Dental Care Issues for African Immigrant Families of Preschoolers

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Abstract

This article examines dental health issues for African immigrant families of preschoolers living in the United States. The study was done within the framework of narrative inquiry and ethnographic impressionism. Through personal interviews and questionnaire completion, 125 parents of children ages 3 to 5 answered questions about ways in which their cultures influenced their decisions concerning taking their preschool children to dentists for professional dental checkups and how often their children saw dentists. Results of the study showed low patronage by the immigrants at dental clinics. In particular, some of the preschoolers were denied professional dental health care (by their parents) because of the parents' beliefs about dental health (such as there being no need for children to see a dentist because the children's baby teeth would be replaced by permanent adult teeth). The article recommends the education of immigrant families on the need to seek professional assistance with dental health.

Introduction

According to the Surgeon General's report published by the U.S. Department of Health and Human Services (2000), dental caries is one of the most common chronic childhood diseases—5 times more common than asthma. The report indicates that the impact of oral disease on children is substantial and that more than 51 million school hours are lost each year to dental-related illness. The report shows further that "poor children suffer nearly 12 times more restricted-activity days than children from higher-income families" (p. 2). Furthermore, the report stresses that "pain and suffering due to untreated diseases can lead to problems in eating, speaking, and attending to learning" (p. 2).

Given the enormity of the adverse impact of dental-related illness on the health and schooling of children, it comes as no surprise that the American Academy of Pediatrics (2003), in its policy statement on improving the health of all children, calls for children to "begin to receive oral health risk assessments by 6 months of age by a qualified pediatrician or a qualified pediatric health care professional" (p. 1114). The policy also calls for close attention to important factors that impact families' oral health such as dietary practices, fluoride exposure, and utilization of dental services, among others.

Despite the considerable impact of dental-related illness on preschoolers' overall health and well-being, little research exists on the dental health of preschoolers in the oral health literature. Among the few publications that exist is the work of Du, Luo, Zeng, Alkhatib, and Bedi (2007). They conducted a cross-sectional survey on a representative sample of Chinese preschool children ages 3 to 5 years to determine the prevalence and severity of caries in primary dentition. The authors discovered that more than half (55%) of the preschoolers had caries, with 14% having rampant caries. On the frequency of tooth brushing, the authors learned that preschoolers from urban areas brushed their teeth more regularly and had a lower level of caries experience than those from rural areas. Such factors as place of abode, age, and mother's level of education, among others, were the most significant predictors of caries among the preschoolers. Also, the socioeconomic status of the preschoolers' families and dietary factors both influenced the occurrence and severity of caries.

With respect to parental perceptions of preschool children's oral health and its impact on the quality of life of children, Pahel, Rozier, and Slade (2007) found that the oral health-related quality of life of preschool-age children and their caregivers could be negatively affected by the preschoolers' dental disease and treatment experiences. According to the authors, children's quality of life is affected by parental perception of the children's general health and oral health. In particular, they discovered that the poorest quality of life was significantly associated with either fair or poor parental ratings of their child's general and oral health and with the presence of dental disease in the child.

Concerning the patronage of dental care by immigrants in different parts of the world, Lai and Hui (2007) as well as Edwards and Watt (1997) have shown, through their research, that there is low patronage by immigrants of dental care. For example, in their study of Gypsy travelers in East Hertfordshire, England, Edwards and Watt (1997) discovered that although their surveyed participants had no cultural barriers to dental care, they had a high level of unmet need, low dental registration, and very little use of preventive services due, in part, to the Gypsy travelers living in unauthorized and transit sites.

Lai and Hui's (2007) work on Chinese immigrants in Canada also showed low patronage of dental care services by the immigrants. Specifically, they saw that about 52% of the newly arrived immigrants did not use any dental care services. They discovered that longer periods of residence and strong social support, among other factors, increased the surveyed populations' likelihood of using dental services. Lai and Hui noted that in order to strengthen oral health promotion, it is important to consider the cultural characteristics and background of the immigrants.

With respect to the oral health of African immigrants living in the United States, very little research exists (Beveridge, 2006; Graham, Domoto, Lynch, & Egbert, 2000; Lopez, Wadenya, & Berthold, 2005), and most of such research focuses on Somali refugees. None of the aforementioned publications has significantly explored the oral health of preschool-age children. This work then seeks to fill that gap. The first aim is to examine how the immigrant parents' cultures affect decisions about taking their preschool children to dentists for professional dental checkups. The second aim is to explore how the parents' cultures affect their children's teeth-brushing habits.

Theoretical Underpinnings of the Study

The study employs multiple theories in finding out how participants' culture motivated their decisions about their children's dental care. The two theories within which the analyses are done are (1) narrative inquiry (Clandinin & Connelly, 2000; Schwandt, 2001) and (2) ethnographic impressionism (van Maanen, 1988). Using narrative inquiry involves generating and analyzing respondents' narratives concerning their experiences about their children's oral health (see Lewis-Beck, Bryman, & Liao, 2004). Like Clandinin and Connelly (2000), we take it as axiomatic that participants' experiences must constitute the starting point and/or key to our inquiry. Given the fact that experiences and expressions inform each other, we anticipate that the participants' stories will help inform the reader about their (participants') real experiences. Such experiences have a sense of being full and of coming out of participants' personal and social histories (Clandinin & Connelly, 2000). It is also anticipated that the content of participants' narratives and the way they tell such narratives have the capacity to help provide an accurate picture of the reason(s) behind their perceptions about their children's dental care and dental needs and the decisions and actions they take or may have taken with respect to the children's dental care (Polkinghorne, 1988).

Aspects of van Maanen's (1988) ethnographic impressionism are also employed in the study. Specifically, participants' narratives are presented with as much context as possible and by basing the research claims solely and completely on the research participants' responses, claims, and assertions. By situating the participants' responses in their real world, readers are able to understand why the participants made certain decisions and the forces that led them to make such decisions; this approach helps to avoid misconceptions and/or misinterpretations of participants' social actions.

Prior to presenting the results and discussion sections, we deem it essential to discuss the notion of culture given its significance to this study. In particular, given the considerable impact that participants' culture had on their responses to the questionnaires and the interview questions, and more especially about the decisions they took regarding their children's dental health, it is important to examine our working definition of culture or what, in our view, constitutes culture.

First and foremost, it is important to emphasize that there are as many definitions of culture as there are scholars who use culture as an operational or a theoretical construct. Each definition has a close bearing on scholars' understanding of or perception about the different tenets of culture. One common theme that runs through all the different views is how human activity is embedded with and constitutes the core of its culture. Specifically, culture is viewed as the way of life of a people—the codes of manners, dress, language, religion, rituals, norms of behavior, and belief systems. Tylor (1974), a social anthropologist, put it succinctly when he noted that culture includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits of members of a society.

For scholars such as Geertz (1973) and Turner (1967), symbols constitute or form the basis for defining culture. Symbols, Geertz and Turner note, are the practices of social

actors and the context that gives such practices meaning. The symbolic view of culture is well elucidated by Cohen (1985) who notes that it is symbolism that makes culture possible, reproducible, and readable. Symbols, Cohen notes, have meaning, enable members of the group to communicate with and understand each other, and provide regularity, unity, and systematicity to the practices of a group—a fact also elucidated by Bourdieu (1977).

In talking about African culture and how it shaped participants' views about their children's dental care, in this study, attention is focused on the African immigrants' perceptions about dental care as stated by them. Thus, we take seriously such statements as "in Africa, people will think that…" or "back home in Africa, we believe that…" because such statements tend to reveal what the research participants hold to be their normal way of life and of acting, their belief system, or what they believe to be "proper" or "improper" ways of looking at things. We also take into consideration the research participants' social actions or practices relating to dental care and how they interpret such social actions and practices.

Method

Research Site

Data for this study were collected in the states of Indiana and Virginia. A majority of the respondents (70%) lived in Indiana. Participants were recruited through the snowball and purposeful sampling technique (Salganik & Heckathorn, 2004; Heckathorn, 1997; Patton, 1990). Indiana was chosen because of convenience; both the principal investigator and her graduate research assistant lived in Indiana at the time this research was conducted. Virginia was chosen because a large number of African immigrants live in the inner cities in that state. Also, the principal investigator and her research assistant were personally acquainted with a few of the immigrants surveyed for the study.

Research Questions

The main questions asked of participants used in collecting data for this study follow:

- Do you take your children to the dentist?
- State the reason for taking or not taking your children to the dentist.
- How often do you take your children to a dental clinic?
- How often do your children brush their teeth?
- What are the reason(s) for making your children brush their teeth that many times?

Both closed-ended and open-ended questions were posed to participants. The closed-ended questions helped to measure, quantitatively, participants' choice of action and their views on specific issues. With the closed-ended questions, participants were required to choose from a set of multiple answers. The results from the closed-ended questions are discussed in Obeng (2007). Results from the open-ended questions form the basis of this qualitative study. The oral interview questions involved probes that required the participants to provide clarifications of statements and/or reasons for the answers they provided on the questionnaires. Some questions also asked for explanations for the participants' social actions and their perceptions about their children's oral health.

Procedure

Following approval from Indiana University's Institutional Review Board, the researchers contacted potential participants either face-to-face or through phone calls. After voluntarily signing consent forms, surveyed participants completed a set of questionnaires. The questionnaire completion took about 20 minutes. Participants completed the questionnaire independently and at their own convenient time (without any intrusion by either the researcher or her assistant). After completing the questionnaires, some participants agreed to be interviewed. The interviews were conducted in the homes of the participants in order to make them feel at ease. Each interview took up to 30 minutes.

Data Coding and Analysis

The data coding involved grouping similar utterances and excerpts from participants into two categories. These two categories were based on the research questions addressed in the study. The author and a volunteer colleague worked separately in identifying similar utterances and putting them under the same theme. A discussion took place to make sure both coders agreed on the categories identified.

Data for the analyses are from both the open-ended questionnaires and the interviews. Because responses from the questionnaires tended to be short and often inexplicit and not very detailed, we decided to use data from the interviews to explain in detail answers provided in the questionnaires. Thus, the responses from the interviews lent a measure of support to the responses given in the questionnaires. In the analysis done in the study, therefore, participants' utterances from the interview data are cited verbatim to support claims that are made.

Results

Six hundred and twenty questionnaires were distributed to participants. Of this number, 545 were returned, giving a response rate of 87.8%. One hundred and twenty-five parents out of the 545 who returned their questionnaire were chosen for this study because they were the participants who indicated in the bigger study (Obeng, 2007) that they had preschool-age children.

Participant Demographics

Participants reported that they were from 13 African countries, with a vast majority of them (72.8%) coming from West Africa. A majority of the parents (57) indicated that they had 3-year-olds. Twenty-nine participants reported having 3- to 4-year-olds, and 28 indicated that they had children who were between 4 and 5 years old. Eleven participants indicated that they had 5- to 6-year-olds. The average age of participants' children was thus 4.5 years (see Table 1 below).

Table 1
Age Distribution of Children

Number of Participants	Age of Children
57	3
29	3-4
28	4-5
11	5-6
Total = 125	Average age = 4.5 years

Professional Dental Checkups

With respect to participants' views on taking their children to a professional dentist, we learned from the responses to the questionnaires that 82% of the respondents felt that it was unnecessary for a child to be seen by a dentist at an early age since their chances of contracting diseases at the dentist's office at that age were high. The parents indicated that in their cultures dental caries is not viewed as a disease that affects children (preschoolers) permanently. Some participants believed that permanent adult teeth would

replace the children's baby teeth once the children grew; they therefore considered going to a dentist for professional teeth cleaning at that age as a waste of money. The parents' cultural belief about caries therefore influenced their decision not to take their children to the dentist.

Several of the respondents reported that their children (48%) had never had their teeth checked by a dentist. Thirty percent indicated that their preschool-age children saw a dentist once in a year, whereas 7% percent said that their children had their teeth checked twice in a year. Fifteen percent did not know the service existed. The findings suggest that the respondents' cultures greatly influenced their decisions about whether it was important to take their children to the dentist. As one respondent with a 4-year-old put it during the interview:

> In Africa, you don't go to the doctor unless you're sick. In fact, people will think you're insane if you go to the dentist for an ordinary checkup. Even if you have a toothache, you buy an off-the-counter medicine. In the villages, people don't even know about dentists. They've never seen a dentist before. There are people who know how to force a tooth out; they have no Western dental training. They just know how to remove a bad tooth. If you tell anyone you're going to a clinic to have someone look at or clean your teeth, they'll say you're a lazy fool who has money to waste. Let's face the truth; will you go to the doctor if you're not ill? There's not enough money for basic needs; why throw the little money away? Yes, you brush your teeth, but you don't go to a dentist for fun. Here in the U.S. you have to be careful because there are a lot of dangerous diseases you can get by going to the dentist. You don't have to risk your child's life by taking him to the dentist if he does not have problem with the teeth.

Another male respondent who saw no need to take his daughter to see a dentist said:

> Do you go to the shop to buy medicine if you're not ill? Or, do you go to buy the drug only if you're sick? Here they're playing games with money. If you take the child and there is no problem, they'll say there's a problem so that they can charge you money and tell you to come again. In my country, we don't waste money. There are so many people who need help. We go to the doctor only when we are sick. As for the dentist, unless you have, say, gum disease or some mixed-up teeth that you want removed, you don't visit the dentist. To go for a checkup like they do here is unheard of. Why will anybody do that? I know that here in the U.S. they sometimes do free checkup for the children; that's enough. I don't think it's necessary to take her to see a dentist again. We need to take money home else they'll say we're hopeless.

A respondent who took his male child to see the dentist even when the child had no apparent dental problem indicated the following during the interview:

> We all know that prevention is better than cure; that's why I sometimes take my son to the dentist for checkup. I don't do it regularly because it is too expensive and there is no money, but I do my best. I know that they will find nothing wrong with his teeth, but if I don't do it, my wife will say I am a miser or I don't care about my son. I know my wife; if I want my peace of mind, I have to listen to her sometimes. Our son's friends got braces so he also wanted some. Luckily, the dentist told him he did not need one. All these things require money, but people don't know. Insurance self [*sic*] is very expensive so we always pray that we don't fall sick or get trouble with the teeth. Life is hard in the U.S., but people don't know. As for the dentist, yes, I take my son sometimes but not always.

Concerning those who did not know about dental service, data from the questionnaire indicated that the majority of them had been in the United States for less than two years. Only 2% of the people in this category indicated that they had been in the United States for more than two years. Also, some of the respondents worked several hourly jobs and had no friends who knew about the existence of such service; they therefore had no way of knowing that it existed. A respondent who did not know the service existed said:

> I have been in this country (United States) for at least one year and some months. I think one and half years. I have done many jobs but have not heard from anybody that such a thing as dental care exist [*sic*]. In my village where I came from, nobody knows about dental clinics. There is nothing like dental clinic in my area, and I did not have any clue about this service.

Frequency of Teeth Brushing

Regarding the frequency of teeth brushing, we gathered from the questionnaire that a majority of the children brushed their teeth daily. Sixty-one percent of the participants reported that their children brushed their teeth once per day. About 28% of the children brushed their teeth twice per day, 7% brushed thrice per day, whereas 4% did not brush at all. The most common reason given by parents for insisting that the children brush their teeth was that it was a normal thing that everyone did and that not brushing one's teeth could lead to one having caries and halitosis. One respondent remarked:

> Here in America we make sure our son brushes his teeth at least every morning. He needs to do it; that is what everyone does.

Another respondent remarked**:**

> I know that in this country one must brush one's teeth in the morning and before one goes to bed. However, I think that brushing one's teeth only once per day is enough. If you over brush your teeth or take excessive action to whiten your teeth, your gum bleeds. It is not the number of times a child brushes his or her teeth which is important. Rather, it is how wisely the child brushes the teeth.

The author discovered that part of the above response, *If you over brush or take excessive action to whiten your teeth, your gum bleeds*, may have been based on an Akan (Ghana) proverb that advises people not to overindulge in certain actions or overreact to certain seemingly threatening situations.

Although we learned from the responses to the questionnaires that some of the participants were unaware of the existence of dental service, what was interesting was the discovery that those who knew the service was available to them were unwilling to use it. For example, one such participant reported:

> There is not enough money to feed the family; why bother about the teeth. In my country, I mean my culture, we say you worry about the teeth after you've eaten a lot to make it dirty. When you cannot have money to buy medicine, do you spend money on your teeth? Once you clean your teeth well, you will not need dental care. Dental hospital? (Laughs) Well, our children, and we [*sic*] have good teeth so we don't need to go to a dental hospital.

Another respondent who complained about the cost of dental care noted:

> You're not serious. We're struggling to eat and pay the bills, and you're talking about going to dental hospital for the teeth! In my country, people don't even have car insurance. (Laughs) Let me be serious. I drive my taxi and my wife works as nurses' aide. If we want to go to hospital for our teeth [*sic*] with all our four children, our money will be finished. We try to buy health insurance but going to a dentist for teeth cleaning or checkup, no. The school brings dentist to school every year to look at the children's teeth; that is enough.

Discussion

The above excerpts illustrate that the respondents' cultural perceptions about dental care formed an important basis for their inaction about their children's dental health. Specifically, the act of seeing a dentist for a checkup was viewed as culturally inappropriate—having caries was culturally not considered a health issue. Such a cultural perception warranted letting dental care take a backseat to "real" health crises that demand immediate attention.

Also, the respondents viewed dental clinics as public spaces where, through invasive action of dentists or oral health nurses, one could easily contract disease. Given the low importance attached to western-based dental care and in view of the participants' perception of caries as not being a health issue, the participants viewed seeing a dentist as a risk that was unnecessary, uncalled for, and hence, an act that should not be undertaken.

Participants' cultural perception of fiscal responsibility also influenced their decisions concerning taking their children to a dentist. Based on participants' responses cited in the

previous section, we could deduce that fiscal responsibility involved withholding spending on things that may leave no indelible marks or permanent damaging effects. In particular, we learned that going to a dental clinic for a check-up was viewed as fiscally irresponsible because in their cultures having caries did not mean one was ill. Also, children's baby teeth were viewed as temporary, and hence it would be improper to waste scarce financial resources on caring for them. Thus, from their responses, they appear to be saying something like, "Why create an imaginary problem and then waste time and resources on it?" The utterance, *"If you tell anyone you're going to a clinic to have someone look at or clean your teeth, they'll say you're a lazy fool who has money to waste"* cited in the previous section lends strong support to the above conclusion.

Additionally, despite the fact that one may be tempted to blame respondents' choice of action on their ignorance about oral hygiene, evidence from the study indicates that most of the respondents were educated and knew about oral health. Therefore, their action or inaction could rather be attributed to their African cultures, which put little or no emphasis on seeking professional dental care.

Furthermore, we learn from the excerpts that although some of the respondents viewed taking their children to see a dentist for a general checkup as important, they did so reluctantly. A respondent's action was influenced by the need for him to please a spouse in order to get his "peace of mind." Thus, it could be argued that for some of the surveyed participants, decisions about children's dental health were motivated by the cultural demands related to conflict avoidance. To avoid conflict, a married person must yield to a spouse's demands or please the spouse by doing things the spouse's way—not because one believes what one is doing is right but because one realizes that refusal to take that particular course of action may invite a conflict.

Concerning supervision of their children's teeth brushing, it may be argued that participants' cultures played a significant role in their decision to supervise their children. Specifically, participants' cultural perceptions about tooth decay and halitosis as something that was seen as being capable of bringing disgrace to the family acted as stimuli in making the parents bring pressure to bear on their children to brush their teeth.

Concerning the frequency of teeth brushing, as noted in the previous section of this article, most respondents reported that their children brushed their teeth only once per day. Participants' children's frequency of teeth brushing also had its roots in their cultures. For example, one participant's response was based on an African cultural maxim that advises people not to overindulge in certain actions or overreact to certain threatening situations. The participant cited an African proverb—*if you over brush or take excessive action to whiten your teeth, your gum bleeds*—and explained that it was preferable in their culture to engage in moderation. The research participant's use of the maxim to justify a course of action shows the extent to which the participant's culture informed or "dictated" his perception of his child's oral health and the action he took to assist the child.

With regard to the surveyed participants' knowledge about the existence of dental services in the United States, there is no doubt that the high incidence of participants' ignorance was alarming. In particular, given that as many as 15% of the surveyed participants had no knowledge of the availability of dental services, it is incumbent upon all stakeholders—preschool teachers, social workers, and others—to inform or educate the immigrants about the existence of such services and also about their usefulness or benefits to the immigrants' well-being. More attention must also be focused particularly on newly arrived immigrants in view of the fact that they were seen as the group that had the least knowledge about the existence of dental care services in the United States and also about the nature and benefits of such care to their overall health and wellness. Furthermore, it is important for educators to encourage these newly arrived immigrants to allow their children to take advantage of the free dental service offered to children of low-income families by the state through the school systems.

Significance of the Study

This study has implications for preschool health education and community health programming and evaluation and for the cultural base of dentistry. Specifically, it shows that it is essential for educators, parents, and dental health professionals to interact with one another in order to reach a common ground about preschoolers' dental needs, public health policy regarding dental hygiene, and parental belief systems and how they impact their children's oral health.

Recommendations for Early Care and Education Professionals

Based on the results of the study and on the discussion above, the following recommendations may help early childhood professionals to deal with dental care issues among immigrant populations. First, it is imperative that early care professionals inform immigrants, especially newly arrived immigrants, about the existence of dental care services in their communities. In particular, given the fact that as many as 15% of the study participants did not know about the existence of free dental services to school-age children, it is incumbent upon such professionals to let the immigrant populations know who provides such services and where to obtain them. One way of letting the immigrants know about the availability of such services is to give the children available literature (such as brochures, handouts, notices from the school system) on dental care services in the community to take home and share with their parents**.** In places where the immigrant populations live in large enclaves, it might be worthwhile having such materials in the community's language.

It is also important for people reared in the United States who are teaching or caring for children of African immigrant parents to know that some of the parents may express concerns about getting pre-enrollment dental exams for the children, although such concerns could be mitigated through parental education.

Teachers of preschool-age children can incorporate oral hygiene into their curricula. Specifically, teachers should talk about the need to brush one's teeth in the morning and before going to bed and also explain the need to floss one's teeth. By so doing, the teachers will be able to inculcate proper ways of maintaining oral hygiene into the immigrant children.

Finally, early care professionals can, as part of their health education class modules, invite dental care professionals into their classrooms to educate the children about dental health and the risks involved in ignoring oral hygiene. Parents could be invited as guests to listen to some of such talks in order for them to also broaden their views on oral health.

References

American Academy of Pediatrics. (2003). Policy statement: Oral health risk assessment timing and establishment of the dental home. *Pediatrics*, *111*(5), 1113-1116.

Beveridge, Scott. (2002). *Oral health beliefs, traditions, and practices in the Somali culture.* Seattle: University of Washington, Harborview Medical Center. Retrieved June 4, 2007, from http://ethnomed.org/ethnomed/cultures/somali/som_oral_health.html

Bourdieu, Pierre. (1977). *Outline of a theory of practice.* Cambridge: Cambridge University Press.

Clandinin, D. Jean, & Connelly, F. Michael. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.

Cohen, Anthony P. (1985). *The symbolic construction of community.* New York: Routledge.

Du, Minquan; Luo, Yan; Zeng, Xiaojian; Alkhatib, Nour; & Bedi Raman. (2007). Caries in preschool children and its risk factors in 2 provinces in China. *Quintessence International, 38*(2), 143-151.

Edwards, D. M., & Watt, R. G. (1997). Oral health care in the lives of Gypsy travellers in East Hertfordshire. *British Dental Journal, 183*(7), 252-257.

Geertz, Clifford. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.

Graham, Elinor A.; Domoto, Peter K.; Lynch, Heather; & Egbert, Mark A. (2000). Dental injuries due to African traditional therapies for diarrhea. *West Journal of*

Medicine, 173(2), 135-137.

Heckathorn, Douglas D. (1997). Respondent-driven sampling: A new approach to the study of hidden populations. *Social Problems, 44*(2), 174-199.

Lai, Daniel W. L., & Hui, Nelson T. A. (2007). Use of dental care by elderly Chinese immigrants in Canada. *Journal of Public Health Dentistry, 67*(1), 55-59.

Lewis-Beck, Michael S.; Bryman Alan E.; & Liao, Tim Futing (Eds.). (2004). *The Sage encyclopedia of social science research methods.* Thousand Oaks, CA: Sage.

Lopez, Naty; Wadenya, Rose; & Berthold, Peter. (2005, December). *Oral health status and utilization of oral health services among African immigrants in West Philadelphia.* Paper presented at the 133rd Annual Meeting and Exposition of the American Public Health Association, Philadelphia, PA.

Obeng, Cecilia S. (2007). Culture and dental health among African immigrant school-aged children in the United States. *Health Education Journal, 107*(4), 343-350.

Pahel, Bhavna Talekar; Rozier, R. Gary; & Slade, Gary D. (2007). Parental perceptions of children's oral health: The Early Childhood Oral Health Impact Scale (ECOHIS). *Health and Quality of Life Outcomes, 5*(6). Retrieved August 28, 2008, from http://www.hqlo.com/content/5/1/6

Patton, Michael Quinn. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Polkinghorne, Donald. (1988). *Narrative knowing and the human sciences*. Albany: State University of New York Press.

Salganik, Matthew J., & Heckathorn, Douglas D. (2004). Sampling and estimation in hidden populations using respondent-driven sampling. *Sociological Methodology, 34*(1), 193-239.

Schwandt, Thomas A. (2001). *Dictionary of qualitative inquiry* (2nd ed.). Thousand Oaks, CA: Sage.

Turner, Victor W. (1967). *The forest of symbols: Aspects of Ndembu ritual*. Ithaca, NY: Cornell University Press.

Tylor, Edward Burnett. (1974). *Primitive culture: Researches into the development of mythology, philosophy, religion, art, and custom.* New York: Gordon Press. (First published in 1871.)

U.S. Department of Health and Human Services. (2000). *Oral health in America: A report of the surgeon general*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health.

van Maanen, John. (1988). *Tales of the field: On writing ethnography*. Chicago: University of Chicago Press.

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