Short research communication

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Abstract

Background: Oral health is important to general health but use of dental services varies considerably, particularly for children.

Aims: We aimed to determine factors associated with parents' use of dental services for their children in Lebanon, and their perception of dental care relative to medical care.

Methods: A convenience sample of public and private schools in Beirut was selected between January and May 2013. Parents of children in grades 2–6 (aged 7–12 years) were invited to complete a questionnaire covering socioeconomic characteristics and use of dental services. Logistic regression analysis was used to assess the relationship between use of dental services, and parents' socioeconomic characteristics and awareness and perceptions of dental services.

Results: The parents of 316 children returned the questionnaire. Most children (72.8%) had been taken to the dentist in the past year, mainly for emergency care. Most parents (78.2%) considered dental care as important as or more important than medical care, and 89.9% were willing to contribute to dental insurance. Use of dental services was significantly associated with: older age of the parent (odds ratio, OR = 1.04; 95% confidence interval, CI: 1.02–1.06);

awareness of dental care centres offering affordable treatment (OR = 3.18; 95% CI: 1.52–6.68); and children being in private schools (OR = 2.00, 95% CI: 1.08–3.95). It was negatively associated with > 4 children in the family compared with 1 child (OR = 0.18; 95% CI: 0.04–0.81).

Conclusion: Barriers to dental care for children were mostly related to economic factors.

Keywords: dental care for children, oral health care, dental insurance, Lebanon

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Introduction

Poor oral health, which is related to excessive sugar intake and low levels of fluoride exposure (1,2), affects 60–90% of schoolchildren globally (3) and the most socially disadvantaged populations (4), particularly given the high cost of treatment in low- and middle-income countries (5,6). The use of dental services has been widely investigated in relation to sociodemographic variables. Utilization is lower in younger people (21–35 years) and people of lower socioeconomic status (7). On the other hand, the use of dental services in children is greater when parents have a higher education (4,7,8) and have a better perception about oral health, including preventive and comprehensive care rather than only emergency treatment (e.g. toothache) (4,9). In addition, utilization of dental care is greater when third-party dental coverage is available – uninsured people are twice as likely to neglect dental care as insured people (10). Low utilization of dental services was associated with treatment expenses in Lebanon (11), where only about 20% of the population benefit from dental insurance through

military and civil servant programmes (12).

In addition, oral health is globally the most common unmet health care need (13). This fact raises the question about people's perception of oral care in relation to medical care. Although a statistically significant association has been reported between perceived general and dental health (14), the relationship between such perception and use of dental services is not well known.

We hypothesized that the perception of the importance of oral care in relation to medical care may be associated with use of dental services, and that utilization among Lebanese schoolchildren would reflect the oral care perception of parents and related practices. Private and public schools are fairly equally distributed in Beirut – 52.8% and 47.2% of pupils attend private and public institutions, respectively (15). They therefore represent a good model for socioeconomic background.

The aims of our study were to: (i) identify the factors associated with access to dental care in schoolchildren from different socioeconomic backgrounds and with the barriers preventing parents from using needed dental services for their children; and (ii) assess parental perception of dental care in relation to medical care.

Methods

Study design and sample

This was a cross-sectional study of children in grades 2 to 6 (aged 7–12 years) attending five private and two public schools in Beirut that agreed to allow children and their parents to participate in the study. The sample was a convenience sample in the first phase (January–May 2013) of a multiphase study on the children's oral health. In this phase, the children were given a consent form and a questionnaire to take home to their parents for them to sign and complete within one week. Parents who returned the signed consent form and the completed questionnaire were included in the study.

Power analysis showed that with a sample size of 316 responses, an effect size of 0.07 (between a small (0.02) and the medium (0.15) effect size) and a probability level of 0.05, the statistical power is 0.8, with 20 predictors.

Data collected

The questionnaire included standard demographic and socioeconomic questions and questions on the use of dental services. It did not include any scale that required validation. We did a pilot study on a random sample of 10 parents to ensure that the questions were clear to the participants. We excluded these parents from the study to avoid introducing bias. The recorded categorical variables were:

Outcome variable: use of dental services – parents had taken their children to the dentist in the past year (yes/no) and reasons for taking them to the dentist (routine check-up and prevention, emergency motivated by pain, or orthodontics).

Sociodemographic characteristics – sex of the responding parent, marital status (married/separated/divorced), respondent parent's educational level (read and write, primary school, middle and secondary school, college/university), number of children in the family (1,2,3,4, > 4).

Socioeconomic characteristics: family monthly income (