows the comparison of responses regarding the questions asked on voice problems. The table shows the distribution of responses (in percentages) to each question regarding the voice problems among school teachers. The overall awareness of having Voice Problems among Government Secondary School Teachers is 33.5%. 46.7% don't have aware that they don't have any voice problem and 19.8% are unaware of voice problem

Table II: Awareness of Voice Problems among Government Secondary School Teachers

S#	Statement	Disagree	Don't know	Agree
1.	My voice tires or fatigue	13	21	66
2.	My voice is hoarse,croacky etc	29	48	23
3.	My voice disappears completely	88	6	6
4.	My voice does not project as needed	68	24	8
5.	I have a difficulty in breath control	71	11	18
6.	My throats feels dry	36	13	51
7.	I feel tickling in my throat	26	22	52
8.	I feel I have a lump in my throat	77	6	17
9.	I feel pain in my throat	48	24	28
10.	I need to clear my throat and cough	11	23	66
	Total Percentage (%)	**46.7**	**19.8**	**33.5**

In figure II, the graph of self assessment is presented. There are three categories of severity as mild, mold and severe. From the graph it is clear that around 50% teachers considered that severity of voice problems faced by them is mild. Similarly, 40 percent consider they have moderate level of problems. Finally, 10% of the teachers consider their problems to be severe. The responses in percentages are given in the figures III representing bar charts.

Figure II: Bar chart representation of self assessment of having a voice problem

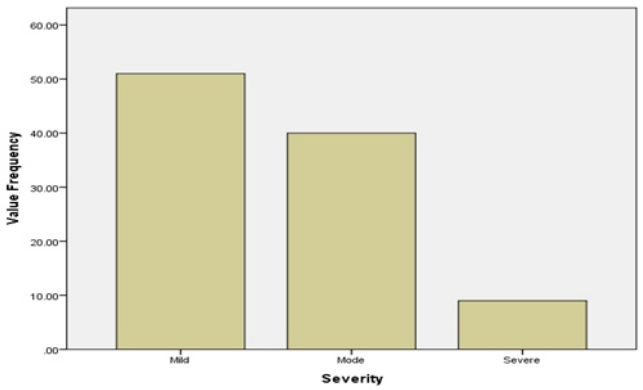
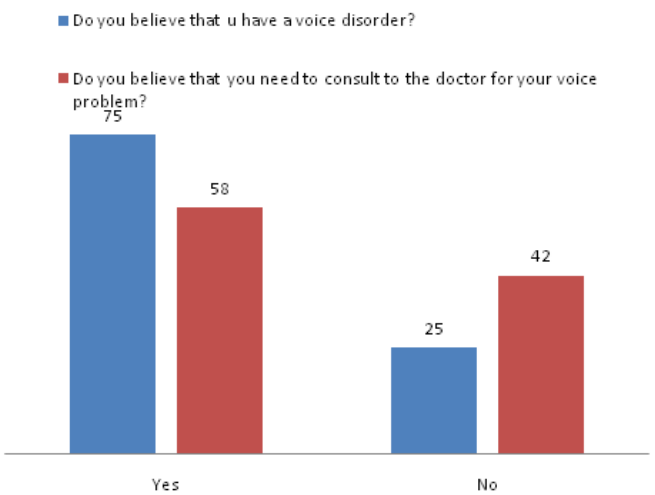


Figure III: Bar Chart for awareness of voice disorders among teachers



The dichotomous variables are used to store the responses for the above questions. 75% of the participants considered that they have voice disorder and 58% consider that they need to consult the doctor.

DISCUSSION

It is widely acknowledged that importance of voice is very important in teaching profession and that teaching can put an immense strain on the voice of teachers. With care the voice can be used to its best advantage, and vocal abuse and strain minimized. elementary school teachers who received weekly lessons on vocal hygiene and voice use during one year of their studies reported significantly fewer vocal symptoms 2 - 4 years after they had begun teaching compared to a group of teachers who did not receive such training [(11)].

The present study was designed to evaluate the awareness of vocal hygiene among the primary school teachers and their treatment seeking behavior. In this study result showed that 64.6% primary school teacher have awareness regarding vocal hygiene. 93% teachers were aware that they have vocal fatigue which affects their performance. 23% teacher did not take sip of water during their lectures but aware of that if they drink water during their lectures their vocal capability enhances. 96% teachers were aware that their pitch is normal or any deviation from normal like high pitch tone or low pitch tone. 28% teachers give rest to their voice but 68% did not give rest their voice, although they know that vocal fatigue can lead to different voice problem. This study also wants to evaluate the treatment seeking behavior among teachers and .result showed that 75% of teacher population was aware that they have voice problem and 25% who have voice problem but do not consider their voice related problem as disorder. But 58% population among the teacher who were aware that they have voice disorder should consult with doctor or speech therapist. 42% teacher did not consult with doctor or speech therapist for their problem. 51% of teachers consider their voice problem as mild and 40% consider their condition at moderate level and 9% think they have severe voice problem. This outcome was in high contrast with the finding of Roy et al [(4)] and Russell et al [(5)] who reported that 14.3% of the American and 32.7% of the Australian teacher consulted a doctor, respectively.

Roy et al [(4)] assumed that teachers were reluctant to take time off from work for medical appointments, or that they fear physician advice to reduce voice use or change occupations general standard practice. Studies show that only a small percentage of teachers who report voice problems seek professional help [(7, 11)]. Similarly with the present research teacher are aware of their vocal problem but do not seek help. In this study, there was no association between awareness regarding vocal hygiene and the prevention of voice complaint. It was seen in the study teachers were aware of vocal hygiene, but did not implement this awareness for prevention of vocal problems. Unfortunately, vocal care has not been taken up in the educational program. Based on this study, we argue for the implementation of a course about the physiology of the voice and vocal care in all teacher programs.

CONCLUSION

It is concluded from the result of the study that teachers were aware of the vocal hygiene but did not follow the protocol for management of voice problem. Similarly teachers are aware of voice problem and some seek medical help, it was due to lack of time for their personal care due to general life stressor like family, socioeconomic status etc. Women compile the largest group of the teachers, which represents a non-negligible portion of the working population.

RECOMMENDATIONS

On the basis of this study following recommendations can be made; i.) Vocal care should be a part of teacher training programs, ii.) Every school has a dispensary and iii.) Teacher should go for follow ups and there is Need to consult to speech language therapist for vocal care.

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