



Original Research Article

Opinion of Primary School Principals on Effectiveness of School Based Oral Health Program in Abha City, Saudi Arabia

Ibrahim FA^{1*}, Tikare S², Togoo RA³, Shahrani I⁴, Ravi KS⁵

¹Assistant Professor, Division of Dental Public Health, ²Lecturer, Division of Dental Public Health, ³Associate Professor, Division of Pedodontics, ⁴Assistant Professor, Division of Orthodontics, ⁵Assistant Professor, Division of Pedodontics

Department of Preventive Dental Sciences, King Khalid University College of Dentistry, Kingdom of Saudi Arabia

*Correspondence Email: drfaisalawad@gmail.com

Received: 09/03/2013

Revised: 02/04/2013

Accepted: 04/04/2013

ABSTRACT

Background: In recent years, the concept of a ‘*Health Promoting Schools*’ has received much interest. This survey assesses primary school principal's opinion on oral health promotion program conducted by King Khalid University, College of Dentistry, Abha, Saudi Arabia.

Method: A questionnaire was developed to assess school principals opinion about oral health promotion program conducted in their respective schools. The questionnaire was sent to principals of all participating schools by mail. The collected feedback data was entered in the computer and analyzed for results.

Results: A total of 14 schools were considered for the feedback survey of which 13 (92.8%) schools responded. 12 (92.3%) of the principals were of the opinion that the information on causes and prevention of oral diseases has increased oral health awareness among school children whereas 9 (69.2%) principals thought awareness increased among school teachers as well. Only 4 (30.8%) principals had opined that there might be reduction in school absenteeism due to oral health program. 10 (76.9%) principals ensured that parents of the children are aware of the school oral health program. All 13 (100%) principals were absolutely satisfied with respect to the benefits of the program, the conduct of the supervising staff and the dental students carrying out the program.

Conclusions: There was a strong positive opinion about the program among the school principals. The overall results suggest that the program was beneficial as well as effective on children, parents and the teachers in improving their awareness about oral health. The results of this feedback survey serves as an evaluation tool and the results can be used for continuous improvement of school oral health programs.

Key Words: Satisfaction, Dental health Education, Saudi Arabia.

INTRODUCTION

In every community and country, children are the most important natural resource. They must be at the very heart of

“development”. Investments in schools are intended to yield benefits to communities, nations and individuals. Such benefits include improved social and economic

development and enhanced quality of life. In recent years, the concept of a “*Health Promoting School*” has received much interest. [1-5] As children attend school during some of the most formative years of their life, the school environment is an appropriate place for Oral Health Promotion efforts. There is evidence that better education leads to better health. [6]

King Khalid University, College of Dentistry is one of the premiere dental institutions in the Kingdom and has been providing dental care for about a decade. Reflecting the institution’s mission of community service and citizenship development, the institution not only offers a full range of specialty dental services for the public, but serves as a role model through extensive outreach programs that bring quality services and preventive education to patients in need of dental care. Schools offer an ideal setting for promoting oral health and provide an important network and channel to the community. College of Dentistry has an endeavor to reach the school children in the region and conducts school based oral health promotion program at various schools.

Consumer satisfaction with health care is an issue addressed in current methodologies for evaluating health care programs. [7-9] In this context, satisfaction can be considered an intermediate outcome of the health care process that reflects the extent to which the care given answers patients' needs, meets their expectations and provides an acceptable standard of service. Satisfaction is a subjective assessment and, by inviting consumers to express their opinions on their health care experience, studies of satisfaction may provide a measure of the success of a health care program in terms of the perceived needs, the expectations and the health care experience of the consumer.

Since school authorities are major stake holders in any school dental health program, their feedback regarding the conduct and impact of the oral health program were collected from the participating school principals. This specific survey was developed as part of the overall evaluation of the school based oral health promotion program conducted by King Khalid University, College of Dentistry, Abha, KSA and use the results of the study to improve the dental services in the schools.

MATERIALS AND METHODS

A draft questionnaire was constructed in English and translated into the national language (Arabic). Both copies were checked by the language expert for clarity in the translated version and the questionnaire was verified for face validity by Dental Public Health faculty. Two dimensions of satisfaction with dental care were incorporated in the questionnaire designed for this Survey: the content of the dental visit and the outcome of the dental visit. The questionnaire had 5 items measuring the outcome and 4 items measuring the content of the program. The program was carried out in 14 schools of Abha, Asir province, KSA. At the end of the program the questionnaire was hand delivered to the respective school principals who were directly involved. The questionnaire was given with a stamped envelope addressed towards the investigator of the feedback survey and were asked to mail them back within 2 days. Respondents were asked to indicate whether they would agree/disagree or satisfied/not-satisfied with statements on the School Oral Health Promotion Program. The collected feedback data was entered into the computer (MS-Office, Excel) and subjected to statistical analysis.

RESULTS

Table 1: School Principal's Feedback on School Oral Health Promotion Program

Questions	Satisfactory/Yes		Not Satisfactory/No		No Response	
	N	%	N	%	N	%
Q1. Do you think the information on causes and prevention about oral diseases has increased awareness among your school children?	12	92.3	1	7.7	0	0
Q2. Do you think the information on causes and prevention about oral diseases has increased awareness among your school teachers?	9	69.2	2	15.4	2	15.4
Q3. Are the parents of the children aware of the school oral health program?	10	76.9	3	23.1	0	0
Q4. If YES to the previous question, what is their opinion? (Beneficial/Not Beneficial)	11	84.6	0	0	2	5.4
Q5. Do you think the content of the program is beneficial?	13	100	0	0	0	0
Q6. Do you notice reduction in school absenteeism after the program?	4	30.8	8	61.5	1	7.7
Q7. Are you satisfied with the dental faculty who supervises the program?	13	100	0	0	0	0
Q8. Are you satisfied with the dental students who carry out the program?	13	100	0	0	0	0
Q9. Do you wish to have such program in the coming year?	13	100	0	0	0	0

The questionnaire was distributed to a total of 14 schools of which the principals of 13 schools responded with filled questionnaire making the response rate of 92.9%. The analysis of the data revealed interesting results. The responses to individual items can be seen from the above table 1.

The responses to items measuring impact of the program were varied: 92.3% of the schools thought the program was informative and increased the awareness among children and 69.2% of the schools thought the program was informative and increased the awareness among school teachers. 76.9% schools had opinion that parents of children are aware about the program. 84.6% of the schools got positive program feedback from the parents who said the program was beneficial for the children. Only 30.8% of the school believed that there could have been reduction in school absenteeism by the children.

The items measuring satisfaction with respect to content of the program had a very positive response. All the schools (100%) believed that the overall content of the program was beneficial. All schools (100%) were satisfied with performance of the faculty and dental students carrying out the program. Also all the schools (100%) were willing to have such program in future at their school.

DISCUSSION

The present survey assessed primary school principal's assessment of school oral health promotion program. This program is conducted biannually by College of Dentistry, King Khalid University. The basic goal of the program is to develop the knowledge, skills and attitudes needed for prevention of dental diseases which lasts for lifetime. The program considers Grade I i.e. 6 year old school children. The program operates for 4 weeks and the activities include: Dental inspection and referral in the

first week, Oral health education using audio-visual aides in the second week, Demonstration of tooth brushing technique using models in the third week, and application of topical fluoride gel in the last week.

The program was comprehensive in its contents including aspects of oral education using audio-visual aids, demonstrations on models and preventive care. All school principals (100%) in the present survey had a common opinion that content of the program was beneficial. This feedback is complimentary with the team of experts at College of Dentistry, KKU who are well-trained to carry out such community outreach activities. The team has always been at the forefront in promoting community oral health.

The results of this feedback survey revealed that 92.3% of the school principals believed that the program had a strong impact on increasing the awareness about oral health among children. Many studies including systematic reviews have established the positive effect of oral health promotion programs on knowledge levels and plaque scores. [10-15] The most likely reason for the school principals to have such an opinion may be due to the kind of response from the school children. The children had a very positive attitude towards the entire program and enthusiastically participated in it. In comparison to the impact on children 69.2% school principals believed the program to have influenced school teacher's oral health awareness as well. This difference in the results observed might be because the content of program though was informative to the school teachers it was primarily focused for the children.

In the present study it was observed that 76.9% school principals ensured the parents of children being made aware of the oral health program. Since there was a

referral system, the program also has believed to have influenced parents of the children. All children needing dental care and attention were referred to College of Dentistry, King Khalid University. A large body of evidence demonstrates a strong and positive link between parents' involvement and interest in a child's learning and a child's subsequent adjustment and achievement. [16] It is well established that parents have large bearing on the child's oral health. [17-19] Today many schools produce regular newsletters to inform parents, caregivers and community members about school activities, developments and initiatives. Such parental involvements enhance the impact of the program on the children. In Saudi Arabia, schools often communicate information about specific issues relating to a student by way of a personal letter, usually sent home with the student or through regular parents meet.

School attendance drops when children or their family members are ill, [20,21] when the school is not clean or not equipped with sanitary facilities, when parents cannot afford to send children to school, when children have to work, or when students fear violence or abuse on the way to, from or in school. In our study majority (61.5%) of the schools had an opinion that there may be no change in the absenteeism rate of the child. This particular observation must be considered with caution since it is not based on absentee's data.

The results of the present survey suggest a positive satisfaction feedback on the performance of faculty and students during the program. The implementation of school oral health program is done with due consideration to the current principles of ethics and good clinical practice thereby ensuring reliable and best quality services to the public. This reflects the dedication and enthusiasm of the dental faculty and staff towards the same end. All the school

principals were overwhelmingly interested and willing to have such programs in the future.

CONCLUSION

In conclusion, there was a strong positive opinion about the program among the school principals. The impact of school oral health promotion program carried out by College of Dentistry, KKU were beneficial as well as effective on children, parents and the teachers in improving their awareness about oral health. The results of this feedback survey serves as an evaluation tool and the results can be used for continuous improvement of school oral health programs.

ACKNOWLEDGEMENTS

We are grateful to all the school principals participating in the survey for their valuable inputs and teachers for their cooperation throughout the program. We are also thankful to the dental students and all the supporting staff directly or indirectly involved in the program.

REFERENCES

1. Nutbeam D: The health promoting school: Organisation and Policy development in Welsh secondary schools. *Health Education*. 1987; 46:109-115.
2. Parsons C, Stears D, Thomas C: The health promoting school in Europe: Conceptualising and evaluating the change. *Health Education Journal*. 1996; 55:311-321.
3. Lee A. The concept of health promoting schools to enhance positive youth development. *Asia Pac J Public Health*. 2004; 16 Suppl:S3-6.
4. Catherine E. Ross, John Mirowsky. Refining the association between education and health: The effects of

- quantity, credential, and selectivity. *Demography*. 1999; 36(4): 445-460.
5. Paula M. Lantz, James S. House. Socioeconomic Factors, Health Behaviors, and Mortality Results From a Nationally Representative Prospective Study of US Adults. *JAMA*. 1998; 279(21):1703-1708.
6. Mohapatra B, Ramadasmurthy V., Better education for better health care. *World Health Forum*. 1988; 9(4):612-4.
7. Paul D. Cleary, Barbara J. McNeil. Patient Satisfaction as an Indicator of Quality Care. *Inquiry*. 1988; 25(1):25-36.
8. Mei-O Hsieh, Jill DonerKagle. Understanding Patient Satisfaction and Dissatisfaction with Health Care. *Health Social Work*. 1991; 16(4): 281-290.
9. Brian Williams. Patient satisfaction: A valid concept? *Social Science & Medicine*. 1994; 38(4):509-516.
10. Kay E, Locker D. A systematic review of the effectiveness of health promotion aimed at improving oral health. *Community Dent Health*. 1998; 15(3):132-44.
11. Petersen P E, Bin Peng. Effect of a school-based oral health education programme in Wuhan City, Peoples Republic of China., *International Dental Journal*. 2004; 54(1) 33-41.
12. Stella Y.L. Kwan, Petersen PE. Health-promoting schools: an opportunity for oral health promotion. *Bulletin of World Health Organization*. 2005; 83: 677-685.
13. W. H. Van PalensteinHelderman, L. MunckEffect evaluation of an oral health education programme in primary schools in Tanzania. *Community Dentistry and Oral Epidemiology*. 1997; 25(4): 296-300.

14. Richard G. Watt, Valeria C. Marinho. Does oral health promotion improve oral hygiene and gingival health?. *Periodontology* 2000. 2005; 37(1): 35–47.
15. Caroline A. Redmond, Fiona A. Blinkhorn. A Cluster Randomized Controlled Trial Testing the Effectiveness of a School-based Dental Health Education Program for Adolescents. *Journal of Public Health Dentistry*. 1999; 59(1):12–17.
16. Desforges C, A. Abouchaar. The impact of parental involvement, parental support and family education on pupil achievement and adjustment. A literature review. DfES Research Report: 433. 2003. London.
17. Fisher-Owens *et al.* Influences on Children's Oral Health: A Conceptual Model. *Pediatrics*. 2007; 120(3): e510-e520.
18. Okada M. Influence of parents' oral health behaviour on oral health status of their school children: an exploratory study employing a causal modelling technique. *Int J Paediatr Dent*. 2002 Mar; 12(2):101-8.
19. Poutanen R, Lahti S, Tolvanen M, Hausen H. Parental influence on children's oral health-related behavior. *Acta Odontol Scand*. 2006; 64(5):286-92.
20. S. L. Jackson, W. F. Vann Jr. Impact of Poor Oral Health on Children's School Attendance and Performance. *American Journal of Public Health*. 2011; 101(10):1900-1906.
21. W. Richards, J. Ameen. The impact of attendance patterns on oral health in a general dental practice. *British Dental Journal*. 2002; 192: 697–702.

How to cite this article: Ibrahim FA, Tikare S, Togoo RA et. al. Opinion of primary school Principals on effectiveness of school based oral health program in Abha city, Saudi Arabia. *Int J Health Sci Res*. 2013;3(4):80-85.
