



SURVEY MEASURING ABSENCES RELATED to TOOTHACHES

The S.M.A.R.T. Survey Revisited

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INTRODUCTION

In 2013, it was reported by our research team that 11% of the children in the Jackson, Mississippi metropolitan area missed school days due to tooth pain and disease. We decided to repeat the survey and add a few additional questions. The purpose of this study was to determine if toothaches or dental pain affected school absences of children from 2020 through 2022. During this period, Jackson was dramatically affected by the Covid-19 pandemic, experienced reduced services of many dental offices, and suffered a crisis of the public water purification and delivery system. Most dental offices were ordered to provide dental care for emergency patients only. Routine recall appointments were postponed by as many as two years. The water was unfit to drink for several months, and citizens were required to drink bottled water. This limited the fluoride intake that otherwise would have been provided in the tap water.

Self-reported measures of oral health status have been shown to be associated with clinical dental needs, and have been confirmed as an independent predictor of overall health. A 10-question survey was completed by parents of school-aged children in UMMC waiting rooms and at the Jackson Medical Mall Facility. The answers were quantified and evaluated. The significance of the study was to evaluate the impact these issues can have on school attendance. Tooth decay is largely preventable, thus providing children and their parents with oral health care information can improve the status of oral health. Also, providing children with routine professional dental visits, toothbrushes, and other dental hygiene items will positively affect the oral health of our communities.

METHODS

This was a survey based study. We asked parents if their child missed school days due to oral pain such as toothaches. We used the answers from the surveys to understand the impact of lack of routine dental care and oral hygiene supplies on school absences. The survey was distributed to participants within UMMC and Medical Mall waiting rooms. The survey was anonymous. No PHI was stored. Answers were quantified to summarize the following: impact of lack of routine dental care, the lack of a good toothbrush, toothache occurrences that led to missing school, the Jackson water crisis, and if the patient had a dental home during this period.

SURVEY INSTRUMENT AND TALLEY SHEET

The S.M.A.R.T. Dental Survey

Age: _____ Gender: _____ Grade: _____
City: _____

- Does your child have a toothbrush?
 Yes No
- If you answered **yes** to question 1; Does your child use the same toothbrush longer than 6 months?
 Yes No
- Does your child complain of toothaches?
 Yes No
- Has your child ever missed a school day solely because of toothache pain?
 Yes No
- Does your child currently have a dentist that they visit on a regular basis?
 Yes No
- Has your child been seen by the dentist in the last 6 months?
 Yes No
- If you answered **no** to question 5 or 6; What is a common reason for not scheduling a dental visit for your child? You may circle more than one answer.
 - Transportation difficulties
 - The cost of care is too expensive
 - My child does not need to go that often
 - I forgot to schedule the appointment
 - There's nothing wrong with my child's teeth
 - My dentist's office moved or closed during the Covid-19 pandemic
- Did your child miss any routine dental appointments during the Covid-19 pandemic? (2020-2022)
 Yes No
- Was bottled water used to brush your child's teeth during the Jackson water crisis (2020-2022)?
 Yes No
- Has your child been drinking **mainly bottled water** since 2020?

1. CHILD HAS A TOOTH BRUSH	YES: 65
NO: 0	
2. HAS TOOTHBRUSH LONGER THAN 6 MONTHS	YES: 18
NO: 46	N/A: 1
3. CHILD COMPLAINS OF TOOTHACHES	YES: 27
NO: 37	N/A: 1
4. CHILD MISSED SCHOOL BECAUSE OF TOOTHACHES	YES: 12
NO: 53	
5. CHILD VISITS DENTIST REGULARLY?	YES: 51
NO: 13	
6. CHILD SAW DENTIST IN THE LAST 6 MONTHS	YES: 49
NO: 16	
7. REASONS	
TRANSPORTATION: 3	
COST: 3	
NO NEED TO GO THAT OFTEN: 2	
FORGOT TO SCHEDULE: 8	
NOTHING WRONG WITH CHILD'S TEETH: 4	
DENTIST OFFICE CLOSED OR MOVED: 2	
8. CHILD MISSED APPOINTMENTS DURING COVID	YES: 43
NO: 22	
9. USED BOTTLED WATER TO BRUSH TEETH DURING COVID	YES: 37
NO: 27	N/A: 1
10. CHILD DRINKS MAINLY BOTTLED WATER SINCE 2020	YES: 51
NO: 14	
MALE: 23	
FEMALE: 36	
Gender N/A: 1	
2 TO 5 (PRE-K AND KINDERGARTEN): 9	
6 TO 9 (ELEMENTARY SCHOOL): 23	
10 TO 14 (MIDDLE SCHOOL): 21	
15 AND OLDER (HIGH SCHOOL): 17	
LIVES IN JACKSON METROPOLITAN AREA: 24	
DOESN'T LIVE IN JACKSON: 41	



INFORMATION AND CONSENT FORM

Information Letter

Survey Measuring Absences Related to Toothaches

Dear Parent/Guardian,

We are a group consisting of a professor at the University of Mississippi School of Dentistry and a pediatric dental resident. We are conducting a research study to measure the impact of dental toothache pain on school attendance of school aged children (K-12) as reported by parents.

You are being invited to participate in this study because parent's reported measures of their children's oral health status have been shown to be associated with their child's dental needs. Also, the U.S. Surgeon General's "Report on Oral Health" concluded that children have absences of school days that can be directly attributed to dental toothache pain.

If you agree to participate, you will complete a brief survey of questions. Your participation is totally voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty to you or your child. The survey **will not** ask you for your identity, or your child's identity. **Your privacy is important to us, and we will not report or reveal any confidential information.**

If you have any questions concerning this research study, please call us at 601-815-5461. **Completing the questionnaire will be considered your consent to participate in the study.**

Thank you very much.

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SURVEY RESULTS

Sixty-five surveys were collected and analyzed. 41% of children complained of toothaches or tooth related pain. 18% of children missed school solely because of a toothache. The most common reason that children had not been to the dentist was that the parent/guardian forgot to schedule the appointment (12%). 66% of children missed an appointment during the COVID pandemic. 57% used bottled water to brush their teeth during the Jackson Water Crisis. 78% of the children surveyed drank mainly bottled water since 2020.

CONCLUSION

The SMART survey revealed that school-aged children in Jackson, Mississippi had multiple school absences attributed to toothaches and other oral facial pain. The data from our latest survey showed that the percentage of children missing school due to toothaches increased to 18%, from 11% reported in 2013. Many children in the Jackson metropolitan area had access to fluoridated tap water, but did not drink the tap water due to the wide-spread water crisis. The water was contaminated, and the water pressures were low.

In addition, many children missed regular recall dental appointments as a result of COVID-19 pandemic which occurred from 2020-2022. Dental providers were asked to reduce their schedules to only treat emergency patients. Routine recall appointments were postponed during the months of the worldwide pandemic. Undiagnosed and untreated caries during this period may explain the increase in the percentage of children missing school days due to toothache pain.

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