Caspian J of Dent Res

Original Article

Relationship between parents' information literacy on oral hygiene and oral health of public elementary school children in Education of Kerman, District 2 in 2017-2018

Maliheh Moghbeli[1], Arash Shahravan[2], Mozhdeh Salajegheh[3]✉

1. Master of Arts Student (MA), Department of Information and Knowledge Studies, Shahid Bahonar University of Kerman, Kerman, IR Iran.

2. Professor, Oral and Dental Diseases Research Center ,Department of Endodontics, Faculty of Dentistry, Kerman University of Medical Sciences, Kerman, , IR Iran.

3. Associate Professor, Department of Information and Knowledge Studies, Shahid Bahonar University of Kerman, Kerman, IR Iran.

✉**Corresponding Author:** Mozhdeh Salajegheh, Literature and Humanity Faculty, Shahid Bahonar University of Kerman, Kerman, IR Iran.

Email: msala@uk.ac.ir **Tel:** +983431322381 **ORCID** (0000-0002-6540-3754)

Received: 4 Oct 2020 Accepted: 17 Mar 2021

Abstract

Introduction: Oral hygiene is an essential part of public health and affects the quality of individuals' life. The purpose of this study was to investigate the relationship between parents' information literacy on oral hygiene and oral hygiene of public elementary schoolchildren in Education of Kerman, District 2.

Material & Methods: In this cross-sectional study, 423 questionnaires were fully answered. The sampling method was random cluster one. The Versami (2010) questionnaire was used to assess parents' information literacy on oral hygiene. Data analysis was done by SPSS- 23 at a significant level of $P<0.05$. The descriptive and analytical statistics including correlation coefficient, Pearson chi-square were applied to analyze the data.

Results: Findings showed that the oral hygiene knowledge of parents ($p=0.1$), parents' awareness of oral health-related diseases ($p=0.3$), parental knowledge of important activities for protecting children's teeth ($p=0.5$) and parents' awareness of dental services ($p=0.2$) were independent of the oral health status of students. Parents 'ability to understand oral health information was related to students' oral health status ($p=0.008$).

Conclusion: The parents' information literacy on oral hygiene was independent of the oral health of students. It is recommended that parents should engage in preventive programs and educational programs to increase their oral health literacy using the capacity of various media and simple educational materials.

Keywords: Information literacy, Oral hygiene, Oral health, Parents

Citation for article: Moghbeli M, Shahravan A, Salajegheh M. Relationship between parents' information literacy on oral hygiene and oral health of public elementary school children in Education of Kerman, District 2 in 2017-2018. Caspian J Dent Res 2021; 10: 48-56.

[Downloaded from cjdr.ir on 2026-11-23]

[DOR: 20.1001.1.22519890.2021.10.1.7.6]

[DOI: 10.22088/cjdr.10.1.48]

رابطه میان سواد اطلاعاتی بهداشت دهان و دندان والدین و سلامت دهان و دندان دانش آموزان ابتدایی آموزش و پرورش ناحیه ۲ شهر کرمان در سال¬های ۱۳۹۵-۱۳۹۶

ملیحه مقبلی[۱]، آرش شهروان[۲]، مژده سلاجقه[۳*]

۱. دانشجوی کارشناسی ارشد، گروه علم اطلاعات و دانش شناسی، دانشگاه شهید باهنر کرمان، کرمان، ایران.
۲. استاد، مرکز تحقیقات بیماری های دهان و دندان ، گروه اندودنتیکس، دانشکده دندانپزشکی، دانشگاه علوم پزشکی کرمان، کرمان ایران.
۳. دانشیار، گروه علم اطلاعات و دانش شناسی، دانشگاه شهید باهنر کرمان، کرمان، ایران.
***نویسنده مسئول:** مژده سلاجقه، دانشکده ادبیات و علوم انسانی، دانشگاه شهید باهنر کرمان، کرمان، ایران.
پست الکترونیکی: msala@uk.ac.ir **تلفن:** ۰۹۸۳۴۳۱۳۲۲۳۸۱+

چکیده

مقدمه: بهداشت دهان و دندان بخش ضروری در سلامت عمومی است و روی کیفیت زندگی افراد تاثیر دارد. هدف این پژوهش بررسی رابطه میان سواد اطلاعاتی بهداشت دهان و دندان والدین بر سلامت دهان و دندان دانش آموزان مدارس ابتدایی آموزش و پروش ناحیه ۲ شهر کرمان است.

مواد و روش ها: در این مطالعه مقطعی، به ۴۲۳ پرسشنامه به طور کامل پاسخ داده شده است. روش نمونه گیری خوشه ای تصادفی بود. از پرسشنامه Versami (2010) برای بررسی سواد اطلاعاتی بهداشت دهان و دندان والدین استفاده شد. تجزیه و تحلیل داده ها با نرم افزار آماری SPSS-23 با سطح معنی داری $P<0.05$ انجام شد. برای تجزیه و تحلیل داده ها از آمار توصیفی و تحلیلی شامل ضریب همبستگی، مجذور کای پیرسون استفاده شد..

یافته ها: نتایج نشان می دهد دانش بهداشت دهان و دندان والدین ($p=0.1$) آگاهی والدین از بیماری های مرتبط با بهداشت دهان و دندان ($p=0.3$) دانش والدین از فعالیت های مهم برای محافظت از دندان های کودکان ($p=0.5$) و آگاهی والدین از خدمات دندانپزشکی ($p=0.2$) مستقل از وضعیت بهداشت دهان و دندان دانش آموزان هستند. وضعیت بهداشت دهان و دندان دانش آموزان با توانایی درک اطلاعاتی بهداشت دهان والدین ارتباط دارد($p=0.008$) .

نتیجه گیری: سواد اطلاعاتی بهداشت دهان و دندان والدین از سلامت دهان و دندان دانش آموزان مستقل است. توصیه می شود برای بهبود وضعیت سلامت دهان و دندان دانش آموزان، بهتر است والدین، درگیر برنامه های پیشگیرانه و برنامه های آموزشی همراه با استفاده از ظرفیت رسانه های مختلف و مطالب آموزشی ساده شوند.

واژگان کلیدی: سواد اطلاعاتی، بهداشت دهان و دندان، سلامت دهان و دندان، والدین

Introduction

The effect of oral health on the quality of life (QOL), especially in young children, is very important, because it can affect growth, weight, confidence, socialization and learning abilities of children and influence the daily activities of children and their parents. Oral and dental care is the science and art of preventing oral diseases, increasing oral hygiene and QOL through organized education in society. Lack of the use of dental services is one of the most obvious factors of the high prevalence of oral diseases and their treatment. Obstacles to using these services include lack of awareness and knowledge in the field of dental services, knowledge on oral and dental health, access to dental insurance, lack of admission of patients and failure in patients' access to the dentist and appropriate transportation services. Despite the plans and facial improvements, problems with oral and dental caries, especially tooth decay among students are common yet. [1] Naderifar et al. stated that dental health literacy is the ability and understanding of health information and informed decision making about oral hygiene. Today, people are exposed to tooth decay as a result of their lifestyle and feeding behaviors. [2] Veerasamy has shown that children with dental decay and cavity are more likely infected with pain and infections of the mouth and teeth, and there is no relationship between oral

[Downloaded from cjdr.ir on 2026-11-23]
[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]

[Downloaded from cjdr.ir on 2026-11-23]
[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]

hygiene literacy and dental service use. [3] According to the United States Ministry of health in the area of oral health, teeth decays are the most common chronic illness among the children of this country. [4] Avenetti has concluded that the tooth decay of children living in areas where economically and socially are at a lower level often starts at age 2. [5] It is estimated that children aged 5-7 in the United States per year miss more than 7 million classroom hours due to the oral and dental problems. In Iran, one study on oral and dental health indicated that children at ages 3 and 5 had about 2 and 5 decayed teeth, respectively. [6] Khodadadi et al.'s findings demonstrated that inadequate literacy of parents on oral hygiene was related to high dental decay and less dental fillings in children. [7] Bridges et al. reported that parents' oral hygiene literacy had positive relationship with children' oral health status. [8] Firmino et al.'s results illustrated that low parents' oral hygiene literacy was related to dental decay among their children. [9] According to Parthasarathy et al., parents' habits of reading print and digital Chinese texts are significantly related to their oral hygiene literacy scores. However, their reading habits have no effects on children's oral health conditions. [10] Divaris et al. have stated that there is a positive strong relationship between oral hygiene literacy and children's oral health related to the QOL. [11] Based on the results of Vann et al., low hygiene literacy of parents was related to harmful oral health behaviors. [12]

Bozorgmehr et al. found that the attitude and increasing knowledge of parents could affect their children's oral health behavior and status. [13] Brennan et al. concluded that the dental knowledge was associated with oral health status. [14] Hashemi et al. represented that mothers' awareness of the importance and health care of their children's primary teeth was inadequate in Yasuj. [15]

According to Ueno et al., [16] understanding levels of participants on oral health literacy is important to design effective health educational materials and create intervention programs in order to improve oral health. Students with higher oral health literacy had better oral hygiene status, which belonged to higher-educated families. Oral health literacy promoting programs for the students should be considered to improve their oral health and prevent future dental caries. Basir et al. found that patients with low levels of oral health literacy had weak periodontal health. [17] Baskaradoss displayed that development of the oral health literacy of patients may be useful in activities to improve the cohesion of medical guidelines, self-management skills and general treatment consequences. [18] Kesavan et al. have remarked that oral health literacy of the academic students is moderate, and it has significant relationship with socioeconomic conditions as well as the oral health habit with different educational categories has no effect on it. [19]

Parents are responsible for oral hygiene care for adolescent children, especially school-age ones. So, it is necessary to study the relationship between parents' oral hygiene literacy and students' oral health. In the present study, the information on oral hygiene literacy of parents and its effect on oral health of elementary school children in District 2, Kerman were studied according to variables such as level of oral hygiene knowledge of parent, their awareness of oral and dental diseases, important activities for protecting children's teeth, knowledge of dental services and ability to understand their oral hygiene information literacy (Figure 1). The effect of these factors on students' oral health status is shown in figure 2. The main purpose of this study was to investigate the relationship between parents' information literacy on oral hygiene and oral hygiene of public elementary schoolchildren in Education of Kerman, District 2. The hypotheses of the ongoing study were:

1. The oral hygiene knowledge of parents had significant relationship with the oral health condition of students.
2. Parents' awareness of oral and dental illnesses had significant relationship with the oral health of students.
3. Parents' knowledge of important activities to protect children's teeth had significant relationship with oral and dental health of primary school students.
4. Parents' awareness of dental services had significant relationship with oral health status of primary school students.
5. Parents' oral hygiene information awareness had significant relationship with oral and dental health of primary school students.
6. Parents' information literacy on oral hygiene had significant relationship with oral and dental hygiene of students.

The conceptual model of students' oral health status and parents' information literacy on oral hygiene is illustrated in figures 1 and 2.

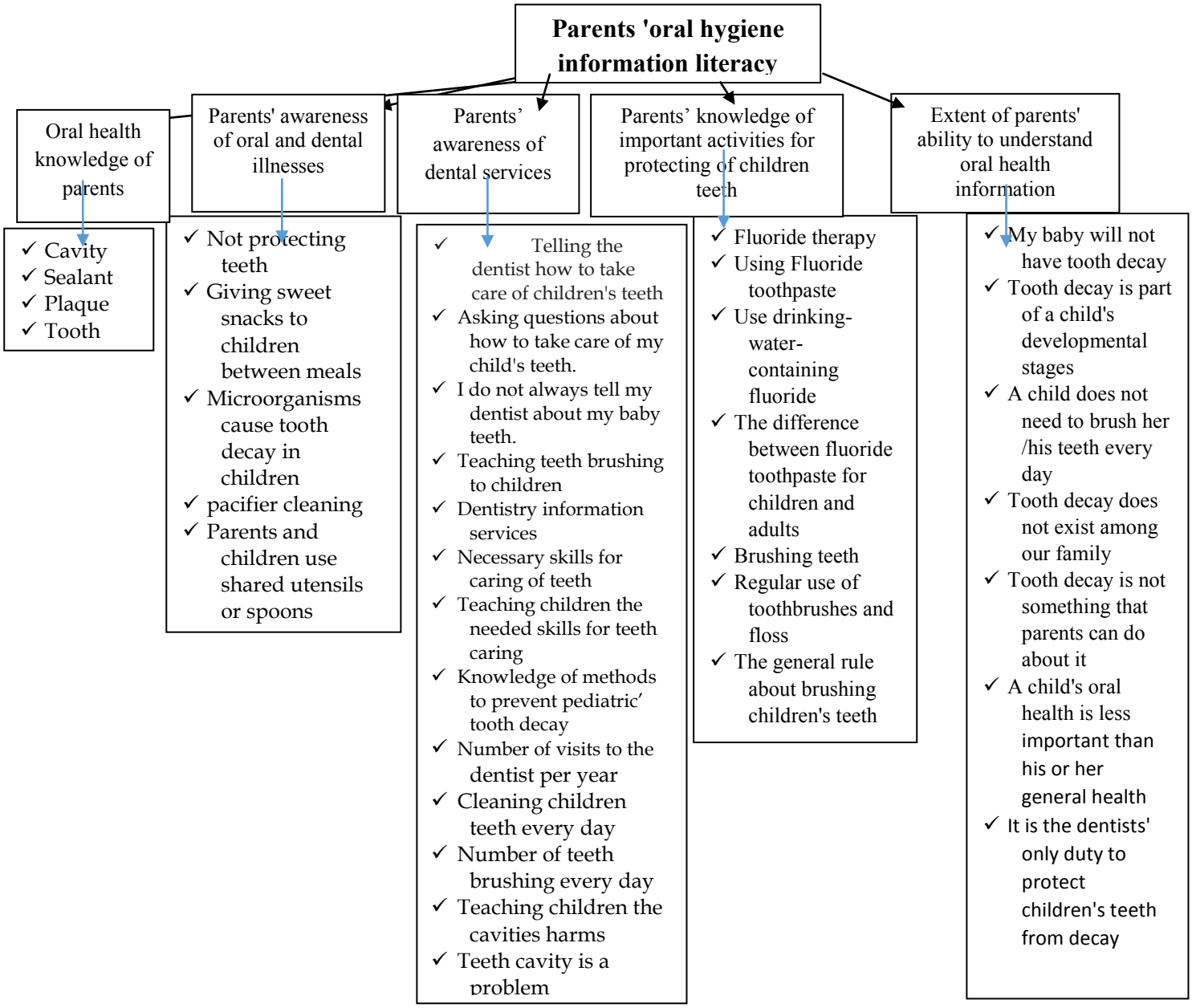


Figure 1. Conceptual model of parents' oral hygiene information literacy

Students oral health Status	Baby Teeth	Cavities and tooth decay
		Filled teeth
		Extracted Teeth
		Impacted tooth
	Permanent Teeth	Teeth need to space-maintainer
		Cavities and tooth decay
		Filled teeth
		Extracted Teeth
		Need to Fissure Sealant

Figure2. Conceptual model of students' oral health status

[Downloaded from cjdr.ir on 2026-11-23]
[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]

Materials & Methods

This study was approved by Ethics Committee of Shahid Bahonar University of Kerman with the ethical code of IR.UK.VETMED.REC.1398.017. In this cross-sectional study, the data was gathered by a questionnaire. The Veerasamy's (2010) questionnaire was used to examine parents' information literacy on oral hygiene,[3] which has been used in several related studies in this field. Therefore, this questionnaire was not researcher-made and its validity was confirmed. Cronbach's alpha was used to confirm its reliability (α = 0.887).

The questions of questionnaire were designed based on 5-point Likert scale, and its content validity was evaluated and approved by 7 professors and experts. The statistical population of the current study was parents and students of primary school in Education of Kerman, District 2 during the academic year of 2017-18.

The reason for selecting the students of District 2 of Kerman was that only one dentist could examine the teeth of the students of one school in this district every week and send the problems to their families while these examinations were performed rare and irregular in the schools of District 1 of Kerman Education. The sampling method was cluster sampling. First, a list of schools of District 2 was prepared. Then, five schools were randomly selected, from each school, one class of each grade was selected as well as from each class, ten students were randomly selected.

Questionnaires were given to the students whose teeth were examined by dentist, and it was emphasized that they hand the questionnaires in to one of their parents and return them to the school's health instructor after completion. Using Morgan's table and probability drop, the sample size was estimated to be 450, of whom 423 respondents completely answered the questionnaires.

To collect information on the students' oral health, the researcher referred to schools and got the oral health information of students from the dentist who examined the teeth of schoolchildren. Simultaneously, the health educator collected information literacy questionnaires on oral dental hygiene form parents of selected sample students.

Data were analyzed using SPSS 23 at a significant level of $P<0.05$. The descriptive (mean±SD) and analytical statistics including correlation coefficient, Pearson chi-square were applied to analyze the data.

Results

The results indicated that out of 423 students, 305 (72.1%) and 118 (27.9%) had unhealthy and healthy deciduous teeth, respectively. Moreover, among 423 students, 151 ones had no decayed deciduous teeth at all and 272 schoolchildren had 1-8 decayed teeth. In addition, of 423 cases, 375 students had no filled baby teeth at all and 48 ones had 1-7 filled teeth. Besides, 289 schoolchildren had no extracted deciduous teeth at all and 134 had 1-9 extracted deciduous teeth as well as none of the 423 students had immature deciduous teeth. Furthermore, 367 (86.8%) ones had deciduous teeth without retaining space and 56 (13.2%) had deciduous teeth in the need of retaining space.

As shown in tables 1-6, among 423 students, 174 (41.1%) and 249 (58.9%) ones have unhealthy and healthy permanent teeth , 273 and 150 ones have no decayed permanent teeth at all and 0-4 decayed permanent teeth, 408 and 15 school children have no extracted permanent teeth and 0-2 extracted permanent teeth as well as 422 (99.8%) have permanent teeth without the need for fissure sealant and 1 (0.2%) case has permanent teeth with the need for fissure sealant, respectively. As illustrated in tables 1-6 regarding parents' information literacy on oral health, the average oral health knowledge of parents is 3.5, the average parental awareness of students' oral diseases is 4.15, the knowledge and awareness average of parents about important measures to protect children's teeth is 4.23, the average parental awareness of dental services is 3.71 and the average ability to understand parental oral health information is 2.07.

First hypothesis: Findings of table 1 demonstrate that the null hypothesis is confirmed, and it can be concluded that the level of oral health knowledge of parents is independent of the oral health status of students (p=0.1).

Second hypothesis: Findings of table 2 display that the null hypothesis is confirmed, and it can be concluded that parents 'awareness of oral health-related diseases is independent of students' oral health status (p=0.3).

Third hypothesis: Findings of table 3 represent that the null hypothesis is confirmed so parental knowledge of important activities for protecting children's teeth is independent of the oral health status of students (0.5).

Forth Hypothesis: Findings in table 4 show that the null hypothesis is confirmed; thus, the parents 'awareness of dental services is independent of the students' oral health status (0.2).

[Downloaded from cjdr.ir on 2026-11-23]
[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]

Fifth hypothesis: Findings of table 5 reveal that the p-value is less than 0.05; therefore, the null hypothesis is rejected, and it can be concluded that the parents' ability to understand oral health information is related to the oral health status of students (p=0.008).

Sixth hypothesis: Data in table 6 illustrate that the p-value is more than 0.5; hence, the null hypothesis is confirmed, and it can be concluded that parents' information literacy on oral hygiene is independent of the oral health status of students (0.8).

Table 1. Relationship between oral hygiene knowledge of parents and oral health of students

		Oral health of students in primary schools					p-value
		very good	good	median	weak	very weak	
Parents' oral hygiene knowledge	very low	2	0	0	1	0	
	low	1	2	0	1	1	
	median	27	32	1	11	12	
	much	55	121	17	32	40	
	very much	24	20	3	12	8	
	Total	109	175	21	57	61	0.1

Table2. Relationship between parents' awareness of oral and dental illnesses and oral health of students

		Oral health of students in primary schools					p-value
		very good	good	median	weak	very weak	
Parents' awareness of oral and dental illnesses	very low	0	0	0	0	0	
	low	1	1	0	0	0	
	median	8	19	2	7	8	
	much	63	121	14	34	31	
	very much	37	34	5	16	22	
	Total	109	175	21	57	61	0.3

Table3. Relationship between parents' knowledge of important activities to protect the teeth of children and oral health of students

		Oral health of students in primary schools					p-value
		very good	good	median	weak	very weak	
Parents' knowledge of important activities to protect the teeth of children	very low	0	0	0	0	0	
	low	0	0	0	0	0	
	median	3	11	0	2	1	
	much	71	119	16	37	39	
	very much	35	45	5	18	21	
	Total	109	175	21	57	61	0.5

[Downloaded from cjdr.ir on 2026-11-23]
[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]

Table4. Relationship between parents' awareness of dental services and oral health status of students

		Oral health of students in primary schools					p-value
		very good	good	median	weak	very weak	
Parents' awareness of dental services	very low	0	0	0	0	0	
	low	1	0	0	0	0	
	median	33	51	8	13	26	
	much	69	117	12	44	35	
	very much	6	7	1	0	0	
	Total	109	175	21	57	61	0.2

Table5. Relationship between parents' understanding ability on oral hygiene information and oral health of students

		Oral health of students in primary schools					p-value
		very good	good	median	weak	very weak	
Parents' oral hygiene information understanding ability	very low	19	20	3	13	7	
	low	66	127	16	37	40	
	median	21	27	1	7	10	
	much	3	0	10	0	4	
	very much	0	1	1	0	0	
	Total	109	175	21	57	61	0.008

Table 6. Relationship between parents' information literacy on oral hygiene and oral and dental health of students

		Oral health of students in primary schools					p-value
		very good	good	median	weak	very weak	
Parents' oral hygiene information literacy	very low	1	1	0	1	1	
	low	4	12	0	4	3	
	median	30	44	9	13	18	
	much	70	110	14	39	42	
	very much	1	4	2	0	0	
	Total	106	171	25	57	64	0.8

Discussion

The results of the current study suggested that parents' information literacy on oral hygiene was independent of the oral health of students; hence, the null hypothesis was accepted and the oral hygiene knowledge of parents was independent of oral health of student, which are consistent with those of Brennan et al. in their study. [14] It could be concluded that there was a high correlation between knowledge of individuals and oral health behaviors as well as the cause of this outcome might be the parents' high level of awareness of decay teeth or plaque and fissure sealant in teeth. Parents' awareness of factors such as microorganisms, children's use of sweet snacks between meals and shared-use dishes and spoons between parents and children caused and exacerbated diseases related to students' mouths and teeth, which is similar to that of Smith, [1] who has identified tooth decay as the most important chronic disease in children, undermining the structure of the tooth through the process of formation of acidic bacteria. The ongoing study claimed that the rate of referrals and use of dental services in children is affected by factors such as the availability of

[Downloaded from cjdr.ir on 2026-11-23]
[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]

[Downloaded from cjdr.ir on 2026-11-23]

[DOR: 20.1001.1.22519890.2021.10.1.7.6]

[DOI: 10.22088/cjdr.10.1.48]

dentists and their numbers, geographical location of the dentist, possibility of using dental insurance, higher education levels and higher-income families so that these families had fewer dental caries. However, the high cost of dental care and lack of insurance coverage for dental services may restrict the referral of low-income families to the dentist. Regarding to the second research question, the findings demonstrated that the null hypothesis was accepted and the parents' awareness of oral diseases was independent of oral and dental health. The probable cause of this result was the increased awareness of parents about factors such as microorganisms, use of sweet snacks between meals by children, shared-use dishes and spoons between parents and children as well as parenting habits in the care of students' oral hygiene.

The findings about the third hypothesis showed that the null hypothesis was confirmed, and parents' awareness and knowledge of the important activities to protect the students' teeth was independent of the oral health status of students. Parents' awareness and knowledge of important activities to protect the teeth of students were independent of their oral health condition, and the probable cause of the desirability level of parents' awareness could be their high awareness of factors such as brushing, using dental floss and fluoride therapy as the main factors to protect the teeth of children. On the forth hypothesis, the null hypothesis was verified and parent's knowledge of dental services was independent of students' oral hygiene. The possible reason for the desirability level of parents' knowledge of dental services might be their high concern about the children' tooth decay, asking and knowing how to care of the teeth of children.

Research the fifth research hypothesis, it was suggested that the null hypothesis was rejected and the parents' ability to understand oral health information was related to students' oral health status, which are compatible with Bozorgmehr et al.'s findings. [13] The probable causes of this fact might be due to the lack of operational awareness and knowledge, lack of time, lack of monitoring the way of brushing and using dental floss in children as well as not referring to the dentist due to the high cost of dentistry and lack of dental insurance coverage.

Research findings regarding to the sixth research question represented that null hypothesis was not rejected and parents' information literacy on oral health was independent of the oral hygiene of students. The probable cause of this fact was that parents had a fairly good level of oral and dental hygiene literacy, but some reasons including the lack of operational awareness and knowledge, lack of time, lack of monitoring the way of brushing and using dental floss in children, not referring to the dentist due to the high cost of dentistry and lack of dental insurance coverage might lead to that parents' awareness had no great influence on the oral hygiene status of students.

One of the limitations of the present study was the unfamiliarity of some respondents with doing research, and as a result, their cooperation was inadequate in completing questionnaire. Another one was inadequate cooperation between Education and school health educators to access students' oral hygiene data.

Conclusion

Knowledge of parents on oral and dental health and diseases, important activities to protect children's teeth as well as dental services are desirable; however, they are independent of oral health status. Nevertheless, if the ability to understand the oral hygiene information of parents has been undesirable, it affects the oral health of the students. Of course, in the ongoing study, the students' oral health condition was relatively favorable. For increasing the oral hygiene literacy of parents, it is suggested that parents should participate in training programs held through different media in schools. Moreover, it is recommended that policymakers and administrators of education programs in primary schools of Education in District 2 of Kerman should not only increase the parents' oral hygiene literacy but also help to improve it via providing appropriate content and educational environment and presenting educational courses.

Acknowledgments

The authors would like to express their deepest appreciation to all those who provided the possibility to complete this study.

Funding: This study is a part of dissertation (no: 350/6332), supported and funded by Shahid Bahonar University of Kerman.

Conflict of Interests : The authors have declared that no conflict of interest.

Authors' Contributions

Mozhdeh Salajegheh developed the original idea and protocol as well as and wrote the manuscript, Maliheh Moghbeli gathered data and prepared the manuscript and Arash Shahravan edited the manuscript.

References

1. Smith A. Oral Health Literacy of Parents and Dental Service Use for Children Enrolled in Medicaid [PhD Thesis]. Minneapolis: Walden University; 2014.
2. Naderifar M, Ghaljaei F , Akbarizadeh MR. Determination of the mothers' practice about orodental health of their children up to six years old. Zahedan J Res Med Sci 2010;*12*:43-8.
3. Veerasamy A. Oral Health Literacy of Parents of Preschoolers. [M.A Thesis]. Christchurch, Canterbury, New Zealand: University of Canterbury;2010.
4. Jackson NG, Waterhouse PJ, Maguire A. Factors affecting treatment outcomes following complicated crown fractures managed in primary and secondary care. Dent Traumatol 2006;22:179-85.
5. Avenetti D. Assessing the relationship between caregivers' pediatric oral health literacy and children's caries status [DDS Thesis]. Seattle, Washington,: University of Washington;2013.
6. Haerian Ardakani A, Morowati Sharifabad MA, Rezapour Y, Pourghayumi ArdakaniA. Investigation of the relationship of oral health literacy and oral hygiene self-efficacy with DMFT and Gingival index in students of Ardakan University. Payesh 2015;3:351-62.
7. Khodadadi E, Niknahad A, Naghibi Sistani MM, Motallebnejad M**.** Parents' oral health literacy and its impact on their children's dental health status. Electron Physician 2016*;* 8:3421-5.
8. Bridges SM, Parthasarathy DS, Wong HM, Yiu CK, Au TK, McGrath CP. The relationship between caregiver functional oral health literacy and child oral health status. Patient Educ. Couns. 2014; 94:411-6.
9. Firmino RT, Ferreira FM, Martins CC, Granville-Garcia AF, Fraiz FC, Paiva SM. Is parents' oral health literacy a predictor of children's oral health outcomes? Systematic review of the literature. Int J Paediatr Dent 2018. [Online ahead of print].
10. Parthasarathy D, Bridges SM, McGrath CP, Au TK, Wong HM, Yiu CK. The relation between caregivers' multiliterate reading habits and their children's oral health status. Interact J Med Res 2014;3: e13.
11. Divaris K, Lee JY, Baker AD, Vann WF Jr. Caregivers' oral health literacy and their young children's oral health-related quality-of-life. Acta Odontol Scand 2012;70:390-7.
12. Vann WF Jr, Lee JY, Baker D, Divaris K. Oral health literacy among female caregivers: impact on oral health outcomes in early childhood. J Dent Res 2010;9:1395-400.
13. Bozorgmehr E, Hajizamani A, Malek Mohammadi T. Oral health behavior of parents as a predictor of oral health status of their children. ISRN Dent 2013;2013:741783.
14. Brennan D, Spencer J, Roberts-Thomson K. Dental knowledge and oral health among middle-aged adults. Aust N Z J Public Health 2010;34:472-5.
15. Hashemi Z, Manzouri L, Rahimi F, Farzadmoghadam M, Gholami SAS. Awareness of care and importance of primary teeth among mothers in Yasuj 2017. Caspian J Dent Res 2019; 8: 24-30.
16. Ueno M, Takeuchi S, Oshiro, A , Kawaguchi Y. Relationship between oral health literacy and oral health behaviors and clinical status in Japanese adults. J Dent Sci. 2013; 8: 170-6.
17. Basir L, Araban M, Khanehmasjedi M, Khanehmasjedi S. The effect of oral health literacy of adolescents on their oral health status: A cross-sectional study from Southwestern Iran. J Oral Health Oral Epidemiol 2020; 9: 173-9.
18. Baskaradoss JK. Relationship between oral health literacy and oral health status. BMC Oral Health 2018; 18: 172.
19. Kesavan R, Prabhakar R, Chaly P, Saravanan R, Mary A. Assessment of oral health literacy and its relationship with oral health related behaviour and socioeconomic status among students of a university in Chennai City. Biomed Pharmacol J 2019; 12: 739-46.

[Downloaded from cjdr.ir on 2026-11-23]

[DOR: 20.1001.1.22519890.2021.10.1.7.6]
[DOI: 10.22088/cjdr.10.1.48]