

CHILDREN'S ATTITUDE TO THE USE OF GLOVES BY DENTISTS

FUAD H AL-MOHERAT, BDS, MSc, Royal Medical Services of Jordan Armed Forces (RMS)

KARAM H ABU SHAGRA, BDS, MSc, Royal Medical Services of Jordan Armed Forces (RMS)

ABSTRACT

The aim of the present study was to evaluate the attitude of parents and their children to the use of gloves by dentists in the dental clinic. 314 parents and their children attending pediatric dental clinic at King Hussein Medical Center and Prince Ali Hospital were asked to participate in the study. Children aged between 11-15 years old participated. A questionnaire was used in the research.

The majority of the children and their parents (94.9% and 96.2% respectively) stated that the wearing of gloves was important during dental treatment. Most of the participants stated the gloves are worn for the protection of dentist and the patient (94.9% and 90.8% respectively). 94.4% of children and parents did not like to attend a dentist who did not wear gloves. Most of children 92.3% and parents 94.9% thought that gloves should be changed after dental treatment of each patient.

The majority of participants in the present study indicated that gloves should be worn by dental practitioners while treating their patients and they will not bring their children to a dentist who does not show adequate infection control procedures. The study showed no significant difference in response between children and their parents.

INTRODUCTION

Increase in the incidence of the diseases like Aids and hepatitis lead to awareness of cross infection control measures in dental surgery^{1,2}. So many authorities put comprehensive guidelines of infection control in dental practice¹⁻⁴. One of the important recommendations among these guidelines is the routine use of gloves by dental practitioners. Gloves may be worn for many reasons namely to protect the operator from infection carried by the patient, to avoid transmission of infection from one patient to another, and to reassure to the patients and their parents that the operator is aware of the dangers of cross infection and taking steps to avoid it⁵. The percentage of dentist who use gloves routinely while treating their patients is greater as compared to those dentists who either never wear gloves or use gloves for selected patients or procedures⁶⁻¹⁰. Dentists mentioned several reasons for non routine use of gloves such as reduced sensations, restricted movement, low infection risk, patient acceptance, and lack of supplies, cost and others⁷.

Many studies were undertaken to evaluate dentist's and adult patient's attitudes to gloves use; however, the attitude of children to gloves use by dentists has not been recorded. Therefore, the purposes of the present study was to investigate the awareness of children on the importance of gloves use by dental practitioners and to compare their response to their parents.

METHODOLOGY

A survey was conducted which included children and their parents attending pediatric dental clinic at King Hussein Medical Center and Prince Ali Hospital. The questionnaire was designed to elucidate the patient's attitude to gloves use by dentists. The questions were; Do you consider that dentists should wear gloves while treating patients? Are gloves worn to protect the dentists or the patients? Will you attend a dentist who did not wear gloves? And do you consider that dentists should change gloves between patients, or is washing the gloved hands sufficient? Participants completed questionnaires in the dental clinic after completion of

Correspondence: Fuad Hamed Al-Moherat, Amman, 11810, Wadi Elseer PO Box 53 Email: fuadalmoherat@yahoo.com

treatment of the children. Verbal consents were obtained from their parents children whose age ranged between 11 and 15 years were included in the study. Mean age of children was 13.4 years with SD+2.3.

Data were analyzed using descriptive statistics and chi-square test was used to assess the relationship between the responses of parents and children to questions and the level of significance was set at 5%.

RESULTS

There were 300 participants (157 children and 157 parents). The majority of the children and their parents (94.9% and 96.2% respectively) stated that the wearing of gloves was important during dental treatment (Table 1). Almost equal response was noted by children and parents. Most of both the participants stated that gloves are worn for the protection of the dentist and the patients (94.9% and 96.2% respectively) (Table 2). 90.4% of children and 87.3% of parents did not like to attend a dentist who did not wear gloves (Table 3). Most of the children (92.4%) and parents (94.9%) thought that gloves should be changed after dental treatment of each patient, (Table 4) with no significant difference in response between the two groups.

TABLE 1: RESPONSE OF CHILDREN AND THEIR PARENTS ON WHETHER DENTIST SHOULD WEAR GLOVES WHILE TREATING PATIENTS

	Yes No (%)	No No (%)	Don't know No (%)
Children	149 (94.9%)	3 (2%)	4 (2.5%)
Parents	151 (96.2%)	6 (3.8%)	1 (1%)
Total	300	9	5

X²=2.8, p> .05

TABLE 2: CHILDREN'S AND PARENT'S RESPONSE ON WHETHER GLOVES ARE WORN TO PROTECT DENTIST OR PATIENTS

	Dentist only No (%)	Patient only No (%)	Both No (%)
Children	4 (2.5%)	4 (2.5%)	149 (94.9%)
Parents	2 (1.3%)	4 (2.5%)	151 (96.2%)
Total	6	7	300

X²=0.82, p> .05

TABLE 3: CHILDREN'S AND PARENT'S RESPONSE ON WHETHER THEY WOULD ATTEND A DENTIST WHO DON'T WEAR GLOVES

	Yes No (%)	No No (%)
Children	15 (9.6%)	142 (90.4%)
Parents	20 (12.7%)	137 (87.3%)
Total	35	279

TABLE 4: CHILDREN'S AND PARENT'S RESPONSE ON WHETHER DENTIST SHOULD CHANGE GLOVES OR WASHING IS SUFFICIENT

	Change gloves No (%)	Washing sufficient No (%)	Decision by dentist No (%)
Children	145 (92.4%)	5 (3%)	7 (4.5%)
Parents	149 (94.9%)	1 (1%)	7 (4.5%)
Total	294	6	14

X²=2.71, p> .05

DISCUSSION

The present study compares the response of children to questions regarding use of gloves by dentists. According to Piaget, by the age of eleven the children's thought process become similar to that of adult and is capable of understanding concept of health, disease, and preventive treatment. For most of children, the ability to deal with abstract concept and abstract reasoning develop by the age of eleven.

The majority of children and their parents considered that dentist should routinely wear gloves during dental treatment. This result is in agreement with most previous studies^{5,11,15}. The high proportion of participants in the study considered that gloves worn by the dentist during treatment is an important aspect of cross infection control, indicating high level of public awareness of such issue. There was no significant difference in response between children and their parents. This result showed that children nowadays have high degree of awareness to the diseases that spread these days and their thinking is almost similar to adults. In Jordan 81.8% general dental practitioners wear gloves during dental treatment¹⁶, whereas 100% of dental staff of university teaching center reported routine wearing of gloves use while treating patients¹⁷.

In dentistry gloves are worn with the aims of protecting the dentist and the patients from infection and to avoid transmission of disease from patient to patient. In the present study, the overwhelming majority of children and their parents considered gloves are worn for protection for both the dentist and the patient. This result is in contrast to previous finding by Bowen et al¹⁵, when 31% of patients considered that the main reason to wear the gloves was to protect the dentist from the patient and 19% patients' surveyed felt that the main reason of wearing gloves was for protection of patient from dentist. But this finding is in agreement to previous reports^{5,11,13}.

Most of the children and their parents mentioned that they would not attend a dentist who does not wear gloves during dental treatment (90.4%, 87.3% respectively). This is higher than the results obtained by previous studies^{5,11,13}. There was low percentage of children and parents (9.65, 12.7% respectively) who would attend a dentist when gloves are not worn. These figures were much lower than 51.51 and 34% of patients in previous reports by Burke et al and Otuyemi et al respectively^{5,12}. These results, however conflicts with the fact that 2.1% of children and 3.8% of parents, felt that glove wearing was unnecessary. Increase in awareness of cross infection among parents and children may explain these results, with no significant difference between both groups.

Most of participants were in favor of necessity of glove wear by dentists and in changing of gloves between patients. This reflects more awareness of both groups to the importance of infection control. The present findings is higher than results reported by others^{5,11-14}, which may be due to the effect of media reports on infectious diseases such as Aids on people and have made them more aware to the importance of infection control procedures in dental practice. This awareness is almost similar in both children and their parents with no significant difference between them.

CONCLUSION

The majority of participants in the present study indicated that gloves should be worn by dental practitioners while treating their patients and should not bring their children to a dentist who does not show adequate infection control procedures. The study showed

no significant difference in response between children and their parents to listed questions regarding their attitude to use of gloves by dentists.

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Correspondence: All correspondence must be addressed to Professor Ahmad Iqbal, Editor, Pakistan Oral & Dental Journal, 19, Street 63, F-7/3, Islamabad, Pakistan. E-mail: driqbal7@gmail.com, website: www.podj.com.pk