

Effect of Educational Program about Dental Problems on Health-Related quality of Life For children

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Abstract:

Introduction: Oral health related quality of life reflects people's comfort when eating, sleeping, and engaging in social interaction. Poor oral health affects social activities and child quality of life, such as attending school and interacting with other people. Aim of this study was to determine the effect of educational program about dental problems on health-related quality of life for children.

Materials and Methods: A Quasi experimental research design was used at pedodontics clinic, Faculty of Dentistry, Tanta University. A convenient sample of 60 school age children with dental problems. Tools: Three tools were used to collect the required data structured interview schedule (Tool I): to assess child knowledge and practice regarding to oral health and dental problems. Oral Assessment Scale. (Tool II): to assess oral health of school age children. Oral health related to quality-of-life scale (Tool III): to assess the effect of oral health on children quality of life.

Results: showed that, before program 56% had poor knowledge and practice about oral health and dental problems while after program 66.7% had good knowledge and practice. Regarding child quality of life, nearly two third (65 %) of children had poor quality of life pre- program while as half of them (51.6 %) had good quality of life after three months of program implementation. Conclusion: The educational program has a positive effect on improving children's knowledge, practice and their quality of life.

Conclusions: School curriculum should be containing information about oral health and dental problems to improve awareness of school age child about it.

Keywords: Educational program; Dental problems; Quality of life

Introduction

Oral Health is the standard of oral and related health that enables individuals to eat, speak, and socialize without active disease discomfort, or embarrassment and contributes to general wellbeing. Their self-esteem; and satisfaction with respect to oral health. OH is the result of interaction among oral health conditions, social and contextual factors, as well as the rest of the body (1, 2). Oral health related quality of life has no strict definition. However, there is general agreement that it is a multidimensional concept (3). School age children have 20 primary teeth sometimes called "baby" or "milk" teeth that begin erupting around 6 months of age and continue to erupt through about 2 years of age. Primary teeth are essential for good nutrition, language development, self-esteem, and as placeholders for permanent teeth (4).

Inadequate dental care results in the most common dental problems such as dental caries, malocclusion, gingivitis and Trauma, especially tooth avulsion (5,6). Good oral and dental hygiene help prevent bad breath,

tooth decay, gum disease and tooth loss. It can keep the teeth as the child gets older (7).

The impact of oral diseases on the quality of life is very obvious. The psychological and social impact of such diseases on daily life is easily comprehensible which makes them of considerable importance. Any disease that could interfere with the activities of daily life may have an adverse effect on the general quality of life. Therefore, the notion of oral health related quality of life is the product of many observations and research.

The nurse has historically been the one to receive a child in pain, determines the source of the discomfort, renders care as appropriate and makes the necessary referral. The nurse can enhance dental and oral health by increasing parental information about the importance of sound of nutrition practices, regular dental check-up, proper oral hygiene at varying age . The aim of this study was to: determine the effect of educational program about dental problems on health-related quality of life for school age children.

Materials & Methods:

Research design: A quasi-experimental research design was used in this study

Setting: The study was conducted at selected dental clinic Haryana

Subjects: A convenient sample of 60 school age children with dental problems and their mothers were included from the previously mentioned setting. They were attended for dental management.

Tools of data collection:

Three tools were used to collect the necessary data.

Tool (I): Structured interview schedule: It was developed by the researcher after reviewing the related literature to assess child knowledge and practice regarding to oral health. It includes three parts:

Part (1): Demographic characteristic of:

- Children such as: age, sex, birth order and educational level.
- Mothers such as: educational level, occupation, monthly income and family size.

Part (2): Children's' Knowledge About:

- Dental health: definition of oral health, types, numbers and importance of healthy teeth and harmful behaviors related to child teeth.
- Dental problems such as: dental caries, gingivitis, bad breath, teeth bleeding, dental injury and discoloration of teeth.
- Preventive measures to avoid dental problems.

Scoring System for Children Knowledge for Each Question:

- Correct and complete answers were scored 2.
- Correct and incomplete answers were scored 1.
- Incorrect or no answers were scored 0.

Total scores for children knowledge:

- Less than 50% were considered poor knowledge.
- From 50% to less than 70% were considered fair knowledge.
- 70% and more were considered good knowledge.

Part (3): Children reporting practice related to oral health hygiene includes: frequency and importance of tooth brushing, periodical dental check-up and dietary habits.

- Scoring system for children reporting practice:
- Reporting done correctly and completely were scored 2

- Reporting done correctly but incomplete was scored ¹
- Incorrect or not done were scored ⁰
- Total scores for children reporting practice:
- Less than 50% were considered poor practice
- From 50% to less than 70% were considered fair practice.
- 70% and more were considered good practice.

Tool II: Oral Assessment Scale : This scale was adopted by Ullman 2009(11) and used twice by the researcher before and after three months of program implementation to assess oral health of school age children .It includes five items (lips, tongue, saliva, oral mucosa and teeth). It was done on three-point Likert scale (3-2-1) and analysed as continuous rang from (5-to 15). It was categorized as following:

- Mild dysfunction if it was 5-7
- Moderate dysfunction if it was 8-11.
- Sever dysfunction if it was 12 -15.

Tool III: Oral health related to quality-of-life scale

It was adopted by Slade, 1997(12) and modified by the researcher .it was used twice before and after three months of program implementation to assess the effect of oral health on children quality of life. It consists of fourteen items (has problem pronouncing words, feel the sense of taste worsened, has painful aching in the mouth, find uncomfortable to eat any food to be self-confidence, feel tense, has an unsatisfactory diet, has to interrupt meals, find difficult to relax to be a bit embarrassed, to be irritable with other people, has difficulty in school achievement, feel that life in general was less satisfactory, and to be totally unable to function).

Results

Table (1) shows percentage distribution of studied children regarding to socio-demographic characteristics.

Socio Demographic characteristic	Studied children (60)	
	Number (No)	Percentage (%)
Age in Years		
7	14	23.0
9	33	55.0
11-12	13	22.0
Sex		
Male	28	46.7
Female	32	53.3
Birth order		
First	12	20.0
Second	24	40.0
Third	15	25.0
Fourth	6	10.0
Fifth and more	3	
Educational level		
Primary	60	100.0
Residence		
Urban	21	
Rural	39	

It was found that, more than half of the studied children(55 %) their age 9 years, about one quarter(23 %) 7year and 22 % from 11 to 12years.Regardingtotheirsex, it was noticed that, more than half of them(53,3%) were females and 46,7%weremale.

- It was found that, 40% of studied children were the second children in the family, 20% were first one and 25 % were the third one.
- All of them in primary education.
- It was observed that, nearly two third (65%) of children from rural area, while the rest 35% from urban area.



Figure (1) presents total scores of children knowledge about oral health and dental problems pre, immediate and after threemonths of program implementation

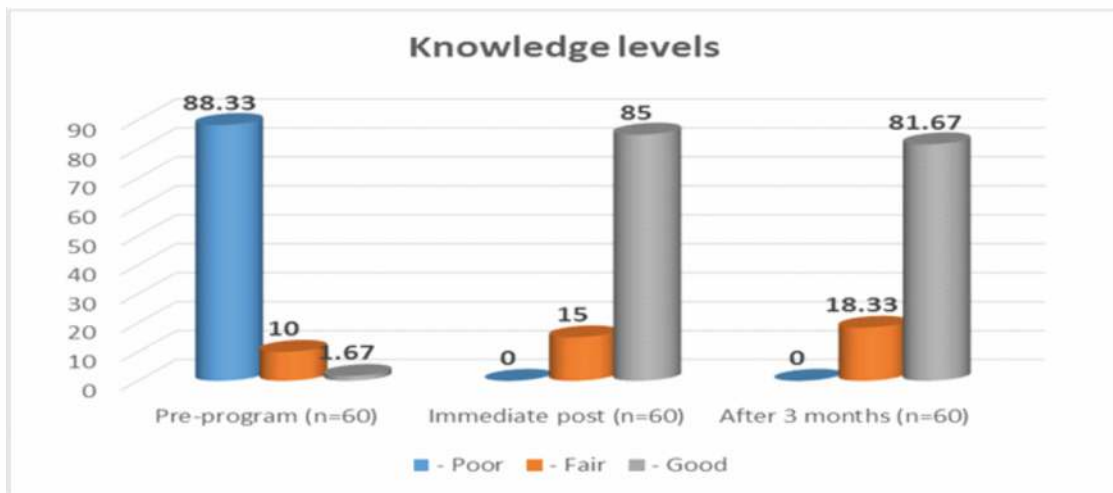


Figure (2) illustrates total scores of children reporting practices before and after three months of program implementation

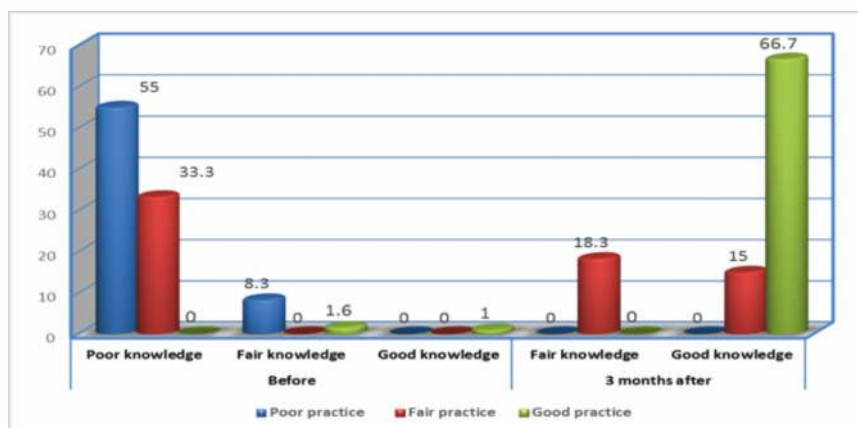


Figure 3: Correlation between total scores of children knowledge and reporting practice before and after three months of program implementation.

Table 2: Total scores of oral health assessment for studied children using oral assessment scale before and after three months of program implementation.

Items of assessment	Pre-program (N=60)		After 3 months (N=60)		χ^2	P value
	No	%	No	%		
-Mild dysfunction)5-7(	25	41.67	24	40.00	0.035	0.983
-Moderate dysfunction)8-11(	34	56.67	35	58.33		
-Severe dysfunction)12-15(	1	1.67	1	1.67		
Mean±SD	7.82±1.21		7.88±1.26		.100P value=t= -1.66	

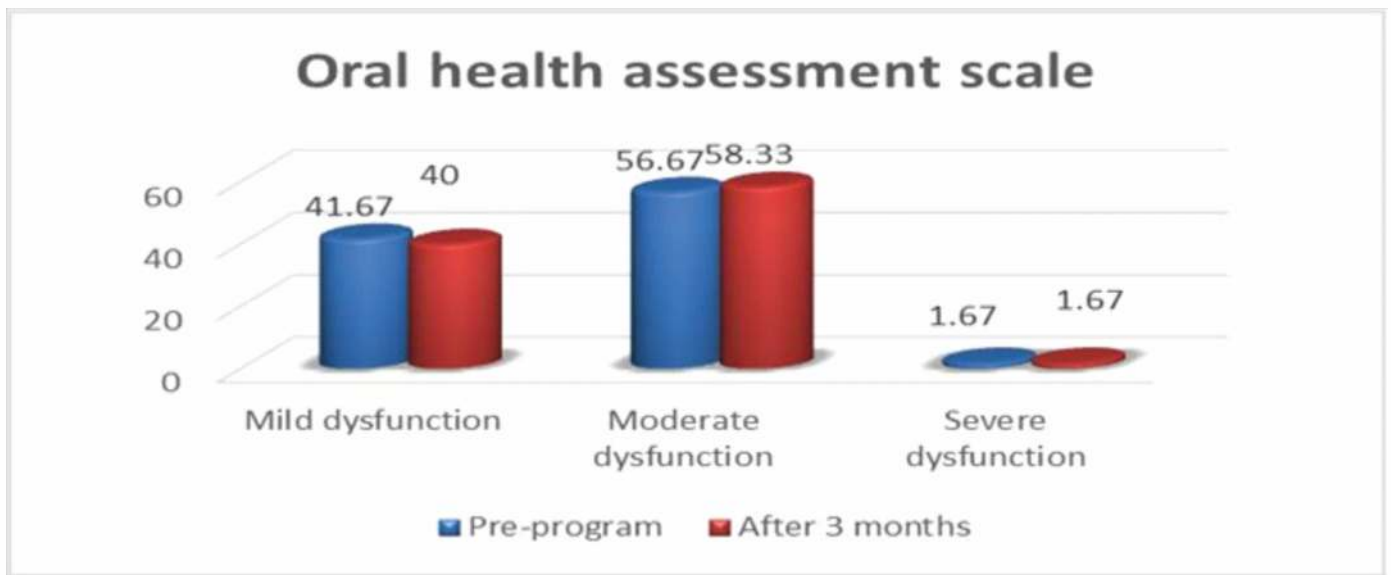


Figure (4) Total scores of oral health assessment before and after three months of program implementation.



Figure (5) Total scores of children quality of life before, and after 3 months of program implementation

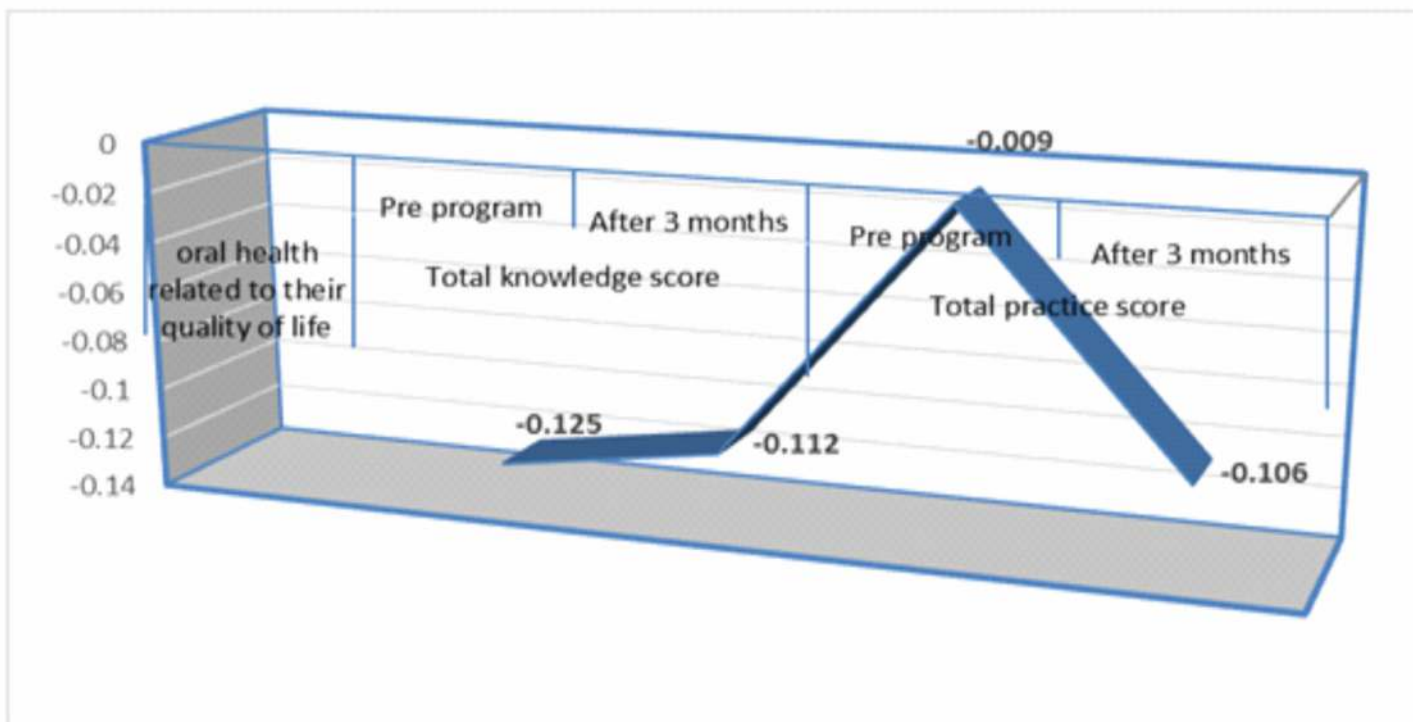


Figure (6): Correlation between total scores of children knowledge, practice and oral health related to their quality of life before and three months after program implementation.

Conclusions

- OHRQOL is defined as a multidimensional construct that reflects children's comfort when eating, sleeping, and engaging in social interaction; their self-esteem; and their satisfaction with respect to their oral health.
- Regarding child age affected by dental problems, the present study revealed that, more than half of the studied children with dental problems their age range from 9 to 11 years and it was more among female children than male and rural areas more than urban area.
- This may be attributed to the effect of good education, communication and interaction of children during session in addition child during this stage had the curiosity to learn and willing to communicate and interact with others.
- Based upon the finding of the present study, it can be concluded that:
- The educational program had a positive effect on improving children knowledge; reporting practice as well as their quality of life.

Recommendations

- Based upon the finding of the present study the following recommendations were suggested;
- Establish continuous educational programs for mothers and their children as well as nurses working in dental clinic to improve their information's.

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