Child reaction to protective garb at the first dental visit

Robert Davis, DMD  David H. McKibben, DMD, MDS  Mamoun M. Nazif, DDS, MDS  J. Bartko, RDH

Introduction

The use of masks, gloves, and protective eyewear as a means of infection control in the dental office has been mandated by both the federal government and organized dentistry. Compliance among dental practitioners has increased, but a significant number of general practitioners and pediatric dentists still resist the use of protective garb while treating children. Some assume that these items interfere with establishing rapport by restricting normal communication. The introduction of “appearance altering devices” adds a new variable into the complex problem of child management in the dental office. Just how negative, or perhaps positive, a factor barrier garb is when treating children remains unknown. The objective of this study was to investigate children’s acceptance of masks, gloves, and goggles worn by the dentist at the first dental visit.

Bowden et al. surveyed the general reaction of adult patients to the use of protective garb and reported 78.5% of those surveyed agreed that some combination of covering should be used when treating adults. When asked specifically about children’s dental health care, 18% felt no gloves or goggles should be worn while treating children. The number of dentists who use barrier techniques varies around the country. Yablon et al. reported fewer than half of the New York metropolitan area dentists surveyed used barrier techniques routinely. A survey of Minnesota dentists in the same year found only 35% and a North Carolina study reported 27% using barrier techniques routinely. A study of Connecticut pediatric dentists produced a higher compliance rate for gloves (76%) and eyewear (86%), but only 35% for masks.

Methods and materials

Only children with no history of a previous dental examination or treatment, aged 2 to 8 years (median age 4.2), were invited to participate. Thirty healthy pediatric dental patients (14 males and 16 females, with the median age of 4.4 years) were chosen. The same staff dental hygienist greeted each family and obtained a preliminary health history. She showed the child two photographs of the same operator (Fig), one with the operator in mask, gloves, and goggles and one without. The pictures were left with the child and, after five minutes, the child was asked to select which picture represented how he or she wished the dentist to look. Three options were offered: 1) “I like picture No. 1” (mask, gloves, and goggles); 2) “I like picture No. 2” (no protective wear); or 3) “I do not care.” After five minutes, the hygienist accompanied the patient to the operatory and seated the child. At this time she also assigned a pretreatment behavior rating based on the Frankl scale. The hygienist was trained in assigning Frankl ratings; however, intrarater reliability was not measured. The dentist then demonstrated the mask, gloves, and protective eyewear to the patient using a standard brief explanation of the purpose of each item. The garbed hygienist then cleaned the child’s teeth and applied topical fluoride, after which the garbed dentist was called to complete the examination. At the end of the visit, the child was shown the same pictures and asked to select again the one that represented how he or she wished the dentist to be dressed. A second behavior rating was assigned by the hygienist at the end of the appointment.

Results

The table contains a summary of the initial selections.
Dr. Davis is in private practice of Pediatric Dentistry in Beaver, PA and former Chief Resident at Children’s Hospital of Pittsburgh, PA. Dr. McKibben is clinical associate professor, Pediatric Dentistry, University of Pittsburgh and staff pediatric dentist, Children’s Hospital of Pittsburgh. Dr. Nazif is director, Pediatric Dentistry, Children’s Hospital of Pittsburgh. Ms. Bartko is staff hygienist, Children’s Hospital of Pittsburgh.