

## **Commercial Advertising and Parental Choices of Children's Dental Providers**

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### **ABSTRACT**

#### **Introduction:**

To determine the influence of commercial advertising by pediatric dentists on the parental choices of a provider for their child/children.

#### **Methods:**

A convenience sample of parents of children between the ages of 0 to 18 completed an online survey. A 13-item survey was developed, designed, and previously field tested by a panel of four experts. Descriptive statistics were used to determine frequency of responses. A Chi-Square test determined comparisons between variables of interest including advertising selection, access to a dental provider and last dental visit.

#### **Results:**

A total of 357 parents submitted completed online surveys. Subjects were predominantly married (N=256, 71.7%), mothers (N=176, 49.3%), and white (N=264, 73.9%), with a college degree (N=216, 60.5%). Findings noted that 81.8% (N=292) of subjects stated their child/children had a current dental provider and 48.7% (N=174) noted the dental provider was a pediatric dentist.

#### **Conclusions:**

The top three reasons parents in this sample chose a dental provider for their child/children were: 1) the provider accepted their dental insurance, 2) a friend, family member or a neighbor referred them to the practice, and 3) the convenience of the dental practice. Advertisements had little influence on parental decisions to choose a provider.

**Key Words:** Dental Access, Advertising, Oral Health, Health Promotion

### **INTRODUCTION**

Marketing and advertising are controversial topics for health providers (Wright, Raho, & Berkowitz, 1989). Whether or not to advertise is an issue that most professionals face today (Johns & Moser, 1989). Many of the same problem areas encountered by traditional businesses such as a changing economy, social and cultural forces, political and legal factors and increasing competition concern health professionals (Johns & Moser, 1989). Many professionals find it difficult to handle the dynamics of a changing environment, especially without some form of ongoing marketing plan (Johns & Moser, 1989). Even with all these changes according to Rizzo and Zeckhauser, advertising by healthcare professionals has increased over time and it will continue to do so (Rizzo & Zeckhauser, 1992).

In 1988, Hite and Fraser compared multiple studies involving attitudes of professionals towards advertising. Findings from their study concluded that consumers believed advertising of dental services can be done professionally and that dentists should advertise their services (Hite & Fraser, 1988). They also believed that advertising would not lower the dignity, credibility, or public image of the dentist (Hite & Fraser, 1988). On the other hand, dentists did not agree. They felt that advertising would lower their credibility and the image of the profession (Hite & Fraser, 1988). The dentists that were generally negative towards advertising were older and believed that dental treatment was too complex to be packaged and sold to consumers (Shapiro & Majewski, 1983).

Some studies concluded that the dental profession has become more positive towards advertising their services. In 2001, Yavas and Riecken identified the attitudes of physicians and dentists towards advertising. They found that the attitudes of physicians

had not changed substantially over the years, however, dentists had become more positive towards advertising (Yavas & Riecken, 2001). This change has been gradual and has been seen in younger professionals more so than in older professionals. In the same study, Yavas and Riecken noted that there wasn't a significant difference between male and female consumers' attitudes towards advertising, however, female professionals had a more positive attitude (Yavas & Riecken, 2001).

The dental profession is increasingly noted as a recognized business and dentists have become highly competitive in marketing their services to the public. It has become common for dentists to advertise their services using a variety of media. Yavas and Riecken surveyed physicians and dentists to determine which marketing tools they most often used for advertising. The most widely used tools by both dentists and physicians were yellow pages, newspapers, and office brochures while no respondents used the Internet at that time (Yavas & Riecken, 2001). In a study by Markham, Gatlin-Watts and Bounds they stated:

“The internet is rapidly becoming an accepted communication/promotion medium for all types and sizes of businesses. It is especially significant in reference to the major marketing functions of advertising and sales. Individual Internet users are rapidly moving from the upper income/educational demographic to a more median level (Markham, Gatlin-Watts, & Bounds, 2001).”

Research suggests that the attitudes of dental professionals and consumers regarding advertising health services have become more positive in recent years, but a question remains as to whether or not advertising techniques influence consumers

in choosing a dental provider? The purpose of this study was to determine if advertisement influences parents in choosing a dental provider for their child/children. It was the intent of this study to discover information, which would be useful to pediatric dentists, pediatric dental residency programs and other community health programs in planning and improving the quality of their advertisement through the most widely used parental and consumer marketing tools.

## **METHODS**

### *Study Sample*

This study was approved by the Institutional Review Board at the University of Nevada, Las Vegas (UNLV) [Protocol 728922-1]. A convenience sample (N=357) of parents of children between the ages of 0-18 completed the online survey regarding the importance of commercial advertising in parental choice of a dental care provider for their child/children. A 13-question survey including a consent to participate in the study was distributed. Before parents were able to access the survey questionnaire, they were asked to consent to participate in the study by checking the box “I agree to participate and have all the information requested to complete the survey.” Participants could elect to stop the survey process by exiting the survey without submission. If parents chose not to participate, it was explained to them to simply exit out of the form. Parents were able to access the questionnaire on their own time and electronic device such as computers, smart phones or laptops. The survey took approximately 5-10 minutes to complete.

### *Data Collection*

The survey questionnaire was developed, designed, and field tested by a panel of four experts: the Associate Dean of Research, a dental public health specialist, a

biostatistician and a student researcher enrolled in an advanced pediatric dental program. Eight questions assessed the demographics of participants as they related to race/ethnicity, level of education, marital status, household income, parental age, relationship to child, number of children and age of children. Three questions related to access to a dental provider. One question asked about the top three reasons for selection of a dental provider with one question ranking methods of advertising as a marketing tool.

The survey documented gender, race/ethnicity, education level, household income, if their children were currently seeing a dental provider, and if that provider was a pediatric dentist. Additionally, parents were given multiple options on how they chose their current provider, such as advertisement, word of mouth from a friend, family or neighbor, their insurance was accepted by the provider, referral by a pediatrician or a dentist, provider's ethnicity/race, or location of practice. If parents chose advertisement as one of the main reasons for choosing a provider, they were asked to provide specifically which form of advertisement such as TV, Internet, billboard, social media or mail. All survey and screening data were coded with a numerical, non-duplicated identifier to

ensure confidentiality of the participants. No identifying data (name, social security number etc.) was provided; therefore, coded information did comply with anonymity standards according to the Health Insurance Portability and Accountability Act (HIPPA).  
*Data Analysis*

Descriptive statistics were used to illustrate frequencies (N-values and percentages) of results of the aggregated survey responses. A Chi-Square test was performed to determine comparisons between select variables of interest (e.g., top 3 advertising techniques and access to care as assessed by provider type and utilization of services).

**RESULTS**

A total of 357 parental subjects in the sample submitted a completed online survey. Subjects who completed the online survey were predominantly married (N=256, 71.7%), mothers (N=176, 49.3%), white (N=264, 73.9%), and had a college degree (N=216, 60.5%) [Table 1]. The average age was 35-44 years of age (N=152, 42.6%) with a household income of greater than \$75,000 (N=172, 48.2%) [Table 1].

Table 1: Demographic Characteristics of Parental Respondents

<b>Age</b>	<b>Total N (%)</b>
<24	9 (2.5)
25-34	62 (17.4)
35-44	152 (42.6)
45-54	65 (18.2)
55-64	28 (7.8)
65-74	3 (0.8)
Choose not to respond	1 (0.3)

**Relationship to Child**

Other	43 (12.0)
Mother	176 (49.3)
Father	121 (33.9)
Grandparent	8 (2.2)
Legal Guardian	5 (1.4)
Choose not to respond	4 (1.1)

**Gender**

Female	184 (51.5)
Male	135 (37.8)

**Race/Ethnicity**

White	264 (73.9)
Hispanic or Latino	9 (2.5)
Black/African American	13 (3.6)
American Indian/Alaska Native	3 (0.8)
Asian/Pacific Islander	7 (2.0)
Multicultural	8 (2.2)
Choose not to respond	16 (4.5)

**Level of Education**

No high school education	2 (0.6)
Some high school, no diploma	7 (2.0)
High school graduate, diploma or equivalent	33 (9.2)
Some college credit, no degree or technical training	61 (17.1)
College degree	216 (60.5)

**Marital Status**

Never been married	28 (7.8)
Married	256 (71.7)
Divorced	30 (8.4)
Widowed	4 (1.1)

**Current Household Income**

<\$25,000	30 (8.4)
\$25,000-\$49,999	51 (14.3)
\$50,000-\$75,000	60 (16.8)
>\$75,000	172 (48.2)

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Note: N=357; The total may not equal to 100% due to missing data

The top three reasons identified by parents as important in the selection process of a dental provider for their child/children are highlighted in Table 2.

Table 2: Top Three Reasons Identified as Influencing Decisions

<b>Reasons Identified by Parents</b>	<b>Total N (%)</b>
My dental insurance is accepted by this provider	289 (81.0)
Word of mouth from a friend, family member or neighbor	202 (56.6)
This was the most convenient dental practice for me and my family	147 (41.2)

Note: N=338; Not all participants answered this item

A total of 20.4% (N=69/338) of the subjects noted advertisement as one of their top 3 reasons for choosing their dental provider. These respondents were asked to select from a list of multiple sources to rank order them. The list included social media, TV commercials, Internet searches, magazines/newspapers, direct mail, yellow pages and billboard. Internet was the number one modality ranked by all respondents (N=23, 39%). The top 4 were pulled and listed in Table 3.

Table 3: Top Four Advertisement Modalities Influencing Decisions

<b>Modalities Identified by Parents</b>	<b>Total N (%)</b>
Internet	23 (39.0)
TV Commercials	12 (21.4)
Social Media	11 (20.8)
Direct Mail	10 (18.2)

Note. N=69

Findings from this study report that 81.8% (N=292) of subjects stated their child had a current dental provider with 48.7% (N=174) stating the dental provider was a pediatric dentist. The majority of subjects stated that their child/children had been to a dental provider within the last 6 months

(N=240, 67.2%). Chi-Square analysis was conducted to determine if there was a difference between those who currently have a dental provider and those that do not in their choosing advertising (TV, Internet, billboard, magazines, direct mail, yellow pages, social media) as the most important reasons for selection of their dental provider. There were no significant differences in these two groups in their selection of advertisement as an important factor in selecting the provider (Chi-Square=1.76; p=0.25). In addition, Chi-Square comparisons were made between those that were more likely to have had a dental visit in the last six months compared to those that chose advertising as the most important reason for selection of their dental provider. Again, there were no significant differences (Chi-Square=2.5; p=0.46).

**DISCUSSION**

The results of this study suggest that parents chose a provider for their child/children mainly because the provider accepts their dental insurance. A second reason was being referred to the provider by a friend, family member or a neighbor. A study by Cobb-Walgren and Sleszynski concluded that consumers selected new physicians often based on recommendations and medical referrals (Cobb-Walgren &

Sleszynski, 1987). Moser and Freeman looked at public views on hospital advertising. Findings from their study reported that the majority of the public does not consider hospital advertising to be misleading, but most of them trust their friends more than advertising (Moser & Freeman, 2011). Parents also chose a provider based on the convenience of the dental practice.

Advertisements have little influence on parents' decisions to choose a provider. However, parents who indicated using advertisements to choose a provider often used Internet searches as a preferred media method, unlike the respondents in this study. Clow, Fischer and O'Bryan examined patients' expectation of dental services in 1995. They found advertising did not have a significant impact on patients' expectations of dental services, however, patients' expectations were based on the patients' image of the dentist, tangible cues, situational factors, and patient satisfaction with prior service encounters (Clow, Fischer, & O'Bryan, 1995). The role of advertising and marketing were secondary to the use of personal experiences, the dentists' image, and personal sources of information when it came to dental care in another study (Clow, Stevens, McConkey, & Loudon, 2007).

Advertising wasn't the top choice among parents in this study when selecting a dental provider but some consumers may still utilize it to find a provider. Since most dentists have little to no training in advertising, it will be increasingly important to involve them in educational programs, college or university courses, seminars, and workshops which focus on educating healthcare providers in order to help them identify the most appropriate media to promote their dental practice (Freeman & Moser, 2010). Staying current with effective healthcare promotion strategies will help

healthcare providers address the healthcare needs in their respective communities.

Dentists and other healthcare professionals who market services should understand the role of a changing economic environment, demographics and cultural factors in the decision making process and be prepared to make necessary adjustments necessary to meet the expectations of consumers (Moser, 2008). Advertising and marketing does play a role in managing a dental practice, however, the quality of service and the reputation of the dentist is also accounted for by consumers. At the end of the day, good dental practice by the dentist and dental staff is critical to building the trust of patients and introducing new patients into the practice.

#### *Limitations*

Limitations in this study can be attributed to a small convenience sample size that were enrolled in an online survey cloud-based company and that had access to a digital device to take the survey. Data were collected from a national distribution of the survey, but findings may not represent the viewpoints of all consumers across the country. Regional differences could not be determined in this study, thus, cultural and social influences could not be addressed. Future studies can evaluate healthcare provider advertisements by geographic region and health professional shortage areas (HPSAs) within these regions.

#### **CONCLUSION**

The top three reasons parents in this study sample chose a dental provider for their child/children were: 1) the provider accepted their dental insurance, 2) a friend, family member or a neighbor referred them to the practice, and 3) the convenience of the dental practice. Advertisements had little influence on parents' decision to choose a provider. However, parents who did indicate using advertisement to choose a

provider often used Internet searches as a preferred media method. Findings from this study can help healthcare providers determine the best approach to marketing their dental practice to the public.

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