

Comparison of Vocal Hygiene Awareness in Pastors and Priests

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I. INTRODUCTION

The vocalization in the larynx is emitted through the mouth, whether it is speech or singing is known as voice. Voice box also called as larynx which is made up of cartilages, muscles and mucous membrane. The myo-elastic or aerodynamic theory has provided an explanation for how voice is physically produced. The two bands of smooth muscle tissue known as the vocal folds, which are situated opposite one another in the larynx, vibrate to create the sound of our voice. Between the tip of the tongue and the top of the trachea, serves as the entrance to the lungs, where the larynx is situated. when the adducting muscles bring the vocal cords into the closed posture of phonation, a coordinated expiratory effort begins by transforming the sound produced by the vocal tract into speech and song. The mouth, nose, and throat serve as resonating cavities to modulate the sound waves that are created by the vibrations. Vocal cords also help to close voice box when we swallow by preventing from inhaling food or liquid. The size and structure of vocal folds and resonating cavities impact the quality of our voice including its pitch, volume, and tone. Hence voice varies from person to person.

Humans have evolved a special extra function that allows them to express their thoughts and feelings. The voice which is necessary for the line of work is referred to as a professional or occupational voice user.

Teachers, priests, salespeople, telemarketers, receptionists, and other professionals use speech during their jobs. At the same time singers, performers and broadcasters use their voice professionally.

Vocal folds are made up of fragile tissues. Vocal folds vibrate or join together as we use our voice to create sound. The vocal folds can be damaged if they come together forcefully or harshly, but they can function normally if they vibrate easily and gently.

Any disturbance that adversely affects the synchronization or competency of vocal fold vibration would probably alter the voice signal and quality of sound generated. Anything that stresses or destroys the vocal cords is considered as vocal abuse.

Patients who complain of vocal fatigue, linked with voice use, should be especially suspicious of voice abuse or misuse. Speaking in noisy environments, cheerleading, post-performance parties, preaching, excessive screaming, forced vocalizations, performing hard glottal attack, bad vocal and practice techniques can create hyperfunction of the vocal folds and can also cause abusive voice.

A person whose profession, in whole or in part, depends on the use of voice is referred to as a professional voice user (PVU). For such professional, maintaining a high level of vocal consistency and endurance is essential.

Vocal fold lesions are more common in PVU's than in general population. As a result, people will be continuously subjected to increased phono trauma, inefficient voice use, and excessive vocal loading.

It is a well-known truth that having vocal fold lesions affects everyone's voice negatively. Therefore, Professional voice users with vocal fold lesions have a better voice quality after medical or surgical treatment of these lesions.

Vocal hygiene is a daily regimen of healthy behaviors to keep our vocal folds in good condition. Vocal hygiene or indirect therapy is specifically a crucial part of a comprehensive vocal rehabilitation program because it typically addresses both speech (loudness and quantity) and nonspeech factors (throat clearing, yelling, crying, laryngopharyngeal reflux, allergies, irritants, and dehydration).

Vocal hygiene is viewed as a therapeutic approach that involves patient-centered behavioral treatment, habit modification, and the use of guidelines to promote improved vocal health. A vocal hygiene will help to avoid bad vocal habits and circumstances that put too much strain on the voice. Behlau and Oliveira (2009) did a study on vocal hygiene among voice professionals and concluded that Vocal hygiene has produced modest but effective outcomes when used as the sole method of treatment for voice issues. Thus, the current study aims to compare the vocal hygiene awareness among pastors and priests which helps to create healthy behaviors to preserve voices.

II. REVIEW OF LITERATURE

The vocal tract of a human being can be used to produce a variety of sounds, including talking, singing, laughing, sobbing, screaming, shouting, humming, and yelling. The vocal folds (vocal cords) serve as the main sound source for the frequency of the human voice, which is a distinct aspect of human sound production. (Other sound generation processes from the same general region of the body include the creation of unvoiced consonants, clicks, whistling, and whispering).

In day-to-day life, voice plays a major role in human communication. Additionally, voice reveals a speaker's identity through revealing their social standing, character, attributes, and emotional state. Mechanically, voice production involves the interaction within the glottis and its control by laryngeal muscle activation. Pitch, volume, and voice quality need to be controlled and adjusted for voice communication. Activating the laryngeal muscles stiffens, deforms, or repositions the vocal folds, controlling their geometry, mechanical properties, and glottal configuration. This is how such adjustments are made physiologically. Thus, vocal tract resonator amplifies and alters voice sound.

The term "occupational or professional voice user" refers to anyone who uses their voice for their line of work. Teachers, priests, pastors, salespeople, lawyers who practice in court, telemarketers, receptionists, and other professionals all use their voice for line of work. Singers, actresses, and broadcasters also utilize their voices professionally. Tom&Kumaraswamy (2016) investigated on Vocal Hygiene Awareness Program in Priests and came to conclusion that priests are aware about the voice problems after the lecture and demonstration. And, also priests were less aware about the voice problem prior to vocal hygiene lecture.

Voice disorders are more likely to occur in those who use their voices professionally or for work. Additionally, the effects of even a minor voice disorder can have a great impact on the user. In day-to-day life, voice plays a major role. Additionally, voice reveals a speaker's identity through revealing their social standing, character attributes, and emotional state.

Professional voice users rely on a harmonic quality of voice, the integrity of the structures involved in phonation, and ideal working conditions for proper and effective interpersonal interactions. The maintenance of voice quality and defense against aggressive agents are crucial components of their overall health and quality of life.

Due to their hectic schedules and high vocal demands at work, many of these professionals may gradually acquire some form of dysphonia if we do not care of the vocal health. There is a variety of documented factors that can influence or predispose the development of vocal alterations including physical, social, environmental, organizational, and psychological. Dysphonia may also be favored by improper vocal use, general health issues, anthropometric variables, and personal susceptibility.

Devadas, Jose&Gunjawate(2016) investigated on prevalence and influencing risk factors of voice problems in priests in Kerala. Their findings suggested that Marthoma priests were found to have high career (47.8%) and year prevalence (25.2%) of voice problems with 17.8% reporting frequent voice problems during their career. Asthma, allergy and frequent throat clearing behaviour were found to have significant association with priests reporting frequent voice problems.

Koufmann&Issacson (1991) evolved a classification of vocal professional based on their voice use and risk as follows:

Level 1: Include the most skilled vocalists, such as actors and singers, can have a significant negative impact on these performers' career even for a minor vocal issue.

Level 2: Include the professionals who use their voices professionally and for whom even a mild vocal challenge would prohibit them from performing their jobs effectively. This level of voice users includes clergy, lecturers/teachers, public speakers for politicians, and telephone operators.

Level 3: Includes professionals such as lawyers. Only severe dysphonia poses a threat to the performance of their jobs. Mild to moderate vocal issues are not a barrier for them as they are non-professionals.

Level 4: Non vocal non-professionals include laborers and clerks. The non- professionals are not impeded from doing his or her work when they experience any kind of dysphonia.

Voice disorders can be categorized into organic and functional. Functional vocal issues include overuse, abuse, or misuse of the voice. Physiologic changes brought on by exposure to the environment (allergies), hormonal changes, or other systemic disorders can negatively impact the voice, such as Gastro esophageal reflux disorder (GERD), acute infectious laryngitis, and benign vocal fold masses, might also be the reason. Neurogenic or organic voice disorders include vocal tremor, spasmodic dysphonia, and vocal fold paralysis. These organic voice disorders are caused by issues with the larynx's innervation by the central or peripheral neural system.

Vocal overuse or abuse can cause laryngeal disorder. Straining or spraining cause injury to the vocal folds. It also results in developing laryngeal nodules. Functional voice disorder is easier to identify than other psychosomatic disorders. Both organic and functional voice disorders can affect vocal parameters such as pitch, quality and loudness. When our vocal folds are forced to come together (adduct) too forcefully, it leads to

hyperfunction. This will cause laryngeal tissue tension, maladaptive behavior, and changes in laryngeal musculature if it is habitual or repetitive.

Vocal hygiene refers to practices that help to maintain a healthy, powerful voice throughout life. Vocal hygiene can help to keep a powerful voice into 60s, 70s, and beyond, just as proper oral hygiene can help safeguard our teeth as we age. Speech therapists can assist in the rehabilitation of a broken voice by teaching good vocal practices. Some of the vocal practices include avoiding throat clearing, whispering, Grunting/noisy vocalization, yelling/screaming, excessive talking, spicy food, maintaining proper hydration, Avoiding Smoking and Alcohol consumption.

Western studies

Ilomaaki, Maki & Laukkanen (2005) studied on vocal symptoms among teachers with and without voice education and concluded that male teachers appear to be more protected against vocal issues by speech therapy than female teachers. Short-term training resulted in increase of vocal symptom awareness, which is beneficial for voice protection.

Wochenshr & Boltezar (2009) conducted a study on prevalence and risk factors for voice problem among priests. The results revealed that 85.6% of priests reported having voice problem during their career and 15.9% of them experiencing frequent voice problems.

Roy, Merrill & Smith (2009) investigated on voice disorders in general population. The findings of this extensive epidemiologic study offer important knowledge about the voice abnormalities, risk factors for voice disorders, and the functional effects of voice issues on the general population.

Chen, Chian & Chung (2010) did a study on risk factors and voice problems for teachers. The result showed that the development of vocal issues in teachers may be significantly influenced by loud voice.

Paniagua, Perez & Alonso (2020) studied on an acoustic signal-based preventive program for university lecturers' vocal health. They concluded that it is possible to categorize lecturers into different groups based on characteristics retrieved from speech recording and can develop preventive voice care program for lecturers.

Indian Studies

Bhominathan, Rajendran & Nagarajan (2013) did a study on vocal abuse and vocal hygiene practices among different level of professional voice users in India. The results showed that that Politicians and business people are not aware to treat voice problems when they first appeared. Speech and voice pathologists would be able to make strategic plans to prevent voice issues thanks to the study's findings.

Devadas, Jose & Gunjawate (2016) investigated on prevalence and influencing risk factors of voice problems in priests in Kerala. The results suggested that Marthoma priests were found to have high career (47.8%) and year prevalence (25.2%) of voice problems with 17.8% reporting frequent voice problems during their career. Asthma, allergy and frequent throat clearing behaviour were found to have significant association with priests reporting frequent voice problems.

Tom & Kumaraswamy (2016) conducted a study on Vocal Hygiene Awareness Program in Priests. The result revealed that priests are aware about the voice problems after the lecture and demonstration. And, also priests were less aware about the voice problem prior to vocal hygiene lecture.

Natour, Darawsheh & Bashiti (2018) did a study on VHI scores and Acoustic features in street vendors as occupational voice users. The findings suggested that street vendors have voice impairment and great impact on vocal quality. It is important to conduct more research into the impact of variables like work hours and educational attainment on voice quality.

Anagha & Gupta (2021) investigated on Aerodynamic measures of MPD and S/Z ratio in Malayalam speaking politicians and theyyam artists. They concluded that there was highly significant difference in individual voice characteristics between healthy, normal and politicians followed by theyyam artists and no significant difference between theyyam artist and politicians followed by healthy, normal adults.

NEED FOR THE STUDY

Professional voice users rely on a harmonic quality of voice, the integrity of the structures involved in phonation, and ideal working conditions for proper and effective interpersonal interactions. The maintenance of voice quality are crucial components of their overall health and quality of life. Koufman & Issacson (1991) evolved classification of vocal professional voice use and risk. Level 2 includes PVU's include lecturers, clergy, politicians in which a moderate voice difficulty would prevent adequate job performances. Professional voice users such as Priests and Pastors duties include preaching and conducting worship services. They also interpret biblical scripture for the congregation, provide care and counselling to church members and assist them in crisis situations. Many of these professions may gradually develop voice problems if they do not take care of vocal health due to busy schedules and high vocal demands at work. The development of vocal changes can be influenced by or predisposed to by a number of established factors, including social, physical, environmental and psychological. To summarize from the above literature, limited or few studies compared the knowledge of

vocal hygiene among priests and pastors in Kerala. Hence the current study aims to compare the awareness of vocal hygiene in pastors and priests. The results of the current study helped professional voice users to keep their voices consistent and clear throughout the day. Therefore, it is essential for the speech-language pathologist to prioritise vocal health and optimal vocal effectiveness to treat voice disorders and to advocate vocal health.

III. METHOD

AIM:

The aim of the study is to compare vocal hygiene awareness between pastors and priests in Kottayam district, Kerala.

The current study was carried out in three phases;

1. Development of questionnaire and validated by SLP's to evaluate the comparison of vocal hygiene awareness among the participants.
2. Administration of developed questionnaire followed by thorough explanation of voice anatomy and physiology, causes of voice problem and vocal hygiene tips with demonstration.
3. Quick re-administration of the survey following the vocal hygiene programme.

DEVELOPMENT OF QUESTIONNAIRE:

A questionnaire consist of 30 closed ended questions was prepared. The questionnaire was divided into following sections.

- a. Section A- Questions related to Anatomy and physiology of voice production mechanism.
- b. Section B- Questions related to causes of voice disorders.
- c. Section C- Questions related to vocal hygiene tips.

INCLUSION CRITERIA:

- Priests and Pastors should be native speakers of Malayalam.
- The age of participants should be ranged from 40-60 years.

EXCLUSION CRITERIA:

- They should not have any speech, language, cognitive and neurological issues.
- Participants should not be below age of 40 years and above age of 60 years.

PROCEDURE:

15 pastors and 15 priests participated in the study. The participants were required to answer pre-test and post-test questionnaires following the demonstration programme. The objective was to Assess the knowledge of many areas of voice and voice production system. The pre-test questionnaire was given for evaluating prior information of vocal hygiene awareness. The pastors and priests took 10-15 mins to complete questionnaire. A video was shown after the self-administration of pre-test questionnaire. The effectiveness of the vocal hygiene program was evaluated based on the participants' ability to respond to the same question prior to and following voice hygiene awareness.

SCORING:

Pre-test and post-test responses from 30 participants were individually graded. For correct answer score of 1 was given and wrong response of 0 was given. The obtained scores were tabulated and statistically analysed for pre and post-test.

STATISTICS ANALYSIS:

The obtained data was statistically analysed by using the method McNemertest.

IV. RESULTS AND DISCUSSION

The present study aims to compare the effectiveness of vocal hygiene awareness among pastors and priests in Kerala. The scores obtained were subjected to statistical analysis and results obtained are discussed below.

Vocal Hygiene Awareness in Pastors and Priests

Table 4.1:

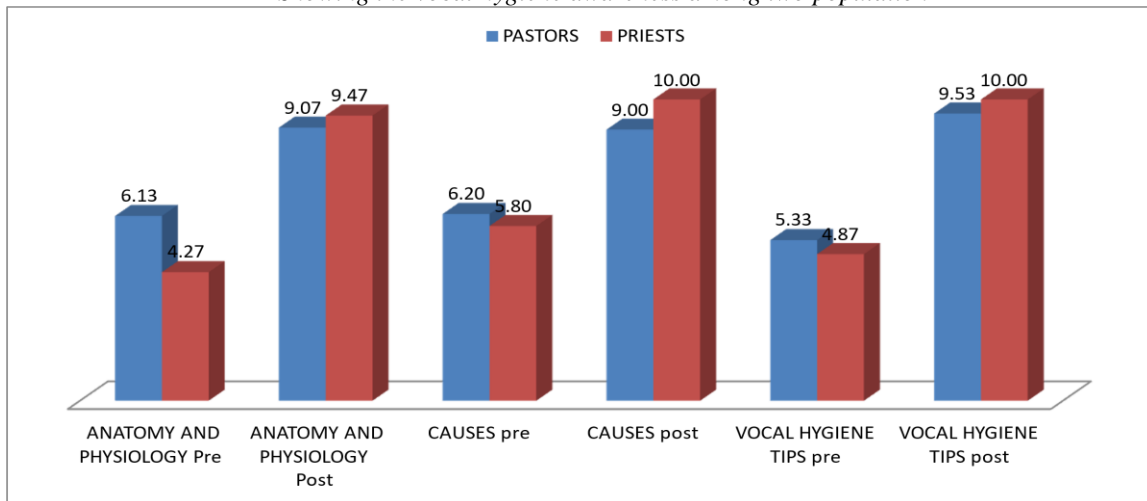
Showing the Vocal hygiene awareness among pastors and priests.

*Sig -Significance, NS- No significance

		Mean	Std. Deviation	t test p value	Significance
ANATOMY AND PHYSIOLOGY Pre	PASTORS	6.13	2.416	0.044	sig
	PRIESTS	4.27	2.434		
ANATOMY AND PHYSIOLOGY Post	PASTORS	9.07	0.961	0.271	NS
	PRIESTS	9.47	0.990		
CAUSES pre	PASTORS	6.20	2.007	0.543	NS
	PRIESTS	5.80	1.521		
CAUSES post	PASTORS	9.00	0.845	0.000	sig
	PRIESTS	10.00	0.000		
VOCAL HYGIENE TIPS pre	PASTORS	5.33	1.047	0.288	NS
	PRIESTS	4.87	1.302		
VOCAL HYGIENE TIPS post	PASTORS	9.53	0.990	0.079	NS
	PRIESTS	10.00	0.000		
Overall score Pre	PASTORS	17.67	3.478	0.042	sig
	PRIESTS	14.93	3.535		
Overall score Post	PASTORS	27.60	2.063	0.004	sig
	PRIESTS	29.47	0.990		

Fig 4.1:

Showing the vocal hygiene awareness among two population



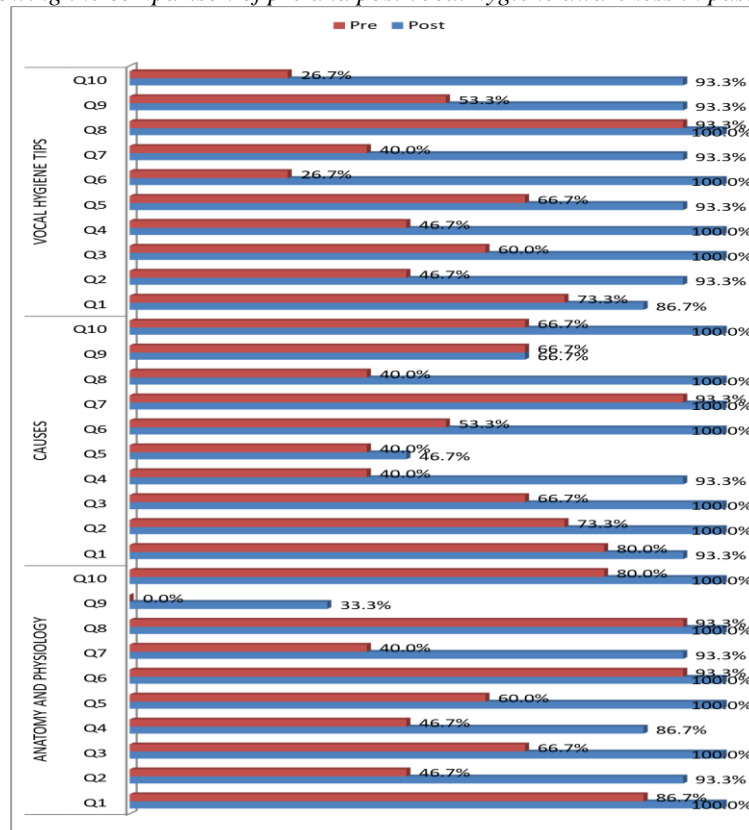
Vocal Hygiene awareness in Pastors

Table 4.2:
Showing the comparison of pre and post vocal hygiene awareness in pastors

		Group PASTORS						McNemer test p	Significance
		Yes(1)							
		Pre		Post					
		Count	Row N %	Count	Row N %				
Parameter	ANATOMY AND PHYSIOLOGY	Q1	13	86.7%	15	100.0%	0.154	NS	
		Q2	7	46.7%	14	93.3%	0.009	sig	
		Q3	10	66.7%	15	100.0%	0.021	sig	
		Q4	7	46.7%	13	86.7%	0.028	sig	
		Q5	9	60.0%	15	100.0%	0.011	sig	
		Q6	14	93.3%	15	100.0%	0.318	NS	
		Q7	6	40.0%	14	93.3%	0.004	sig	
		Q8	14	93.3%	15	100.0%	0.318	NS	
		Q9	0	0.0%	5	33.3%	0.021	sig	
		Q10	12	80.0%	15	100.0%	0.079	NS	
	CAUSES	Q1	12	80.0%	14	93.3%	0.292	NS	
		Q2	11	73.3%	15	100.0%	0.040	sig	
		Q3	10	66.7%	15	100.0%	0.021	sig	
		Q4	6	40.0%	14	93.3%	0.004	sig	
		Q5	6	40.0%	7	46.7%	0.715	NS	
		Q6	8	53.3%	15	100.0%	0.005	sig	
		Q7	14	93.3%	15	100.0%	0.318	NS	
		Q8	6	40.0%	15	100.0%	0.001	sig	
		Q9	10	66.7%	10	66.7%	1.000	NS	
		Q10	10	66.7%	15	100.0%	0.021	sig	
	VOCAL HYGIENE TIPS	Q1	11	73.3%	13	86.7%	0.369	NS	
		Q2	7	46.7%	14	93.3%	0.009	sig	
		Q3	9	60.0%	15	100.0%	0.011	sig	
		Q4	7	46.7%	15	100.0%	0.003	sig	
		Q5	10	66.7%	14	93.3%	0.079	NS	
		Q6	4	26.7%	15	100.0%	0.000	sig	
		Q7	6	40.0%	14	93.3%	0.004	sig	
		Q8	14	93.3%	15	100.0%	0.318	NS	
		Q9	8	53.3%	14	93.3%	0.020	sig	
		Q10	4	26.7%	14	93.3%	0.001	sig	

*Sig- Significance, NS- No significance

Fig 4.2:
Showing the comparison of pre and post vocal hygiene awareness in pastors.



From Table 4.2 and figure 4.2 showing Pre and post awareness of vocal hygiene in pastors. The results revealed that significant differences is seen in 6 questions (q2,q3,q4,q5,q7,q9) related to anatomy and physiology of larynx, 6 questions (q2,q3,q4,q6,q8,q10) related to causes of voice disorders and 7 questions (q2,q3,q4,q6,q7,q9,q10) related to vocal hygiene tips.

Vocal hygiene awareness in priests

Table 4.3:
Showing the comparison of pre and post vocal hygiene awareness in priests

		Group PRIESTS				McNemer test p	Significance	
		Pre		Pre_Post				
		Count	Row N %	Count	Row N %			
Parameter	ANATOMY AND PHYSIOLOGY	Q1	4	26.7%	12	80.0%	0.007	Sig
		Q2	3	20.0%	14	93.3%	0.000	Sig
		Q3	2	13.3%	15	100.0%	0.000	Sig
		Q4	5	33.3%	13	86.7%	0.006	Sig
		Q5	8	53.3%	15	100.0%	0.005	Sig
		Q6	4	26.7%	15	100.0%	0.000	Sig
		Q7	11	73.3%	13	86.7%	0.369	NS
		Q8	10	66.7%	15	100.0%	0.021	Sig
		Q9	13	86.7%	15	100.0%	0.154	NS
		Q10	4	26.7%	15	100.0%	0.000	Sig
	CAUSES	Q1	12	80.0%	15	100.0%	0.079	NS
		Q2	10	66.7%	15	100.0%	0.021	Sig
		Q3	14	93.3%	15	100.0%	0.318	NS
		Q4	4	26.7%	15	100.0%	0.000	Sig
		Q5	0	0.0%	15	100.0%	0.000	Sig
		Q6	10	66.7%	15	100.0%	0.021	Sig

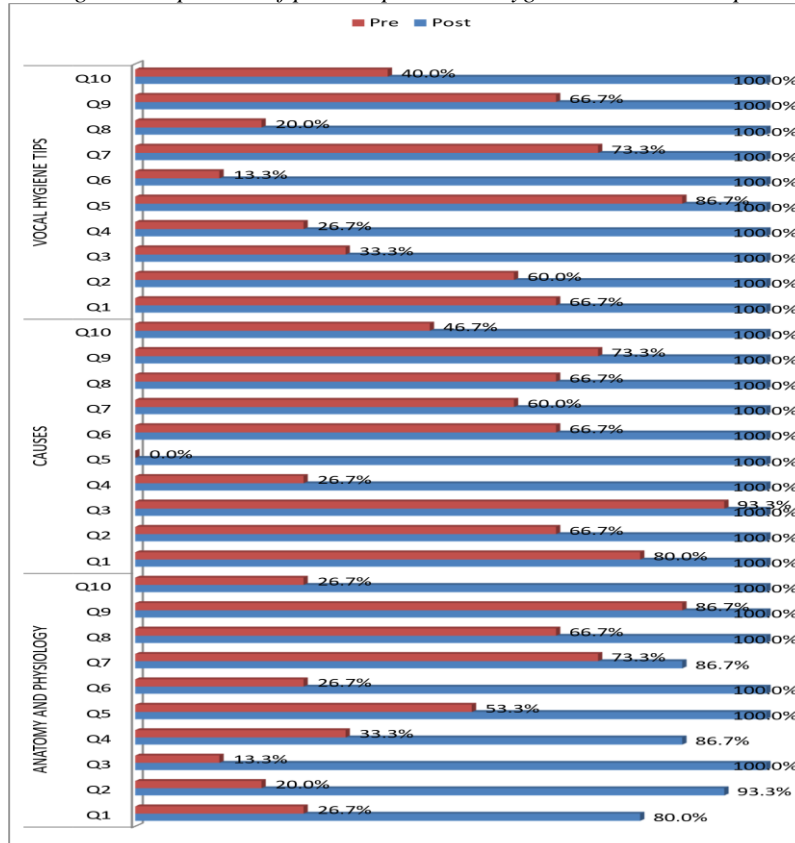
Comparison of Vocal Hygiene Awareness in Pastors and Priests

		Q7	9	60.0%	15	100.0%	0.011	Sig
		Q8	10	66.7%	15	100.0%	0.021	Sig
		Q9	11	73.3%	15	100.0%	0.040	Sig
		Q10	7	46.7%	15	100.0%	0.003	Sig
	VOCAL HYGIENE TIPS	Q1	10	66.7%	15	100.0%	0.021	Sig
		Q2	9	60.0%	15	100.0%	0.011	Sig
		Q3	5	33.3%	15	100.0%	0.001	Sig
		Q4	4	26.7%	15	100.0%	0.000	Sig
		Q5	13	86.7%	15	100.0%	0.154	NS
		Q6	2	13.3%	15	100.0%	0.000	Sig
		Q7	11	73.3%	15	100.0%	0.040	Sig
		Q8	3	20.0%	15	100.0%	0.000	Sig
		Q9	10	66.7%	15	100.0%	0.021	Sig
Q10		6	40.0%	15	100.0%	0.001	Sig	

*Sig – Significance, NS- No significance

Fig 4.3:

Showing the comparison of pre and post vocal hygiene awareness in priests.



From Table 4.3 and Figure 4.3 showing pre and post awareness of vocal hygiene in priests. The results revealed that significant difference is seen in 8 questions (q1,q2,q3,q4,q5,q6,q8,q10) related to anatomy and physiology, 8 questions (q2,q4,q5,q6,q7,q8,q9,q10) related to causes of voice disorders, 9 questions(q1,q2,q3,q4,q6,q7,q8,q9,q10) related to vocal hygiene tips.

Table 4.4:

Showing the comparison of pre and post awareness between pastors and priests.

		Mean	Std. Deviation	t test p value	Significance
ANATOMY AND PHYSIOLOGY Pre	PASTORS	6.13	2.416	0.044	Sig
	PRIESTS	4.27	2.434		
ANATOMY AND	PASTORS	9.07	0.961	0.271	NS

Comparison of Vocal Hygiene Awareness in Pastors and Priests

PHYSIOLOGY Post	PRIESTS	9.47	0.990		
CAUSES pre	PASTORS	6.20	2.007	0.543	NS
	PRIESTS	5.80	1.521		
CAUSES post	PASTORS	9.00	0.845	0.000	Sig
	PRIESTS	10.00	0.000		
VOCAL HYGIENE TIPS pre	PASTORS	5.33	1.047	0.288	NS
	PRIESTS	4.87	1.302		
VOCAL HYGIENE TIPS post	PASTORS	9.53	0.990	0.079	NS
	PRIESTS	10.00	0.000		
Ove all score Pre	PASTORS	17.67	3.478	0.042	Sig
	PRIESTS	14.93	3.535		
Overall score Post	PASTORS	27.60	2.063	0.004	Sig
	PRIESTS	29.47	0.990		

*Sig – Significance, NS- No significance

The pre-awareness between pastors and priests in section A (anatomy and physiology of larynx) showed significant differences whereas post- awareness showed no significant differences. The pre-awareness between pastors and priests in section B (causes of voice disorders) showed no significant differences whereas post awareness showed significant differences. The pre and post awareness in section C (vocal hygiene tips) among pastors and priests showed no significant differences.

Comparison of overall pre and post awareness of vocal hygiene program in pastors and priests

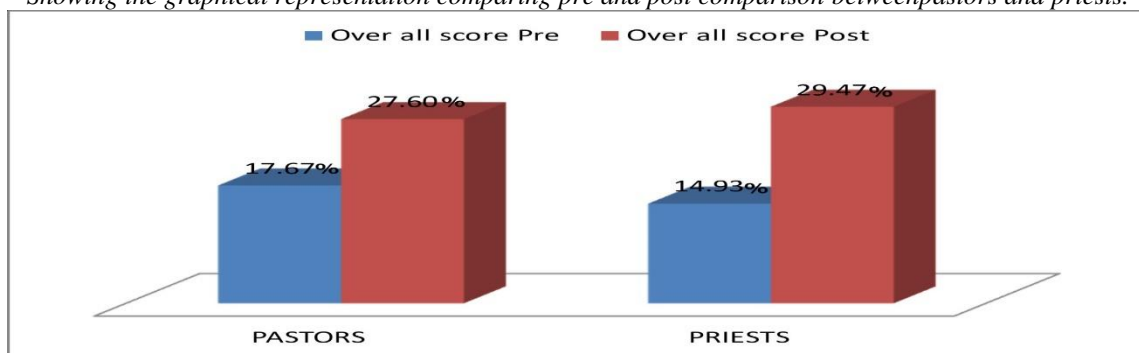
Table 4.5:

Showing the comparison of overall pre and post vocal hygiene awareness in pastors and priests

	PASTORS (%)	PRIESTS (%)
Overall score Pre	17.67	14.93
Overall score Post	27.60	29.47

Fig 4.4:

Showing the graphical representation comparing pre and post comparison between pastors and priests.



From the Table 4.5 and Fig 4.5 it can be concluded that overall pre and post scores of vocal hygiene awareness attained by pastors are 17.67% and 27.60% respectively whereas overall pre and post scores attained by priests are 14.93% and 29.47% respectively. Thus, it can be concluded that awareness of vocal hygiene is better in pastors than in priests.

V. DISCUSSION

The vocal hygiene awareness programme emphasises the significance of taking good care of the vocal fold tissue and suggests specific modifications in behaviour, routines, and lifestyle. It is an efficient way to

create awareness, to reduce vocal fold abuse, and to prevent the development and progression of voice disorders among professional voice User's.

The present study aimed to compare vocal hygiene awareness among priests and pastors in Kerala. Pre and post questionnaires were given to 30 participants including pastors and priests. The age of participants ranged from 30-50 years. Pre and post questionnaires were prepared and conducted for the participants by a speech language pathologist. After the awareness program, participants were asked to complete post-test questionnaire.

The results of the present study revealed that priests are less aware of vocal hygiene than pastors which is in accordance with the findings of study by Devadas, Jose and Gunjawate (2016) on prevalence and risk factors of voice problems in priests in Kerala. They concluded that Marthoma priests were found to have high frequent voice problems during their career. The results of the present study on pre and post awareness of vocal hygiene is also in agreement with the study by Tom and Kumaraswamy (2016) on priests in Kerala.

Professional voice users are at risk of acquiring voice disorders and complaints, hence the vocal health and voice management of these users gained interest in recent years. Thus, the current study and earlier investigations support the findings that priests were less aware of their issue prior to the vocal hygiene programme and that they became moderately aware after the vocal hygiene program. The findings made it abundantly evident that pre questionnaires showed no substantial differences and post results showed notable differences. Hence Vocal hygiene program helped to create healthy behaviours to preserve their voices. So, it can be concluded that pastors are more aware of vocal hygiene program compared to priests during pre and post questionnaires.

The outcome of current study was advantageous for Professional voice users to make their voices remain clear and stable throughout the day. Therefore, it is crucial for the SLP's to prioritise vocal health and optimal vocal effectiveness as to treat voice disorders and that has a responsibility in advocating for vocal health.

VI. SUMMARY AND CONCLUSION

Vocal hygiene awareness programmes mainly aim at vocal professionals about the vocal uses, abuses, and misuses of the voice as well as how to prevent voice issues. Vocal hygiene is a daily routine of healthy behaviours to preserve the condition of vocal folds. These include avoiding unsuitable vocal practices and circumstances that put the voice through undue strain, as well as common sense actions that promote effective voice production and general vocal health.

The present study aimed to compare the vocal hygiene awareness among pastors and priests. The participants selected were total of 30 participants which consist of 15 pastors and 15 priests who are native Malayalam speakers from Kerala district. The age of participants ranged from 30-50 years. The awareness program consists of three consecutive sections A, B and C which includes the Anatomy and physiology, causes of voice problem and Vocal hygiene tips. Pre and post questionnaires were prepared and administered prior to and after the awareness program for the participants by a speech language pathologist.

The objective was to assess the general knowledge of many areas of Vocal hygiene awareness. The priests and pastors took 15-20 mins to complete pre and post questionnaires. The awareness program lasted for 1 hour with power point and video presentations. The video and power point presentation consisted of the anatomy and physiology of voice production, causes of voice problems, voice abuses/misuse, Do's and Don'ts. The efficacy of answering was checked based on participants ability to answer the same questions before and after the awareness program. The findings made it abundantly evident that pre questionnaires showed no substantial differences and post results showed notable differences. So, it can be concluded that pastors are more aware of vocal hygiene program compared to priests during pre and post questionnaires. Hence the current Vocal hygiene program helped to create healthy behaviours to preserve their voices.

Limitations of the study:

- Limited sample size.
- The samples were exclusively collected from Kottayam district in Kerala.

Future directions:

- Sample size can be increased.
- The study can be administered in other districts in Kerala.
- The comparison of pre and post vocal hygiene awareness program in men and female pastors can be assessed.

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