M10 data discussion

M10 Group Data Analysis Discussion Briefly describe your project and share your results. My (group) project was to investigate association betweenunmet dental need (decay) and age and sex of the children, as dental care is the most prevalent unmet health need among the US children. Unmet dental needs are a major problem that hinders public oral health and wellbeing especially in children. In 2010, 4. 3 million children in the US aged 2-17 had unmet dental needs, with the major contributor being lack of dental insurance coverage and parent's limited resources.

To investigate the association, the data was taken from " Summary Health Statistics for U. S. Children: National Health Interview Survey, 2010" available at http://www. cdc. gov/nchs/fastats/children. htm. The data was based on the question, " During past 12 months, was there any time when your child (aged 2 to 17 years) needed dental care including check-ups but did not get it because you could not afford it?" The hypotheses tested were: (1) Is there an association between unmet dental need and sex of children? (2) Is there an association between unmet dental need and age of children? The results of the Chi-square Test for Two-way Tables suggested that there is an association between unmet dental need and sex of children, $\chi^2(1, N = 66098000) = 5335. 10, p < . 001$. The results also suggested that there is an association between unmet dental need and age of children, $\chi^2(2, N = 66100000) = 220103. 18, p < . 001$. Thus, there is a significant association between unmet dental need and sex and age of children.

2. Explain challenges with the project and draw conclusions based on your findings.

Initially, at the start of the project, the main challenge was to select a question to investigate for the project that every team member agrees-on.

The next challenge was to decide on the project parts that each group member would complete. Another challenge was to find valid data set for our research question: " Is there an association between unmet dental need (decay) and age and sex of children?" Luckily, all these challenges were easily handled because of group participations/discussions and contributions (and help) from each member.

The results suggested that about 6. 8% of female child aged 2 to 17 years unmet dental need as compared to about 6. 4% of male child. In addition, unmet dental need based on the age of the children was 4. 0% for children aged 2 to 4 years, 6. 5% for children aged 5 to 11 years and 8. 0% for children aged 12 to 17 years. Thus, for all age groups, girls tend to have more unmet dental needs than boys, and as the age of the child increases, there is more chance of unmet dental need.

The results suggested that age and sex are associated with the level of unmet dental needs among children aged 2-17 in the US. In other words, the percentage of children that had unmet dental need differed by gender and age group.

In conclusion, I (we) can say that age and sex of the children play a role in the extent and degree of oral health among children in the US.