Dental Excellence for Denver’s Great Kids

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Submitted to
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Of the University of Colorado
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Section One

Introduction

Denver Great Kids Head Start (DGKHS) is a government program that provides early education to children whose families are eligible for public assistance or are below the federally defined poverty level. “The vision of Denver’s Great Kids is to prepare enrolled 3 to 5 year olds to enter kindergarten confidently with the social, physical, emotional and cognitive skills and competencies necessary for continuing school success” (Denver Great Kids Head Start Home Page, 2008). Some of the DGKHS programs will also provide childcare for children as young as eight weeks of age. These children are from all different backgrounds, ethnicities, and cultures. Many of the DGKHS teachers are bilingual, speaking Spanish and English, to be able to communicate with the increasing number of Spanish speaking children in Colorado.

Head Start is a national program that was founded under the Elementary and Secondary Education Act of 1965 and the Economic Opportunity Act of 1964. These two acts “created a range of early intervention programs for economically and culturally disadvantaged children. Known as Operation Head Start, these programs had an impact on early childhood education not only for minority children but for all children” (Robinson, 2006). The DGKHS has five delegate agencies that provide the services of Head Start to 1083 children. These agencies are Catholic Charities, Volunteers of America, Clayton Family Futures, Denver Public Schools, and Mile High Montessori.

The Head Start program, in addition to preparing children for kindergarten, also provides basic medical services. These medical services include vision, hearing, and dental screens for all children ages eight weeks through five years. If an abnormality is found during these screenings the child’s parents are informed and are referred to their provider for follow-up. Over ninety
percent of children receive the follow-up care that they need for hearing, vision, and medical abnormalities. According to DGKHS only 83 percent of children who are referred to their dentist receive necessary follow-up care. Because of this lower rate of follow-up dental care, DGKHS decided to focus on dental care for the academic year of 2008-2009.

This focus on dental care is an ongoing project that should ultimately increase the rate of dental care follow-up. Dental caries, when untreated, can cause many health problems. “Although dental caries (tooth decay) is largely preventable, it remains the most common chronic disease of children aged 5 to 17 years—5 times more common than asthma (59% versus 11%)” (Centers for Disease Control and Prevention, 2005). Untreated dental caries can lead to pain, difficulty eating and speaking, infection, sepsis, and in rare cases even death.

To increase the rate of dental follow-up care, DGKHS has decided to train all employees how to use motivational interviewing (MI). “MI works by activating patients’ own motivation for change and adherence to treatment” (Rollnick, Miller, & Butler, 2008, p. 5). MI is a client-centered method of communication that is used to help motivate a person to change a specific behavior. The aim of DGKHS is to have teachers, nurses, and other employees use MI to change Head Start parents’ behavior by increasing the rate of follow-up dental care for their children. The Head Start parents vary in age from teenagers through middle age. There are also many grandparents that are the primary care givers for the children.

The University of Colorado College of Nursing students have been asked to write and evaluate a pre-test for all DGKHS employees to take. There will be a conference on October third that will present the idea of MI to the employees of DGKHS and the employees that attend will take the test to assess their level of knowledge of and attitudes towards dental care.

**Population**
DGKHS has 37 program sites located within the City and County of Denver, which are governed by the five delegate agencies. The U.S. Census Bureau data for Denver County in 2000 indicated that the total population of Denver County was 554,636, including 37,769 children under the age of 5. That number has grown significantly since then. The 2006 U.S. Census data “estimated” that the total population of Denver County was 566,974, including 50,925 children under the age of 5 years - 9 percent of the total population (U.S. Census Bureau-Denver County Fact Sheet, 2008). The City of Aurora borders East Denver County and once participated in DGKHS. The 2000 U.S. Census report indicated that the total population of the City of Aurora was 276,393, including 22,367 children under the age of 5. Children under age 5 represented 8.1 percent of the total population. That amount is now estimated to be around 298,597, including 27,077 children under the age of 5 years old. Children under age 5 are estimated to represent 9.1 percent of the total population of Aurora, Colorado (U.S. Census Bureau, 2008, Fact sheet Aurora, Colorado). There are 6,100 children from poverty level households in the DGKHS service area and of those only 1083 are enrolled in Head Start. The Head Start families, teachers and staff, represent the cultural diversity of Colorado and its inner city communities. Hispanics and Latino children represent 57.3 percent of the student population. African Americans represent 12.8 percent; Asians - 2.4 percent; American Indian and Native Alaskans – 1.6 percent; and Native Hawaiian and Other Pacific Islanders – 0.1 Percent (Denver Great Kids Head Start, 2008, Community Needs Assessment). With the influx of African and European immigrants into the Colorado area, consideration is also given to ethnicity. Individuals identify themselves in the “other” or “some other race” categories because of racial breakdowns that are not applicable to their native cultures. With a culturally diverse population, each Head Start site provides culturally competent medical and educational services to children and their families.
To be eligible for DGKHS, families must have an income below poverty level and/or be eligible for public assistance. The 2008 Poverty Guidelines for the 48 Contiguous States and the District of Columbia are in Appendix 1. Data from the 2008 Denver Head Start Community Assessment indicated that there are 4,494 Head Start eligible kids out of 6,527 kids within the Denver County Head Start Service areas who have family income below poverty level.

According to a study completed by the Colorado Children’s Campaign, in 2006, 15.7 percent of the state’s total child population was living in poverty. This poverty level increased 73 percent since 2000 (Fosch, 2008). The 2007 Comprehensive Community Assessment done by the Mayor’s Office for Education and Children found that of those children under age 5 living in poverty in Colorado, approximately 57 percent reside in Denver County. That percentage was expected to increase another 18 percent in 2008 (Denver’s Great Kids Head Start, 2008, Community Needs Assessment.). Another study done by the Colorado Children’s Campaign found Colorado’s poverty rate among Native American children increased by 473 percent; the rate for African American children increased by 116 percent; and the rate for White children increased by 57 percent while the rate for Asian cultures decreased by 10 percent (Fosch, 2008).

To fully understand how DGKHS impacts the communities, children, and their families, we interviewed DGKHS staff, performed Head Start site visits, and attended committee meetings. Head Start sites serve a fundamental community need. Some of the service area communities are older, and maintained to the best of the community’s abilities. For example, Garfield Head Start is a delegate of Catholic Charities located within a remodeled 3-unit public housing dwelling located in South Denver. The gated playground sits neatly in the middle of the housing complex. Residents are friendly and appear protective of the children. The area has a large Hispanic population with a growing Asian population; however, the children are Hispanic,
In contrast, Lowry Montessori Head Start is located in the new and trendy Lowry area in central Denver. The surrounding area consists of housing, apartments, and up-scale shops and restaurants. The student population is racially diverse, but upon visual observation, the majority of the population appears to be African American, with a number of Hispanics, White-non Hispanic and immigrant children. Children from the neighboring areas have safe, clean environments to learn new educational concepts, build social skills, receive medical services, and safely play and express themselves. The facilities are well maintained and the staff is culturally competent and nurtures creativity and promotes healthy self-esteem among the children. Please see Appendix 2 for an overview of the windshield survey.

Rita Gonzalez, a Health Assistant for Head Start who travels to each site, sees the benefits Head Start is providing to the children and their families that they could not otherwise afford. Families are excited about their kids attending Head Start because it helps them connect to the community. Head Start empowers the families and promotes a feeling of belonging and acceptance. At Westwood Head Start located in South Denver, the student population is more Hispanic/Latino, parents are encouraged to read to their children and complete literacy sheets that list the books that were read to the children. When asked about family composition, Rita acknowledged that there has been an increase in single fathers having custody of their child(ren). She recalled how excited a particular Head Start class becomes when a certain single father comes to read to the class on a weekly basis. Un-documentation is a problem because these parents are afraid to seek medical services for their documented child(ren). They fear that they
will be penalized and/or deported if they use a service, therefore, the child(ren) do not receive any medical services.

Many parents believe that dental care at an early age does not matter because the teeth will just fall out. “Parents don’t understand that they need to take care of the baby’s gums and incoming teeth.” Rita Gonzalez suggested that Head Start and other collaborative agencies provide dental care packets which include toothbrushes, toothpaste, floss, and mouthwash, to families, including migrant farm workers, as a strategy to improve community wide health care. She noted, “people need to know that the bacteria laden plaque from teeth can end up in your heart and cause major problems.”

Lorie Joslyn, a Registered Nurse, is also a strong advocate for Head Start and the push for better oral care among families. Lorie was interviewed at Lowry Mile High Montessori Head Start. She noted that Maslow’s Hierarchy of Needs states that survival is the most basic need; therefore, what Head Start does is try to give families resources for survival. “Kids cannot learn without food so they must get their hierarchy of needs met, then we can set realistic goals to get dental needs met.” Lorie noted that immigrant families are unaware of the short and long term ramifications of eating fast foods and sugary drinks. Lowry’s Asian immigrant population is a “tight knit community that refers other families to the Head Start program. Families know that the resource is here.” She noted that “more progressive public oral health education and dental care follow-up is needed as children progress through public schools. Parents need to understand that you can pass cavity-producing bacteria on to your child when you share drinks and rewet pacifiers with saliva and then place it in the child’s mouth.”

Health Issues
Tooth decay is the most common chronic disease of childhood. Tooth decay can be prevented with proper infant feeding practices, diet, use of fluoride toothpaste at home, and professionally applied topical fluorides and dental sealants (Mouradian, Wher, & Crall, 2000). Only 79 percent of the children in the Head Start program, including those enrolled in Medicaid or State CHIP, have completed a professional dental examination during the 2007 to 2008 program year. Thirty-six percent of the children who did receive a dental exam needed dental treatment. Only 83 percent of those children received treatment (City and County of Denver, 2008).

The risks for not getting a dental exam or not receiving treatment for dental problems are serious. “Untreated dental caries has been associated with failure to thrive and provides a reservoir of contagion for abscesses, cellulitis, and systemic spread of disease” (Mouradian et. al, 2000, p. 2626). In the long-term, decay in the primary dentition is a predictor of decay in permanent teeth. “Poor oral health and dental disease often continue into adulthood, with the potential to affect speech, nutrition, economic productivity, and quality of life” (Mouradian, et. al, 2000, p. 2626).

**Intervention**

Studies have found MI to be extremely effective. One study found that the use of MI by healthcare providers with mothers reduced the number of dental caries the children had later in life. The control group received traditional health education whereas the other group received both traditional health education and MI. “After two years, children in the MI group exhibited significantly less new caries (decay of filled surfaces) than those in the control group” (Weinstein, Harrison, & Benton, 2006, p. 789). Another study has been done on using MI on parents to treat childhood obesity. “The main study outcome was change in the BMI-for-age
percentile… 94% of the parents reported that the intervention helped them think about changing their family’s eating habits. The physician and dietician satisfaction with the MI intervention was also high (Spector & Chanoine, 2007, p. 730).

Unfortunately there is little research on the use of MI to motivate parents to change behavior for the benefit of their child. This will be a topic of further research for Dr. Paul Cook, director of the Center for Nursing Research at the University of Colorado College of Nursing. MI was originally created and proven extremely useful when treating addiction. Similarly, not much has been done in the past to try to increase the rate of dental follow-up care at DGKHS. Each program had been trying its own methods of motivating the parents—none of which worked. Until this year, this was not a focus of any of the staff members. Hopefully by teaching everyone the same technique of MI and by having every DGKHS program doing the same thing, the rates for intervention will increase to 90 percent or more.

There are some cultural implications that should be considered when using MI. Many parents put their child to bed with a bottle, which can increase chances of tooth decay. Some parents give their child a sippy cup full of juice or other sugary drink so the child will drink from that cup and coat their teeth with sugar. These parents do not realize that these practices are unhealthy for their children’s teeth. The dental hygienist at Catholic Charities said that she frequently observes a pattern of cavities resulting from this behavior. Healthcare practitioners and educators cannot assume that all children brush their teeth at home, especially with the assistance of their parents. During the dental screens at Head Start the dentist asked most of the children if they brushed their teeth at home and many replied no. The families should be educated on why these behaviors can be unhealthy for their children’s teeth.

Section Two
Assessment

Poverty impacts families and children through un-education, poor communication, cultural disenfranchisement, health, and fear of authority. Flores and Tomany-Korman (2008) defined minority-based disparities as increased incidence of obesity, asthma, behavioral and speech problems, emotional difficulties, and sub-optimal dental health. Most families had no dental visit in the past year, transportation barriers to care, and no insurance. Minority groups, especially those from non-English speaking households, comprise the largest population of Head Start families living with incomes below the poverty level (Denver Great Kids Head Start, 2008, Community Needs Assessment). According to Bastos, Peres, Peres, Araujo, and Menezes (2008, p. 459) individuals who experience poverty at early ages have limited access to oral hygiene items and oral care and are predisposed to increased dental caries and unhealthy oral health behaviors in later life. Single parent households also contribute to the cycle of poverty and poor health care. Rita Gonzalez noted the increase in single father households and the need to advocate for families who are overwhelmed by the fear of deportation and their inability to access services because of location.

Thomas & Quinn (2008) indicated that solutions to eradicate health disparities must address neighborhood conditions, educational achievement, and political disenfranchisement. Children born in single parent households are exposed to less than optimal childcare because the father or mother may be overwhelmed by the needs of the child and the difficulties of parenthood, resulting in poor oral health habits (Bastos et al., 2008). Based on Maslow’s hierarchy of need, their goal is to survive – have the basic necessities.

By partnering with Transitional Housing and Refugee Clinics, Lowry Mile High Montessori Head Start has established community-based collaborations to reduce health
disparities and maximize Head Start resources. Transitional housing residents now have access to medical and educational services that they would not otherwise have. In the same context, Garfield Head Start is a neighborhood asset in that it is part of the public housing development. Families are connected to that establishment and have a sense of ownership of the surroundings.

According to Thomas and Quinn (2008, p. 116), “literature consistently focuses on the importance of community engagement in health promotion and disease prevention, particularly with minority populations. The next generation of prevention intervention should develop interventions that derive from the communities’ assessments of their needs and priorities. In addition, cultural attitudes need to be taken into account when interacting with families and setting priorities. Lowry Mile High Montessori Head Start’s Asian population maximize Head Start resources by acting as a referral group. Using individuals/talents/resources to promote better oral health education initiatives builds trust and can establish accountability.

Behavioral Change Model

Motivational interviewing uses Cognitive Theory to encourage behavior change. Cognitive theory emphasizes that the way knowledge is organized, connected, and retrieved is important in learning. By changing thought patterns and providing information, learners’ behavior will change. The nurse educator or teacher provides information in a variety of ways that will change the clients’ thought patterns and ultimately lead to changes in behavior (Stanhope & Lancaster, 2006).

Levels of Prevention

Nurses engage in all the levels of prevention in the core public health functions of assessment, policy development, and assurance. This is no different for this intervention. Primary prevention in health promotion programs can improve the general health status and reduce
disease. Secondary prevention activities include routine testing and screening. Diagnosing individuals falls within the realm of tertiary prevention (Stanhope & Lancaster, 2006).

Parents or guardians of Head Start children who have been diagnosed with caries will be given MI to encourage follow-up care. Since we are promoting follow-up care, for example treatment for a cavity, we are encouraging tertiary treatment. As the motivational interviewer is giving information on the need for tertiary care, she is also giving information on the importance of brushing the child’s teeth and gums, avoiding giving the child too much candy and juice, and other preventative measures. This part of the motivational interview represents primary prevention. The motivational interviewer will also bring up the importance of dental check-ups and will explain that a child should get a dental check up every six months. Dental check-ups represent secondary prevention. “Secondary prevention refers to interventions designed to increase the probability that a person with a disease will have that condition diagnosed early enough that treatment is likely to result in cure. Health screenings are the mainstay of secondary prevention” (Stanhope & Lancaster, 2006, p. 169). If children do not have screenings every six months their cavities will not be diagnosed, which is why this is secondary prevention. This is how the Head Start nurse can engage in all three levels of prevention when using MI with a parent or guardian of a child that needs dental treatment.

**Spectrum of Prevention**

One way to help change the behavior of a community is to use the spectrum of prevention. This consists of six levels that promote change within a community when using the guidelines of the levels. The implementation of MI within DGKHS meets the criteria of levels one, two, three, four, and five, but not six.
By providing parents with information about why they should take their children to the dentist this is meeting the criteria of level one—it enhances “an individual’s capability of preventing injury or illness and [promotes] safety” (Cohen & Swift, 1999). This project reaches “groups of people with information and resources to promote health and safety” (Cohen & Swift, 1999), level two, by providing a professional staff and a community of parents with new information and education about the negative consequences of not taking their children in for follow-up dental care. The third level of the spectrum is met because the entire DGKHS staff will be educated on MI and how to provide information to others. By “bringing together groups and individuals for broader goals and greater impact” (Cohen & Swift, 1999) such as teachers and parents to reduce dental caries and improve children’s health the criteria of level four are met. Finally, the concept of using MI is a change in organizational policy and practice, which will improve health, and thus meets level five criteria. Level six is not met because this program, currently, is not attempting to change laws and policies it is just focusing on DGKHS and the positive effects that MI will bring to the Head Start program and its children. Please see Appendix 3 for an outline of the levels.

Section Three

Purpose of Intervention

The overall goal of the Motivational interview is to motivate the parent and/or guardian of Head Start children who have been diagnosed with caries during dental visits at Head Start to follow-up on their child’s care.

There are four outcomes desired for this intervention:
1. Provide resources and support to parents so they can make informed oral health care
decisions for their children, and so they can effectively use the oral health care system
to further the goals they have for their children.

2. Identify and quantify major barriers parents experience in accessing dental care for
their children in Denver.

3. Gather input from parents on their experience of the motivational interviewing
intervention, including the intervention’s cultural sensitivity.

4. Increase the percentage of Head Start children who receive timely follow-up dental
services for identified caries (Richardson, Cook & Shannon, 2008).

Description

Before Head Start personnel can begin use MI, they must first be trained. Before Staff
can be trained we must find out what they know about dental care and what their attitudes are
toward dental care. We have developed a pre-test for the Head Start employees to take after the
Fall Institute meeting. The questions address their attitudes toward teaching dental care and
knowledge of dental issues for the Head Start population. This survey should be affective in
providing a baseline of what the staff knows and believes in order to lead us in the proper
direction for educating them on MI strategies. This test will also be re-administered as a posttest
after the staff has been trained on MI to assess changes that result from the education. Please see
Appendix 4 for the test.

Evaluation

At the Fall Institute there were approximately 80 people present, including nurses,
teachers, parents, and administrative staff. Fifty-nine people responded to our survey. Over all
we had approximately a 74 percent response rate. Some of the participants only answered a few
of the questions. We tallied responses to each answer. See Appendix 5. We used the number of each response to determine the knowledge of dental care and attitudes towards dental care. The results of this pre-test will be compared to the post-test that will be given after the MI training. To be successful we hope that the number of correct answers will go up and the attitudes towards dental care will be more positive.

**Recommendations and Results**

The results of the survey show that 68 percent of Head Start staff believes it is extremely important that preschool age children get a dental exam. Sixty-nine percent of staff feels comfortable talking to parents about their child’s oral health. Most Head Start staff overestimated the number of Head Start children needing dental treatment. The majority of Head Start staff knew that it was not okay to give a child a sippy cup with juice, put a child to sleep with a bottle, or visit the dentist once before preschool. They did know that 8oz of juice at dinner is okay for children. Ninety-five percent of Head Start staff knows that if baby teeth decay the adult teeth will not always come in fine. Ninety-four percent of the respondents know that children under the age of four need to floss their teeth. Head Start staff has a general idea of what can happen when cavities are untreated, but results still showed that they need a lot of education in this area. For example, only 30 percent of staff knows that a child can die from complications of tooth decay. The staff’s prior knowledge and overall positive attitude towards oral health will enhance their experience in learning and applying MI.

The goal of the implementation of MI within DGKHS is to increase the rate of dental follow-up care to above 90 percent and reduce the rate of dental caries in the Head Start children. Only a few studies have been done on the impact of the use of MI with parents to change behavior related to their children. However, these studies show that using MI to change parents’
behavior is extremely effective in reducing dental caries and BMI in children, and increases
dental follow-up care. This evidence shows that using MI will help increase Head Start
children’s dental follow-up care over time. DGKHS should incorporate the teaching of MI into
the new and current employee orientation to ensure that all employees, both new and old, are
knowledgeable on the subject and know how to use MI when interacting with Head Start parents.
There should be pre and post tests to analyze the impact of the training on all employees to see
how their attitudes and knowledge have changed as a result of the training. There needs to be
follow-up studies done on the families and children over the next few years to determine if this
intervention has actually changed parental behavior. This change will be measured by observing
increase in the percentage of follow-up dental care over time. The skill of MI is powerful and can
be used not only to improve dental care, but also to improve other aspects of health such as
obesity and medical care follow-up.
References


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## Appendix 1

Persons in family poverty guideline

1. ............................................................... $10,400/year  
2. .............................................................$14,000/year  
3. .............................................................$17,600/year  
4. .............................................................$21,200/year  
5. .............................................................$24,800/year  
6. .............................................................$28,400/year  
7. .............................................................$32,000/year  
8. .............................................................$35,600/year  

For families with more than 8 persons, add $3,600 for each additional person.
Appendix 2

Windshield Survey Results

What area of Denver County was surveyed? East Denver/Aurora County border

What are the ages of the homes? Older than 10 years
Younger than 10 years ___X_____
Under new construction ___X_____

Are the homes similar in architecture? Yes or No

Are there front and back yards/spaces? Yes or No Small to no spaces/yards

What is their general condition? Good ___X_____
Bad, needs a lot of repair ___X_____
Fair_____
New Construction ___X_____

Are their signs of disrepair i.e. overgrown yards, broken windows, dilapidated cars. Yes or No

What are the neighborhood hangout? Aurora Mall and Lowry Recreation Center
For what group at what hour? Teenagers around 1pm.

Do the people appear approachable? Yes or No

Is there a major highway nearby? Yes or No

Are the streets/roads conducive to good transportation? Yes or No - A few potholes and main streets being repaved.

Is public transportation available? Yes or No - RTD Transportation

Is this neighborhood on the way up or down? On the way up. New townhomes, condominiums, and businesses are being built.

Race/Ethnicity: What race(s) do the residents appear to be? Mixed population. African American, Hispanic/Latino, and White

Are there indices of ethnicities? There were Spanish restaurant food stores, and merchandise stores, one Ethiopian food store, 4 Catholic churches –one for Spanish residents, 2 Baptist churches, and 3 non-denominational churches.
Are there public schools or institutions of education in the area? **Yes** or No  
**Montclair Academy, Denver Academy of Torah, The Logan School for Creative Learning, Kaleidoscope Corner and Lowry Elementary School.**

### Appendix 3

<table>
<thead>
<tr>
<th>Level of Spectrum</th>
<th>Definition of Level</th>
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<tbody>
<tr>
<td>1. Strengthening individual knowledge and skills</td>
<td>Enhancing an individual’s capability of preventing injury or illness and promoting safety</td>
</tr>
<tr>
<td>2. Promoting community education</td>
<td>Reaching groups of people with information and resources to promote health and safety</td>
</tr>
<tr>
<td>3. Educating providers</td>
<td>Informing providers who will transmit skills and knowledge to others</td>
</tr>
<tr>
<td>4. Fostering coalitions and networks</td>
<td>Bringing together groups and individuals for broader goals and greater impact</td>
</tr>
<tr>
<td>5. Changing organizational practices</td>
<td>Adopting regulations and shaping norms to improve health and safety</td>
</tr>
<tr>
<td>6. Influencing policy legislation</td>
<td>Developing strategies to change laws and policies to influence outcomes</td>
</tr>
</tbody>
</table>
Appendix 4

Oral Health Pretest for Head Start Staff

1. How often do you go to the dentist? (Please circle one)
   Never       Occasionally      Every year     Every six months     More than once in six months

2. Children under the age of 4 need to floss their teeth (with the assistance of their parents)?
   a. Yes
   b. No

3. Which of the following can happen if children don’t have cavities treated by a dentist?
   (Circle all that apply)
   a. Sepsis (Infection in the blood) f. Influenza
   b. Learning disorders g. Weight gain
   c. Ear infections h. Bad nutrition
   d. Speech problems i. Death
   e. Negative behaviors

4. If children lose their baby teeth to decay, their adult teeth will always come in fine.
   a. True
   b. False

5. Which of these is an OK practice for your child?
   a. Give the child a sippy cup or bottle of juice to drink throughout the day.
   b. Put the baby to sleep with a bottle of milk
   c. 8 oz of juice at dinner.
   d. If a child visits a dentist once at the age of two they won’t need to visit again until
      they start school.

6. What percentage of Head Start children need dental treatment?
   a. 10%-30% b. 30%-50% c. 50%-70% d. 70%-90%

7. How comfortable do I feel talking to parents about their children’s oral health? (Please
   circle one number)
   0-----------------1------------------2-------------------3-------------------4
   Not at all Neutral Very comfortable
8. How important do you honestly feel it is for preschool age children to get a dental exam?
   a. Not at all
   b. A little important
   c. Important but there are other things just as important
   d. Important
   e. Extremely important

### Appendix 5

<table>
<thead>
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<th>Question Number</th>
<th>Number of Responses</th>
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<tr>
<td>1</td>
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</tr>
<tr>
<td>Never: 4</td>
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<td>Occasionally: 33</td>
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<tr>
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<td>Every 6 months: 23</td>
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<td>More than once in 6 months: 5</td>
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<td>2</td>
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<td>Yes: 50</td>
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<td>No: 3</td>
<td></td>
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<tr>
<td>3</td>
<td></td>
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<tr>
<td>Sepsis: 37</td>
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<td>Learning Disorder: 15</td>
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<td>Ear Infections: 27</td>
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<td>Speech problems: 47</td>
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<td>Negative behaviors: 30</td>
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<td>Influenza: 9</td>
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<td>Weigh gain: 10</td>
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<td>Bad nutrition: 32</td>
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<td>Death: 18</td>
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<td>True: 3</td>
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<td>False: 54</td>
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<td>Sippy cup: 10</td>
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<td>Sleep with bottle: 1</td>
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<td>8oz of juice: 31</td>
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<td>Visit dentist once: 5</td>
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<td>2-neutral: 12</td>
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</tr>
<tr>
<td>3: 20</td>
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<tr>
<td>4-very comfortable: 19</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Not at all: 0</td>
<td></td>
</tr>
<tr>
<td>A little important: 0</td>
<td></td>
</tr>
<tr>
<td>Important but there are other things as important: 4</td>
<td></td>
</tr>
<tr>
<td>Important: 14</td>
<td></td>
</tr>
<tr>
<td>Extremely important: 43</td>
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