

Oral Health Literacy and Its Relationship with Oral Hygiene Status among School Teachers in Davangere City

Sir,

The prevention of oral diseases is the cornerstone of dental public health; however, we cannot begin to address prevention if patients do not understand the health information provided to them. The most common reason for patient misunderstanding could be due to low health literacy. Low health literacy is often described as “The Silent Health Epidemic” because healthcare professionals generally assume that the health explanations and instructions given to patients and families are readily understood; but in reality, people with low health literacy level may find it difficult to comprehend and use information in written materials containing unfamiliar terminology.^[1]

There is growing interest among oral health researchers to study the relationship between health literacy and oral health, leading to the emergence of oral health literacy (OHL). OHL is an intricate process of acquiring and trusting information, skill development, grasping concepts, technique-intensive protocols, and applying them appropriately.^[2]

In the present days, adolescents and young adults are expected to understand complex health information and to choose the appropriate over-the-counter drugs as well as to enroll in health insurance plans. Hence, the seeds of OHL skills should be sown early in life to reap its benefits in the future. To achieve this, OHL should be taught along with general literacy during their school years. The knowledge and skills which are acquired during the school years will be retained throughout their lifetime. In general, the students follow what teachers do and say. Thus, the teachers are the role models for the children to transmit the values of life. School teachers by virtue of their training can influence a large number of children and play a major role in the planning and implementation of oral health preventive programs.^[3] With this background in mind, a cross-sectional survey was conducted among 600

school teachers in Davangere city to assess the oral health literacy of school teachers and its relationship with their oral hygiene status. Multistage random sampling technique was employed. The Davangere city was arbitrarily divided into four zones (North East, North West, South East, and South West). From each zone, five government and five private schools were randomly selected and another turn of random selection was done to select 15 participants from each school to attain the required sample size. The participants who can able to read and understand English and those who worked in primary and higher secondary schools of Davangere city were included in the study.

A self-designed structured pro forma comprised patient information form, demographic details, informed consent form, modified OHL adults questionnaire (OHL-AQ),^[4] and finally a provision to record the oral hygiene index-simplified (OHI-S)^[5] was prepared. OHL-AQ consists of 14 items, given under four sections (Reading comprehension, numeracy, listening skills, and appropriate decision making) was used. The internal consistency of the questionnaire was estimated using Cronbach’s alpha coefficient found to be satisfactory (0.77). Face validity of the questionnaire was done by expert opinions. The scale had a good (content validity index = 0.91 and content validity ratio = 0.61). The intra-examiner and inter-examiner variability was assessed using Kappa statistics found to be 0.88 and 0.78 with respect to OHI-S indicates a high degree of conformity in observations. After obtaining the informed consent, questionnaire was administered. The participants took 20 min to complete the questionnaire. OHL scores were divided into three categories as inadequate (0–9), marginal (10–11), and adequate (12–17) for analysis purposes.^[4] The mouth mirror and explorer were used to assess OHI-S. The collected data were analyzed using Statistical Package for Social

Table 1: The association between oral health literacy level and demographic factors and oral hygiene status among study participants

Factors	Categories	OHL			Total, n (%)	P
		Inadequate, n (%)	Marginal, n (%)	Adequate, n (%)		
Age (years)	20-40	206 (76.6)	144 (78.3)	108 (73.5)	458 (76.3)	0.59 (NS)
	40-60	63 (23.4)	40 (21.7)	39 (26.5)	142 (23.7)	
Gender	Male	53 (19.7)	51 (27.7)	28 (19.0)	132 (22)	0.08 (NS)
	Female	216 (80.3)	133 (72.3)	119 (81)	468 (78)	
Socioeconomic class	Upper middle	258 (95.9)	179 (97.3)	147 (100)	584 (97.3)	0.03*
	Lower middle	11 (4.1)	5 (2.7)	0	16 (2.7)	
Oral hygiene status	Good	96 (35.7)	70 (38.0)	41 (27.9)	207 (34.5)	0.13 (NS)
	Fair	173 (64.3)	114 (62.0)	106 (72.1)	393 (65.5)	

* $P < 0.05$ statistically significant, $P > 0.05$ (NS), Fisher’s exact test. NS: Nonsignificant, OHL: Oral health literacy

Sciences software (IBM SPSS statistics version 17, License Authorization Wizard. Ink, Chicago, USA). Fisher's exact test was employed. The significance level was set at $P \leq 0.05$.

The distribution of oral health literacy across various sociodemographic factors was as shown in Table 1. The respondents belonged either to upper or lower middle class as per the modified Kuppuswami classification. Age and Gender were not associated with OHL whereas socioeconomic status was. Oral hygiene status was found to be either good or fair and was unrelated to OHL. [Table 1].

The probable rationalization for the majority of participants having fair and good oral hygiene status regardless of inadequate OHL was due to acquisition of knowledge through oral health programs/social media and utilization of services from nearby dental colleges. Few recommendations can be considered to improve the OHL level among school teachers. The dental institutions should conduct oral health educative programs and training modules in the form of mock drills for school teachers. The teach-back technique can be implemented to ensure that teachers understand the instructions from a healthcare provider. The incorporation of prescription regimes and nutrition regimes in the curriculum of teacher training program should be considered. Periodically, the teachers can inspect the oral cavity of the school children after proper training and should make the child and parent realize the problem existing in the oral cavity and the consequences of not being treated. The teachers' effort should be recognized, appreciated, and certified as oral health ambassadors, for the particular school where they are working.

The present study concludes that the overall OHL of the study population was inadequate and it did not show any association with oral hygiene status. Our study gives insight to the school teachers to envisioning their role as oral health messengers.

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Conflicts of interest

There are no conflicts of interest.

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