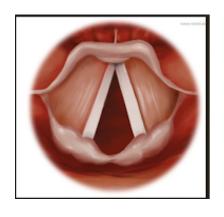
# INDIAN SPEECH-LANGUAGE AND HEARING ASSOCIATION



## VOCAL HYGIENE



EDUCATION & TRAINING MODULE FOR TEACHERS

Indian Speech Language & Hearing Association



## **VOCAL HYGIENE**

# EDUCATION & TRAINING MODULE FOR TEACHERS



**Module created for Public Dissemination** 

Prof. Prakash Boominathan &

Dr. Aishwarya Nallamuthu

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#### Under the title:

Vocal Hygiene: Education and Training Module for Teachers

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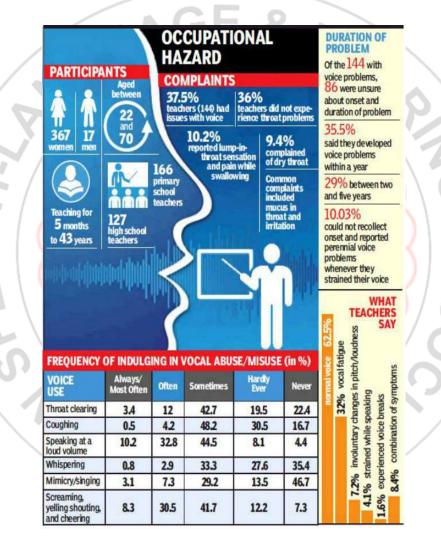
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#### Prologue:

Teachers rely heavily on their voices to effectively communicate, engage students, and manage classroom activities. However, the demands of teaching combined with environmental factors and lifestyle habits can put teachers at risk of developing voice problems. Recognizing the importance of vocal health, implementing preventive measures are essential to ensure that teachers can continue to perform their duties effectively without compromising their vocal well-being.



Infographics from Times of India, Pushpa Narayan / TNN / Updated: Sep 26, 2018, 06:03 IST, based on work of Sathyanaranyana, Boominathan & Nallamuthu - Journal of Voice

#### Read more at:

http://timesofindia.indiatimes.com/articleshow/65957772.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst

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#### **About the Module:**

The vocal hygiene module is designed to educate and equip teachers with the knowledge and strategies necessary to maintain optimal vocal health. This module covers various aspects of vocal hygiene, including understanding vocal health, recognizing symptoms of voice problems, implementing vocal hygiene tips, adopting healthy lifestyle practices, and seeking professional help when needed. By following the guidelines outlined in this module, teachers can protect their voices and enhance their vocal effectiveness in the classroom. The module can be used by any voice care professional (SLP, ENT surgeon) as a systematic guide to train teachers on vocal hygiene and its advantages. It can also be used by teachers as a self-education guide to understand the concept of vocal hygiene.

#### Objectives of the Module:

1 HONI

- Educate teachers about the importance of vocal health and the factors that can impact vocal function.
- Empower teachers to recognize early signs of voice problems and understand their implications for teaching effectiveness.
- Provide practical strategies and tips for maintaining vocal hygiene and preventing voice problems.
- 4. Promote healthy lifestyle habits that support vocal health and overall well-being.
- 5. Guide teachers on when to seek professional help for voice problems and how to access appropriate care.

#### **Module outline:**

The module consists of five concise sections aimed at empowering teachers with the knowledge and strategies to safeguard and promote vocal health.

Section		Content								
Understanding the		Mechanics of vocal production								
	voice box and	Factors impacting vocal health								
aspects related to		<ul> <li>Importance of vocal health for teachers</li> </ul>								
	vocal health									
2.	Symptoms of voice	<ul> <li>Identifying changes in voice</li> </ul>								
	problems	<ul> <li>Implications of voice problems for teaching</li> </ul>								
	/.G\	Checklist for common symptoms of voice problems								
	1	Taking proactive measures								
Vocal hygiene tips		Do's								
		Speak at comfortable loudness and pitch								
		2. Control and limit vocal loudness								
	I	3. Take frequent breaks								
		4. Reduce or avoid unwanted noise								
	<u> </u>	5. Avoid speaking when sick or tired								
		6. Maintain adequate hydration								
		Don'ts								
	0-1	Avoid screaming or shouting								
		2. Do not speak continuously for long periods								
10,14		3. Avoid speaking in noisy environments for prolonged periods								
		4. Refrain from speaking when unwell or fatigued								
		5. Do not consume excessive caffeine or alcohol								
		6. Avoid frequent throat clearing and coughing								
4.	Healthy lifestyle	Importance of proper food habits								
	practices	Ensuring adequate sleep								
		Adopting a healthy lifestyle								
5.	Seeking	When to seek professional evaluation								
	professional help	Role of healthcare providers								

## Section 1: Understanding the voice box and aspects related to Vocal Health

Rationale: By understanding the mechanics of vocal production, you gain valuable knowledge that empowers you to make informed decisions about caring for your voice. When you know how your voice works and what factors can affect it, you're better equipped to adopt habits and practices that promote vocal well-being. This, in turn, can help you avoid voice problems and maintain effective communication in the classroom.

#### **How is Voice Produced?**

Voice production begins with the passage of air from the lungs through the windpipe, reaching the voice box. Within the voice box, the vocal folds vibrate, generating sound. Further modulation occurs as the sound interacts with oral structures like the tongue and lips, shaping it into speech. Understanding this process gives an insight into why certain behaviours or habits can impact your voice's health.

Trainer's Note: This can be transacted by using animations of the speech production system along with video sample of normal vocal fold movement.

#### What are the factors impacting vocal health?

- Phono-traumatic Vocal Behaviours: These are actions or habits that can strain the vocal cords and lead to vocal problems. Common phono-traumatic vocal behaviours among teachers include:
  - Speaking Loudly: Constantly raising the voice to be heard in noisy environments, such as crowded classrooms, can strain the vocal cords.
  - Excessive Talking: Speaking for long periods without breaks can overwork the vocal cords, leading to fatigue and strain.
  - Throat Clearing: Frequent throat clearing can irritate the vocal folds and cause inflammation.
  - Yelling or Shouting: Raising the voice forcefully, such as during disciplining or calling out to students, can cause vocal trauma.

- 2. Environmental Conditions: Factors such as chalk dust, and dust from stationery products such as paper, scented erasers, etc in the classroom environment can irritate the breathing passage and vocal cords.
- 3. Lifestyle Habits: Certain lifestyle choices, such as smoking, excessive alcohol consumption, and inadequate hydration, can negatively impact vocal health.
- 4. Improper dietary habits: intake of oily/spicy foods, skipping meals may result in reflux related problems
- 5. Emotional Stress: Stress and tension can manifest physically in the form of vocal strain, affecting the clarity and quality of the voice.

Trainer's Note: These factors can be explained using pictures and animations related to Indian context



#### Section 2: Symptoms of Voice Problems

Rationale: Deviation in vocal characteristics such as pitch, loudness, or quality can detract attention from the intended message. Symptoms of voice problems may manifest as vocal fatigue, pain, or difficulty in speaking. Recognizing these signs empowers individuals to proactively address potential vocal issues and seek appropriate intervention when necessary.

This section describes common symptoms of voice problems and their potential impact on teaching performance. By understanding these symptoms, teachers can take timely action to maintain their vocal health and ensure effective communication in the classroom

#### Learn to recognize the signs of voice problems:

- Changes in Vocal Pitch: Noticeable shifts in the usual pitch range, such as a voice that sounds higher or lower than usual, and reduced pitch flexibility.
- Loudness Issues: Difficulty maintaining a consistent volume, too soft or too loud.
   Talking soft may be a problem in teachers.
- Vocal Quality: A voice that sounds hoarse, breathy, strained or someone remarks
  'do you have a cold or a sore throat?' or 'your voice is not clear, I am unable to hear
  and understand you'

Trainer's Note: These signs can be taught by asking the teachers to record their voice and get feedback on potential issues

#### Understanding the implications:

- Teaching Effectiveness: Voice problems can make it difficult for teachers to project their voice and be heard clearly, affecting student engagement and learning.
- Communication: Difficulty in speaking can hinder clear communication with students, colleagues, and parents.
- Classroom management: Difficulty being heard can lead to less effective classroom control and managing student discipline.
- Student engagement: A teacher's voice that is hard to hear or understand can reduce student attention and participation. It may invoke a negative emotions towards the teacher and the subject

Trainer's Note: Create infographics that show the direct impact of voice problems on teaching effectiveness and student engagement

#### Identifying common vocal symptoms:

- Change in voice quality: A rough, harsh, hoarse or breathy voice.
- Vocal Fatigue: A feeling of tiredness or strain after speaking.
- Pain: Discomfort or pain in the throat when speaking.
- Difficulty in Speaking: Challenges in producing clear speech or maintaining vocal endurance

Voice samples indicating the vocal symptoms can be played

#### **Take Proactive measures:**

STATIONI

- Early Identification: Spotting symptoms early allows for timely intervention, potentially preventing more severe vocal issues.
- Professional Evaluation: Seeking help from a voice specialist can provide targeted treatment and advice

Trainer's Note: Create a checklist that teachers can use to self-assess their vocal health



#### Section 3: Vocal Hygiene Tips

**Rationale:** Vocal hygiene involves adopting behaviours and lifestyle practices that promote vocal health and prevent vocal strain and injury. Educators, who rely heavily on their voices, need to be particularly mindful of these practices. Implementing vocal hygiene tips can help teachers protect their voices and maintain optimal vocal function throughout their teaching careers.

#### Do's:

#### 1. Speak at a comfortable loudness and pitch:

Rationale: Speaking within one's vocal limits minimizes strain on the vocal cords, reducing the risk of injury or fatigue.

Example: Use a moderate tone in a quiet classroom

#### 2. Control and limit vocal loudness:

Rationale: Moderating vocal volume prevents overexertion of the vocal mechanism, promoting sustained vocal health.

Example: Use visual aids or a microphone instead of raising your voice.

#### 3. Take frequent breaks during extended speaking periods:

Rationale: Intermittent rest periods allow vocal cords to recuperate, mitigating strain and preventing overuse injuries.

Example: Taking regular breaks allows your vocal cords to rest and recover, reducing strain and preventing injury.

#### 4. Reduce or avoid unwanted noise in the environment:

Rationale: Speaking in quiet settings minimizes the need to raise one's voice, decreasing vocal strain.

Example: Close windows and doors to minimize external noise during lessons.

#### 5. Avoid speaking when sick or tired:

Rationale: Refraining from speaking during illness or fatigue prevents exacerbation of vocal strain and aids in recovery.

Example: Use written instructions or delegate speaking tasks when feeling unwell.

#### 6. Maintain adequate hydration:

Rationale: Proper hydration ensures optimal vocal fold lubrication, safeguarding against dryness and irritation. Example: Drink water regularly throughout the day.

#### Don'ts

#### 1. Avoid screaming or shouting:

Rationale: Excessive vocal force can lead to vocal cord trauma, increasing the risk of voice disorders such as nodules or polyps.

Example: Instead of shouting to get students' attention, use a table tap or a hand signal.

#### 2. Do not speak continuously for long periods:

Rationale: Prolonged speaking sessions without breaks can induce vocal fatigue and strain, predisposing individuals to vocal injuries.

Example: During a long lecture, pause to show a video or engage students in a group discussion to give your voice a rest.

#### 3. Avoid speaking in noisy environments for prolonged periods:

Rationale: Extended exposure to loud environments necessitates increased vocal effort, heightening the risk of vocal fatigue and damage.

Example: Move discussions to quieter areas or use a microphone to avoid straining your voice

#### 4. Refrain from speaking when unwell or fatigued:

Rationale: Speaking while ill or fatigued can worsen symptoms and impede vocal recovery, prolonging the duration of vocal issues.

Example: Use written instructions or delegate speaking tasks to a colleague when you're not feeling well.

#### 5. Do not consume caffeinated or alcoholic beverages excessively:

Rationale: Caffeine and alcohol can dehydrate vocal folds, compromising vocal lubrication and resilience. Example: Drink water instead of coffee/alcoholic beverages, especially before teaching.

#### 6. Avoid throat clearing and coughing frequently:

Rationale: Frequent throat clearing or coughing can irritate vocal folds, leading to inflammation and discomfort.

Example: Take a sips of water to clear your throat instead of coughing or clearing your throat habitually.

Trainer's Note: These practices can be explained using pictures and animations related to Indian context

#### Section 4: Healthy Lifestyle Practices

**Rationale:** Maintaining a healthy lifestyle is essential for preserving vocal health and overall well-being. Each component of proper food habits, adequate sleep, and a healthy lifestyle contributes to the prevention of vocal strain, injury, and voice-related problems.

#### 1. Proper Food Habits:

Rationale: A balanced diet provides essential nutrients like vitamins and minerals that support vocal health by maintaining the strength and flexibility of the vocal cords. Avoiding spicy, oily, and fast foods helps prevent acid reflux, which can indirectly impact vocal health by causing throat irritation and inflammation.

Example: Instead of consuming fried foods or spicy dishes, opt for meals rich in fruits, vegetables, whole grains, and lean proteins.

#### 2. Adequate Sleep:

Rationale: Quality sleep allows the body, including the vocal cords, to rest and repair. During sleep, the muscles involved in vocal production relax, reducing tension and preventing vocal strain. Additionally, adequate rest promotes mental clarity and emotional well-being, which are crucial for effective communication.

Example: Establish a consistent sleep schedule, aiming for 6 to 8 hours of uninterrupted sleep each night.

#### 3. Healthy Lifestyle:

Rationale: Smoking and excessive alcohol consumption can irritate the throat, dry out the vocal cords, and increase the risk of developing vocal disorders. Regular exercise improves lung capacity and circulation, enhancing overall physical fitness.

Example: Quit smoking and limit alcohol intake to protect respiratory health and preserve vocal integrity and function. Incorporate activities like walking, swimming, or yoga into your routine to promote cardiovascular fitness and reduce stress, benefiting both your overall health and vocal performance.

Trainer's Note: These practices can be explained using pictures and animations

#### Section 5: Seeking Professional Help

This section provides guidance on when to seek professional evaluation and treatment for voice problems. Persistent or severe voice problems may require intervention from healthcare professionals, such as otolaryngologists or speech-language pathologists.

**Rationale:** Seeking timely professional help can prevent voice problems from worsening and improve outcomes for educators experiencing vocal difficulties.

#### When to seek professional evaluation?:

Recognizing the signs that indicate the need for professional evaluation is crucial for teachers and educators to address voice problems effectively. Some indicators that warrant seeking professional help include persistent hoarseness lasting more than two weeks, vocal pain that does not improve with rest, difficulty speaking or projecting voice, frequent throat clearing or coughing, and sudden changes in voice quality or pitch. Additionally, if voice problems and voice fatigue significantly interfere with teaching duties or daily activities, it's essential to consult a healthcare provider (Speech Language pathologist or ENT Specialist) for assessment and guidance.

#### What are the roles of healthcare providers?:

Healthcare professionals, such as ENT doctors/otolaryngologists (ear, nose, and throat specialists) and speech-language pathologists, play key roles in diagnosing and treating voice disorders. Otolaryngologists can conduct thorough evaluations to identify underlying medical conditions affecting the voice, such as vocal cord nodules, polyps, or laryngitis, etc. They may perform diagnostic procedures like laryngoscopy or imaging studies to assess vocal cord structure and function. Speech-language pathologists specialize in voice therapy and can provide personalized treatment plans to address vocal issues, including voice exercises, vocal hygiene education, and behavioural modifications. These professionals collaborate to develop comprehensive management strategies tailored to each individual's needs, ensuring optimal outcomes for voice rehabilitation.

Trainer's Note: This section can be an interactive discussion with the educators

#### Conclusion

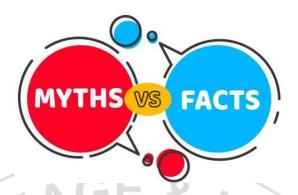
This vocal hygiene module for educators equips teachers with the knowledge and strategies necessary to maintain optimal vocal health and teaching effectiveness. By understanding the principles of vocal hygiene, adopting healthy lifestyle practices, and seeking professional help when needed, teachers and educators can protect their voices and enhance their overall well-being.



#### **Module Transaction (Trainer's Note):**

The vocal hygiene module is structured as follows to ensure effective delivery and engagement:

- 1. Introduction: Begin with an overview of the module objectives, content, and expectations.
- 2. Presentation of Content: Present each module component systematically, covering topics such as understanding vocal health, recognizing symptoms of voice problems, implementing vocal hygiene tips, adopting healthy lifestyle practices, and seeking professional help. Use a combination of lectures, multimedia presentations, case studies, and interactive activities to engage participants and reinforce key concepts.
- 3. Demonstration and reflection: Demonstrate vocal hygiene strategies, allowing participants to observe and practice under the guidance. Provide feedback and facilitate discussions to encourage participants to share their experiences and challenges related to vocal health and hygiene.
- 4. Q&A Session: Allocate time for participants to ask questions and seek clarification on any aspects of the module content. Address queries effectively and provide additional resources or references for further information.
- 5. Wrap-up and Evaluation: Summarize key takeaways from the module and reiterate the importance of prioritizing vocal health. Distribute evaluation forms or surveys to gather feedback from participants and assess the effectiveness of the module in meeting their needs.



1	Whispering is good for your voice	Whispering can actually strain the vocal									
	when you have a sore throat	cords more than speaking softly. When you									
		whisper, your vocal cords come together in									
		an irregular way, which can cause additional									
		strain. Instead, speak softly and take vocal									
/		naps as needed.									
2	Clearing your throat is harmless	Frequent throat clearing can irritate the									
10	and necessary	vocal cords and lead to inflammation.									
1		Instead of clearing your throat, try									
\ L	4 (	swallowing or sipping water to alleviate th									
1	H (SO)	irritation.									
3	Gargling with salt water cures	Gargling with salt water can soothe a sore									
	vocal problems.	throat but doesn't cure vocal problems.									
		Proper hydration, vocal rest, and addressing									
		und <mark>e</mark> rlyin <mark>g</mark> issues are effective in									
	PI	maintaining vocal health.									
4	Loud environments have no	Speaking in loud environments often forces									
	impact on vocal health	teachers to raise their voices, leading to									
		vocal strain. Using amplification devices or									
		moving close to the students can help									
		reduce the strain on vocal cords.									
5	Drinking hot tea with honey is the	While hot tea with honey can be soothing,									
	best remedy for a sore throat	it's the hydration and warmth that help, not									
		just the tea or honey. Drinking plenty of									
		water throughout the day is crucial for									

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	maintaining vocal health as it keeps the										
		vocal cords hydrated.									
6	Only singers and performers	Anyone who uses their voice regularly,									
	need to worry about vocal	including teachers, call center workers, and									
	hygiene.	public speakers, needs to practice good									
		vocal hygiene to prevent strain and injury.									
		Maintaining vocal health is essential for									
		effective communication for all.									
7	Drinking alcohol and caffeinated	Alcohol and caffeine can dehydrate the									
	beverages doesn't affect the	vocal cords, making them more susceptible									
	voice	to strain and injury. It's better to drink water									
		or non-caffeinated herbal teas to maintain									
		pr <mark>o</mark> per hydration									
8	If you have a hoarse voice, it	Hoarseness can result from many factors,									
/	means you've damaged your	including overuse, allergies, infections, and									
/ =	vocal cords	acid reflux. While persistent hoarseness									
10	2	should be evaluated by a ENT/ speech									
		langua <mark>ge pathologist. It does</mark> n't always									
-		indicate permanent damage.									
9	Vocal rest means complete	Vocal rest often means minimizing speaking									
\ '	silence	and avoiding vocal strain, but it doesn't									
	10	always require complete silence. Gentle,									
	0. 77	soft speaking may still be permissible,									
	1	depending on the severity of the vocal issue.									
10	Vocal exercises are only for	Regular vocal exercises can strengthen the									
	people with voice problems	vocal cords, improve flexibility, and help									
	~/V	prevent voice problems. These exercises									
		are beneficial for anyone who relies on their									
		voice for work									

#### **VOCAL HYGIENE CHECKLIST FOR TEACHERS**





- 1. Drink 8-10 glasses of water daily.
- 2. Sip water every 20 to 30 minutes to keep vocal cords hydrated.
- 3. Take vapor inhalation twice a day through the mouth for 2-3 minutes.
- 4. Eat healthy and fresh foods.
- 5. Eat at regular intervals
- 6. Maintain a 2-hour gap between dinner and bedtime.
- 7. Sleep 6-8 hours a day
- 8. Ensure proper posture while speaking
- Face the Students While Speaking/teaching
- 10. Move Close to the Listener/Student or use a microphone to amplify your voice in group or classroom settings.

- 1. Avoid soda/carbonated drinks
- Avoid excessive intake of coffee/ caffeinated beverages
- Avoid speaking in the presence of air conditioners for long periods
- 4. Avoid intake of spicy/ oily food.
- 5. Avoid sour or citric foods
- 6. Avoid raw onion and tomato
- 7. Avoid fast food and junk foods
- 8. Avoid speaking loudly over classroom noise
- Avoid speaking when you are sick or tired
- 10. Avoid throat clearing

#### Vocal hygiene program - Daily monitoring sheet

Instruction: Please tick in the given table (for each day) to monitor your vocal hygiene practice

Vocal hygiene instructions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Maintain adequate Hydration															
Drink 8 -10 glasses of water															
Sip water once in every 20 to 30 minutes	1														
Take vapor inhalation twice a day through mouth for 2-3 minutes	1														
Avoid intake of soda/ carbonated drinks															
Avoid speaking in the presence of air conditioner for long time															
Avoid intake of coffee															
Faller, backler, al 45-4	_	•													
Follow healthy vocal diet		1		ı .											
Eat healthy and fresh foods	+													$\vdash$	<b>—</b>
Eat at regular intervals; avoid skipping meals	+														
Maintain 2 hours gap between dinner and bedtime	+													$\vdash$	
Take adequate rest; sleep 6-8 hours a day														$\vdash$	_
Avoid oily/ spicy food														$\vdash$	<u> </u>
Avoid sour and citric foods															
Avoid raw onion and tomato															_
Avoid fast food and junk foods														$\sqcup$	<u> </u>
Maintain appropriate posture while speaking															
Vocal practices to be followed															
Face the students while speaking/ teaching															1
Move close to the listener/ student and speak	1														
Schedule classes with breaks in between	1														
Use microphone to project your voice in a group/ classroom	1														
Avoid speaking loud over classroom noise	1														
Avoid speaking continuously for a longer duration	1														
Avoid speaking when you are sick															
Don't throat clear															
Avoid listening to loud music and singing along with it															
Speak in a quiet environment															
Avoid speaking in the presence of dust & smoke															

Please indicate the difficulties and improvement noticed while following the vocal hygiene program:

#### References:

Boominathan, P., Chandrasekhar, D., Nagarajan, R., Madraswala, Z., & Rajan, A. (2008). Vocal hygiene awareness program for professional voice users (teachers): an evaluative study from Chennai. *Asia Pacific Journal of Speech, Language and Hearing*, *11*(1), 39-45.

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#### **Appendix**

#### **Vocal Hygiene Educational & Training Module**



## Vocal Hygiene Education & Training Module for Teachers



#### Developed by:

Prof. Prakash Boominathan & Dr. Aishwarya Nallamuthu

Sri Ramachandra Faculty of Audiology & Speech Language Pathology

Sri Ramachandra Institute of Higher Education & Research (DU), Chennai 600116

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- ☐ The information provided in this module is intended for educational purposes and is designed to support teachers in maintaining optimal vocal health.
- ☐ The details provided in this module are based on scientific information published in books and research articles.
- □ This is not a substitute for professional medical advice, diagnosis, or treatment. If you experience persistent voice problems or have concerns about your vocal health, please consult a physician/ ENT/ Speech language pathologist.

\*This vocal hygiene educational module was developed as a part of PhD thesis at Sri Ramachandra Institute of Higher Education & Research (DU)

J

## What is vocal hygiene?

Vocal hygiene are practices that help to

keep the vocal apparatus healthy and fit

for voice production

#### It emphasizes on

- ☐ Hydration
- ☐ Vocal diet & changes in life style
- ☐ Posture & alignment
- Vocal practices
- ☐ Ideal speaking environment



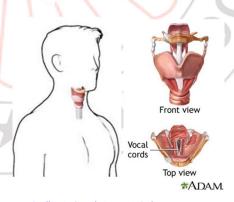
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## A brief orientation to the voice box

It is situated in the throat connecting the base of the tongue to the wind pipe

Made of bone, cartilages and muscle

Includes vital structure called vocal cords that vibrates to produce sound



ttp://www.icytales.com/a-50-rupees-voice-box/ ttps://medlineplus.gov/ency/imagepages/19708.htm

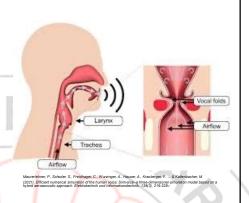
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## How is voice produced?

Air from the lungs moves upward through the wind pipe and reaches the sound box.

When the air reaches the vocal folds in the sound box, the vocal folds vibrates producing sound.

This voice gets further modified by different oral structures (such as tongue, lips, jaw, etc) to produce speech.



## What is a normal voice?

Voice is said to be normal when your voice meets

- ☐ professional/occupational needs
- personal needs
- ☐ emotional and social needs for day to day activities and communication





## What is an abnormal voice?

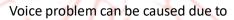
When changes in voice disrupts the speaker's day to day communication it is considered **abnormal voice**It may require treatment or further management





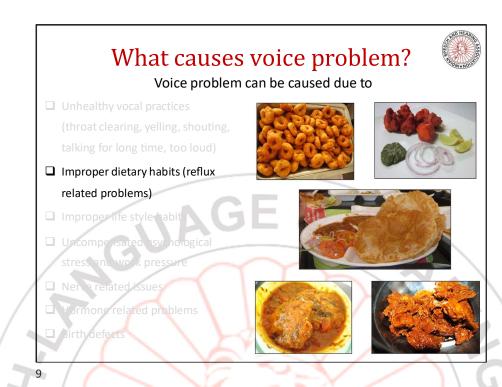
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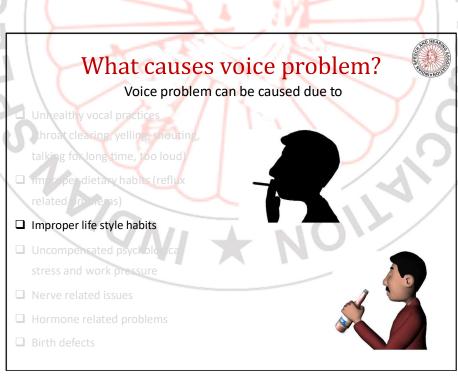
## What causes voice problem?



- ☐ Unhealthy vocal practices
  (throat clearing, yelling, shouting, talking for long time, too loud)
- ☐ Imprependietary habits (reflux
  - related or siens
- ☐ Improper lift, st, le h, b
- ☐ Uncompensated psychologic stress and work pressure
- Nerve related issues
- Hormone related problems
- ☐ Birth defects







## What causes voice problem?



Voice problem can be caused due to

- ☐ Unhealthy vocal practices (throat clearing, yelling, shouting, talking for long time, too loud)
- ☐ Improper dietary habits (reflux related problems)
- ☐ Improper life style habit
- Uncompensated psychological stress and work pressure
- ☐ Nerna related issues
- ☐ ₩ormone related problems
- ☐ Birth defects



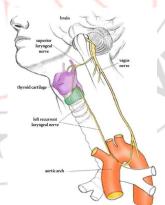
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## What causes voice problem?

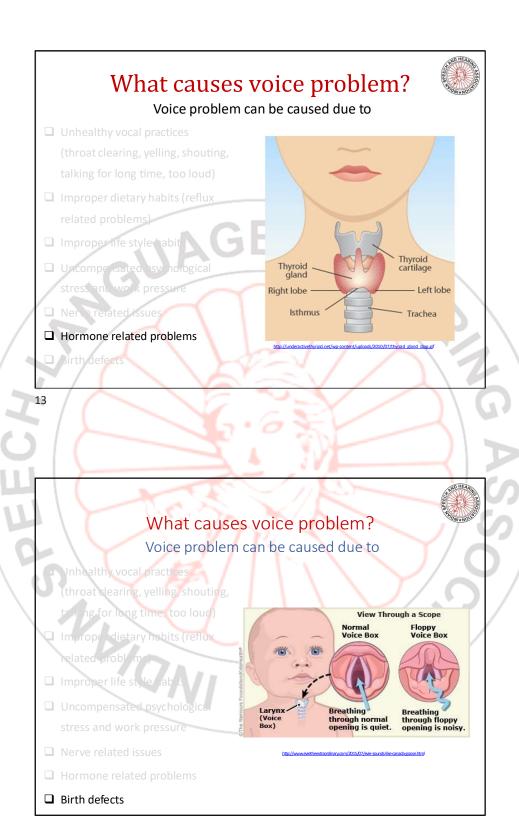


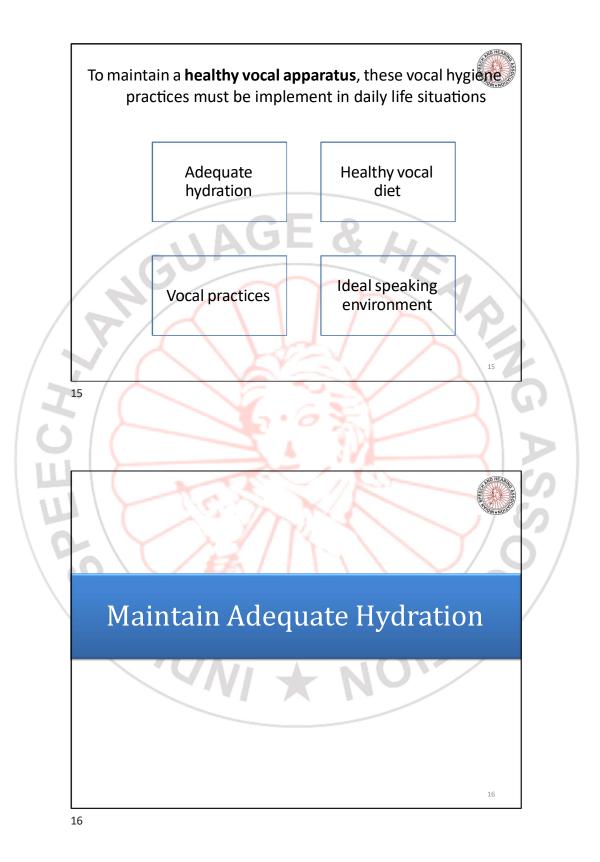
Voice problem can be caused due to

- Unhealthy vocal practices throat clearing, yelling, shouting, talking for long time, too loud)
- Improper dietary habits (reflux related problems)
- ☐ Improper lifest lebe
- Uncompensated psychological stress and work pressure
- Nerve related issues
- ☐ Hormone related problems
- ☐ Birth defect



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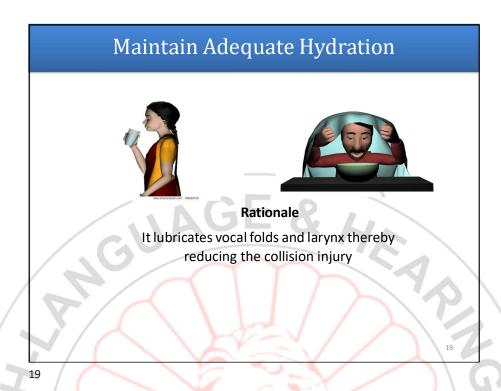


## Maintain Adequate Hydration

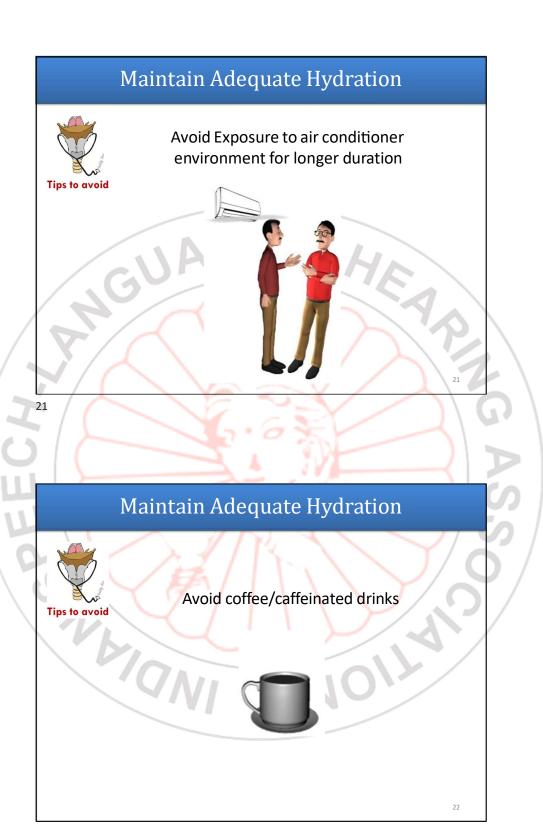


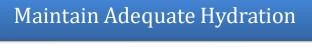
Take vapor inhalation twice a day for 3-5 minutes (without any inhalation agent)













Avoid Smoking cigars & alcohol consumption

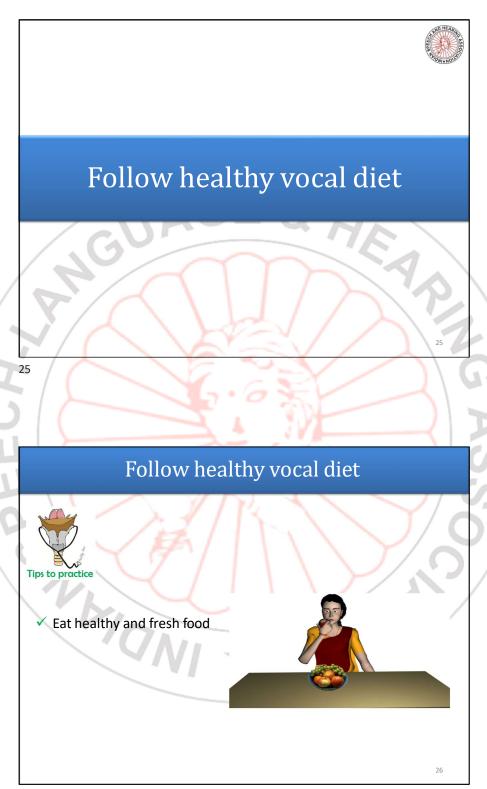




## Inadequate Hydration

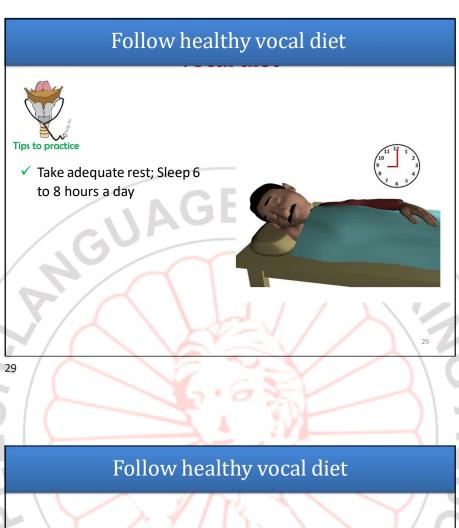


Causes laryngeal irritation and dehydration to the vocal folds



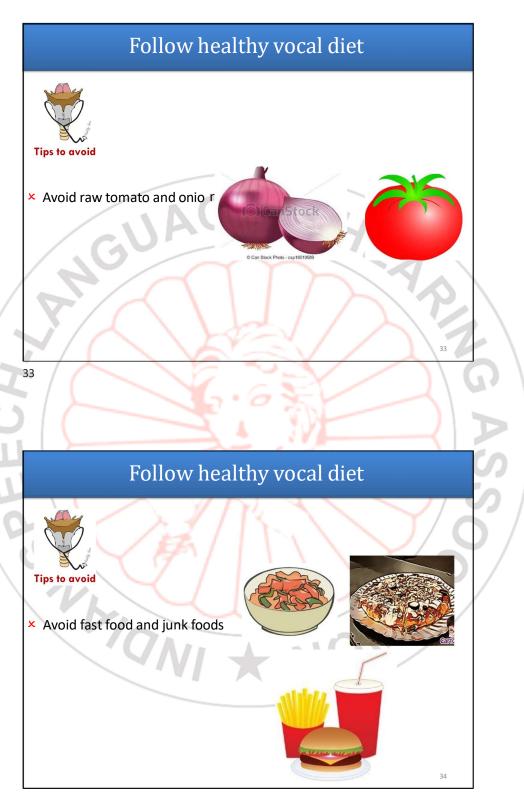


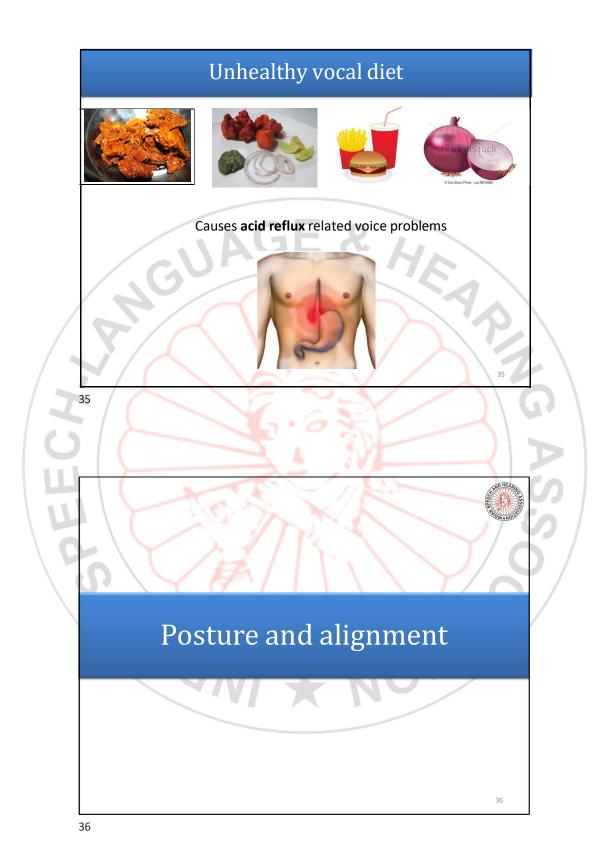






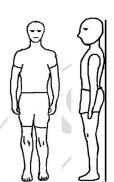


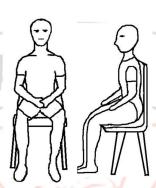




### Posture to be maintained

Maintain appropriate posture
Keep your voice powered by breath flow while speaking







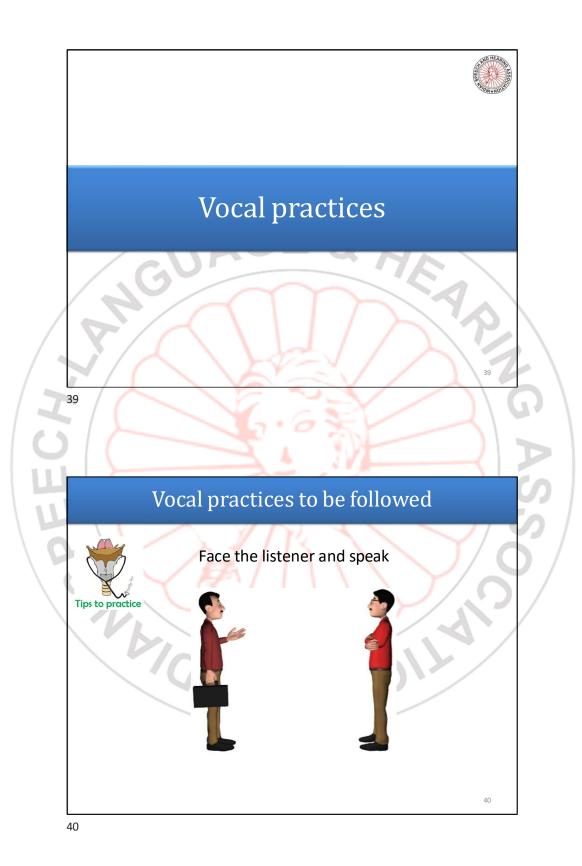
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### Postures to be avoided



Compromised/inappropriate posture results in increased effort in voice production

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# Vocal practices to be followed



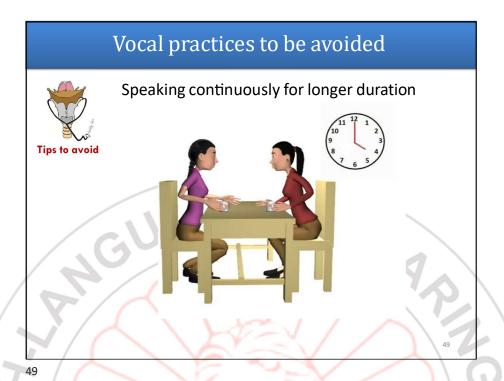
Use microphone to address students in a class



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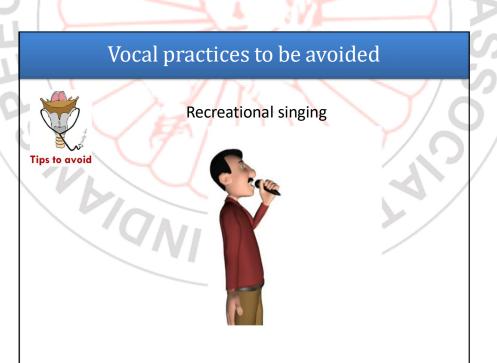




















Use public addressing system to project your voice in a group/ classroom



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# Ideal speaking environment



Avoids damage/injury to the vocal fold

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# Ideal speaking environment



Avoid speaking loud over the class room noise



# Inappropriate speaking environment







causes damage/injury to the vocal fold

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# To maintain good vocal health



- Maintain adequate hydration
- Follow healthy dietary habits
- Use your voice appropriately
- Watch the speaking environment

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### **Credits**



#### **Content Development**

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STATIONI

Chennai

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The vocal hygiene educational module was developed as a part of PhD Thesis at



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