

**KNOWLEDGE, ATTITUDE AND PRACTICE AMONG SCHOOL TEACHERS ABOUT  
CORRELATION OF ORAL HABITS AND FUNCTIONAL DYSLALIA IN CHILDREN****Dr. Ann Polachirakal Tharakan<sup>1\*</sup>, Dr. Madhura Pawar<sup>2</sup> and Dr. Noreen Qazi<sup>3</sup>**<sup>1</sup>MDS Student III Year, Department of Pedodontics and Preventive Dentistry, Dr D.Y Patil Vidyapeeth, Pune, Maharashtra, India.<sup>2</sup>Reader, Department of Pedodontics and Preventive Dentistry, Dr D.Y Patil Vidyapeeth, Pune, Maharashtra, India.<sup>3</sup>MDS Student II Year, Department of Pedodontics and Preventive Dentistry, Dr D.Y Patil Vidyapeeth, Pune, Maharashtra, India.**\*Corresponding Author: Dr. Ann Polachirakal Tharakan**

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**ABSTRACT**

**Introduction:** The World Health Organization's Global School Health Initiative encourages "Health-Promoting Schools". Communicating with proper speech and articulation is very important in children. School teachers correct speech inaccuracies and identify speech difficulties, termed functional dyslalia in school going children. Oral Habits can compromise the harmony of the stomatognathic system and become deleterious. It is important for teachers to recognize and refer speech defects due to oral habits in the initial years. **Aim:** To Assess the Knowledge, attitude and practice among school teachers about effect of oral habits on speech abnormalities in children. **Settings and design:** Descriptive study. **Methods:** A validated structured close ended KAP questionnaire was provided to 30 school-teachers in PCMC area, Pune. The results were statistically analysed and percentage was calculated. **Results:** It was found that 100% of the school-teachers knew children can have oral habits and that they knew that due to these oral habits children can have speech problems. Although 57% of the schoolteachers have taught a child in their class with speech pronunciation problems only 27% had requested parents to see the dentist or speech therapist. **Conclusion:** Early recognition, of oral habits is crucial for precise speech articulation as well as for skeletal and social development. School teachers need to refer the students with speech abnormalities (dyslalia) to the speech therapist and the dentist to initiate the necessary early interventional measures.

**KEYWORDS:** Oral habit, dyslalia, school teachers, speech defect.**INTRODUCTION**

The World Health Organization's Global School Health Initiative encourages "Health-Promoting Schools" to create a healthy setting for living, learning and working.<sup>[1]</sup> Most speech disorders in children relate to functional mislearning or are caused by organic anomalies that affect oral, pharyngeal, or laryngeal structures or neuromuscular functions.<sup>[2]</sup> Communicating information with proper speech and articulation is very important in school children. Children learn to pronounce the correct speech patterns in school. Accurate speech pronunciation is a requisite for communication depending on the language. The stomatognathic system (SS) is composed of static and dynamic structures. Its harmonious functioning relies on the balanced relationship between these structures and habits can compromise the harmony of the SS and become deleterious.<sup>[3]</sup> If oral habits persist beyond 4 years it can cause great harm to the developing teeth, occlusion, and surrounding oral tissues thus causing malocclusions.<sup>[3]</sup> The prevalence of oral habits among 4-13-year-old children was found to be 72.7%.<sup>[4]</sup> and

school teachers may be insufficiently trained on aspects of oral health.<sup>[5]</sup>

Oral habits can cause malocclusions and also known to cause speech defect<sup>[7]</sup> also known as functional dyslalia. It is important for pre-primary and primary school teachers to identify oral habits before the age of 4 years because as soon as the habit ceases, dental changes will be corrected spontaneously.<sup>[8]</sup>

The timely referral from schoolteachers for phonological assessments to speech therapists as well as intraoral and extraoral assessments by dentist is essential. Hence, early recognition of oral habits that may lead to speech abnormalities is crucial for precise speech articulation as well as for facial, skeletal and social development.

**METHODOLOGY**

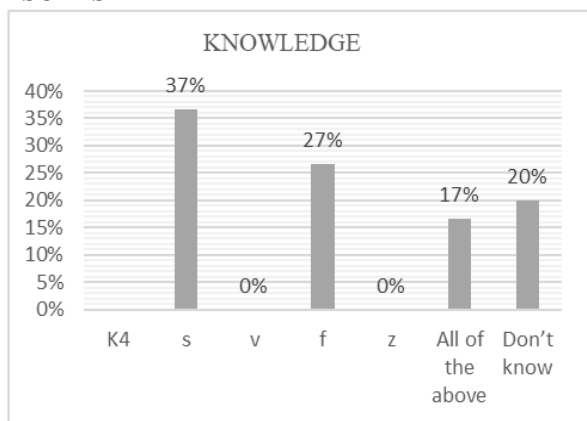
The aim was to assess the knowledge, attitude and practice among schoolteachers about correlation of oral habits and functional dyslalia in children. A self-administered close ended questionnaire consisting of 21

items was distributed among the rural primary school teachers of Pune, Pimpri and Chinchwad area. A sample size of 30 schoolteacher was finalized with simple random sampling technique. The structured questionnaire had close ended questions and was divided into three sections knowledge, attitude and practice. Informed consent form was given to all teachers who agreed to participate are teaching children between the ages of 3-5 years. After collecting the completed questionnaires further information and education on non-nutritive oral habits and the approaches to be taken in the presence of 'this' behavior 'in students were provided.

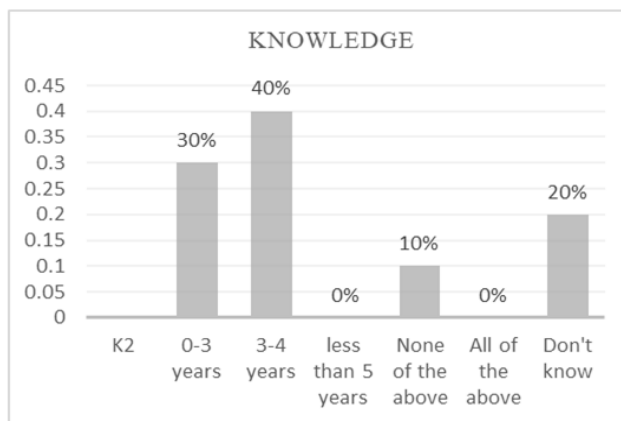
After providing the questionnaire the results from the school-teachers were gathered, tabulated and percentage (100%) was calculated and conclusions were drawn.

All 100% (Table1) of the school-teachers knew children can have oral habits and that children can have speech problems (dyslalia). 93% knew that oral habits can cause problems in pronouncing certain consonants in children. Only 17% (graph 1) knew which consonants cannot be pronounced. Only 53% knew till what age it is considered normal and 93% knew that problems in pronouncing certain words due to oral habits can be corrected with speech therapist and dentist if detected early.

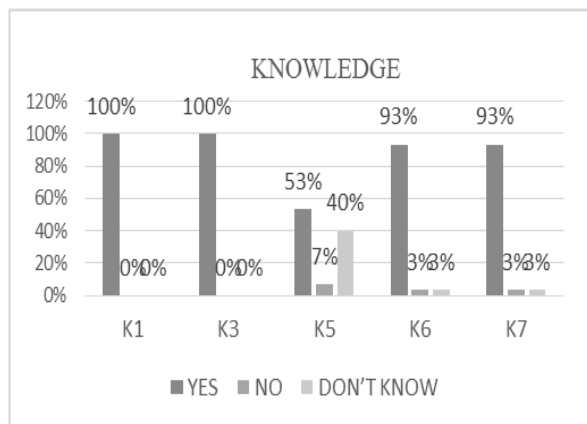
**RESULTS**



**Fig: Graph 1.**



**Fig: Graph 2.**



**Fig: Graph 3.**

KNOWLEDGE						
K1	Do you know children can have oral habits?	Yes	No	Don't know		
K2	Do you know till what age is oral habit considered normal	0-3 years	3-4 years	less than 5 years	None of the above	All of the above
K3	Do you know children can have speech problems (dyslalia)?	Yes	No	Don't know		
K4	Which according to you are some consonants which may have imperfect pronunciation?	s	v	f	z	All of the above
K5	Do you know till what age problems in pronouncing certain consonants is considered normal	Yes	No	Don't know		
K6	Do you know that oral habits can cause problems in pronouncing certain words in children (dyslalia)	Yes	No	Don't know		
K7	Do you know that problems in pronouncing certain words (dyslalia) can be treated easily if detected at early stages of learning in coordination with speech therapist and dentist?	Yes	No	Don't know		

**Fig: Table 1.**

In Table 2 the attitude of the schoolteachers were assessed, and the analysis yielded that 80% of schoolteachers noticed that a child in their class had problems with pronouncing certain consonants. 83% agreed that treating oral habits in children is important as it affects their speech. 80% of the teachers agreed

teachers have an important role in identifying oral habits. But 53% disagreed that a student having an oral habit with difficulty in pronouncing certain words (dyslalia) should be referred to dentist.

ATTITUDE							
A1	Which according to you are the types of oral habits seen in children	Mouth breathing	Tongue thrusting	Bruxism	Thumb sucking	All of the above	Don't know
A2	Did you notice if in your class have a problem with pronouncing certain consonants	Yes	No	Don't know			
A3	A student having an oral habit with difficulty in pronouncing certain words (dyslalia) should be referred to dentist	Strongly agree	Agree	Disagree	Strongly disagree	don't know	
A4	A student having an oral habit with difficulty in pronouncing certain words (dyslalia) should be referred to speech pathologist is important	Strongly agree	Agree	Disagree	Strongly disagree	don't know	
A5	Teachers have an important role in identifying oral habit	Strongly agree	Agree	Disagree	Strongly disagree	don't know	
A6	Children should have routine oral examination by the pediatric dentist?	Strongly agree	Agree	Disagree	Strongly disagree	don't know	
A7	Treating oral habits in children is important as it affects their speech and teeth alignment?	Strongly agree	Agree	Disagree	Strongly disagree	don't know	

Fig: Table 2.

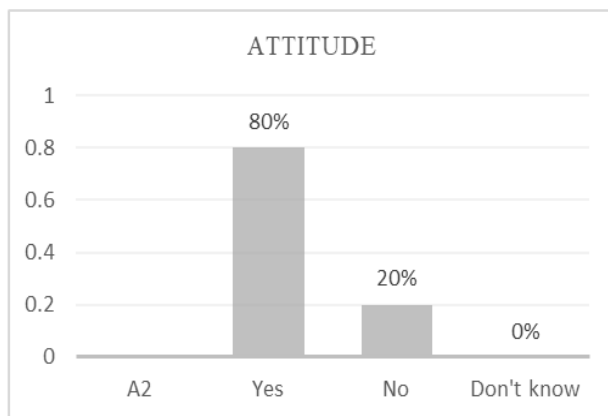


Fig: Graph 4.

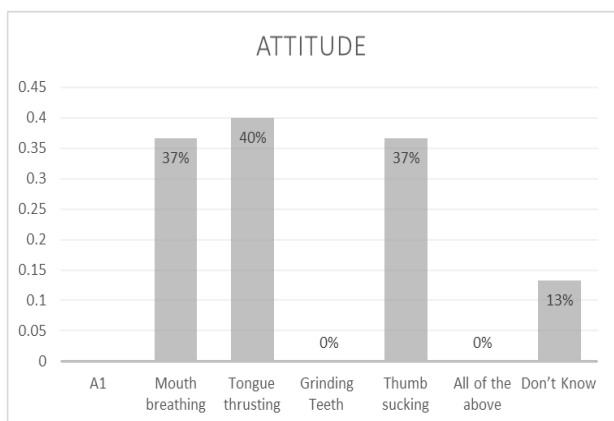


Fig: Graph 5.

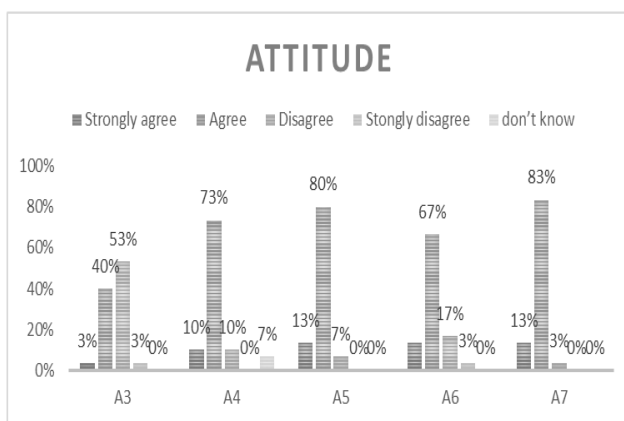


Fig: Graph 6.

In Table 3 the practice of the schoolteachers towards oral habits were assessed 57% of school-teachers taught children with oral habits. 57 % of the schoolteachers have taught a child in their class with speech

pronunciation problems (dyslalia) having an oral habit. But Only 27% had requested parents to see the dentist or speech therapist.

PRACTICE				
P1	Have you taught any child in your class with oral habit	Yes	No	Don't know
P2	Did you refer them to the dentist	Yes	No	Don't know
P3	Have you taught any child in your class with speech problem (dyslalia)	Yes	No	Don't know
P4	Did you refer them to the speech therapist	Yes	No	Don't know
P5	Have you taught any child in your class with speech pronunciation problems (dylalia) having oral habit?	Yes	No	Don't know
P6	If yes, did you refer them to the speech therapist?	Yes	No	Don't know
P7	If yes, did you refer them to the dentist?	Yes	No	Don't know

Fig: Table 3.

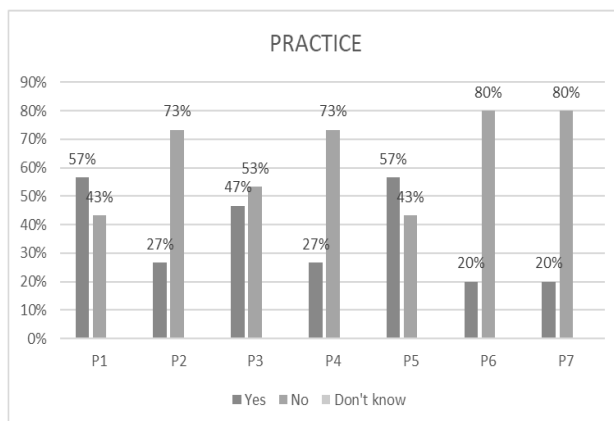


Fig: Graph 7.

**DISCUSSION**

Speech is produced through the complex coordination and movement of muscles and bones of the head and neck. The tongue, lips, teeth, bones and muscles of the face are critical in speech articulation. School teachers inculcate speech phonetics, correct the speech inaccuracies and identify speech defects or inabilities in some children.<sup>[6]</sup> Trident of factors, like duration of the

habit per day, degree, and intensity of habit, are responsible for any habit to produce detrimental and lasting effects.<sup>[9]</sup> The inability of the child to pronounce accurately in school leads to stress and anxiety, Although 93% school teachers knew that problems in pronouncing certain words due to oral habits can be corrected with speech therapist and dentist if detected early only 27% of the teachers had requested parents to see the dentist or

speech therapist. From this study we can infer that a continuous multidisciplinary approach with schools and school teachers is important to identify the oral habits in children. Partnering with schools to educate the school teacher in identifying any habits which may become deleterious should also be initiated. Involving the schoolteachers will ensure that the children receive timely intervention as oral habits are learned patterns of muscle contraction that have a very complex nature. Oral habits might be non-nutritive sucking (thumb, finger, pacifier and/or tongue), lip biting or bruxism and these habits can result in damage to dentoalveolar structure; hence, the role of school teachers a crucial role in early identification to initiate an early intervention.

### CONCLUSION

From this study we can clearly understand that teachers notice oral habits and related speech problems in school children. It is important to educate and involve schoolteachers in not just identifying speech problems or oral habits but also referring them to the pediatric dentist. Teachers can inform the parents during the parent teacher meetings when they notice speech problems or oral habits. Thus, With the help of school teachers the children can receive timely treatment for oral habits.

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