

Background

- Children were at home learning virtually for a little over a year due to the COVID-19 pandemic.
- Children being at home leads to a less structured environment, and as a result of this freedom, naturally adult/parental supervision also began to vary from the norm of having a teacher always present to supervise.
- It has been well documented that parental role in oral health is very important, especially since they are the main caregivers early on a child's life.
- In addition to the change in parental supervision, there has also been a change in the children's eating habits.
- Previous research has also highlighted that there have been changes in the consumption of various food.
- Our study will allow us to have a better understanding of the impact of changes that occurred during the pandemic on the oral health status of children including the impact of changes in parental supervision, oral hygiene habits and dietary habits.

The purpose of this project was to explore the effects COVID-19 related lack of access to dental care, changes in oral hygiene habits and parental supervision had on children's oral health.

Methods

Study population:

- A retrospective chart review with a survey component was conducted on patients seen at the Boston Medical Center's dental clinic from October 5th 2022 through December 16th 2022.
- The inclusion criteria was children who were established patients of record, ranged from 1 year up to 18 years old, and needed to have had at least one recall appointment "prior to Covid-19 pandemic" (1/1/2019 to 3/16/2020) and one recall appointment "during Covid-19 pandemic" (3/16/2020 to 3/16/2021).
- A total of 78 eligible subjects were included.

Data collection and analysis:

- Variables gathered from the subject's electronic health record include the following: caries risk assessment, diet, oral hygiene habits, plaque presence, calculus presence, and gingivitis presence.
- A 16-question survey collected information on parental supervision, dietary habits, and brushing habits.
- De-identified data was imported from EPIC into an excel spreadsheet and then ultimately to the statistical analysis program SPSS.

Results

| | Characteristic | % (N) or mean |
|----------------------|--------------------------------------|---------------|
| Gender | Female | 59% (46) |
| | Male | 41% (32) |
| Age (years) | Mean | 9.68 |
| Insurance | Medicaid | 65.4% (51) |
| | Private | 11.5% (9) |
| | Other | 23.1% (18) |
| Parental Education | Less than associates/college degree | 52.6% (41) |
| | More than associates/college degree | 46.2% (36) |
| | Prefer not to answer | 1.3% (1) |
| Parental work Status | At home (working or non-working) | 56.4% (44) |
| | Not at home (working or non-working) | 43.6% (34) |

Table 1. Description of study sample (n=78)

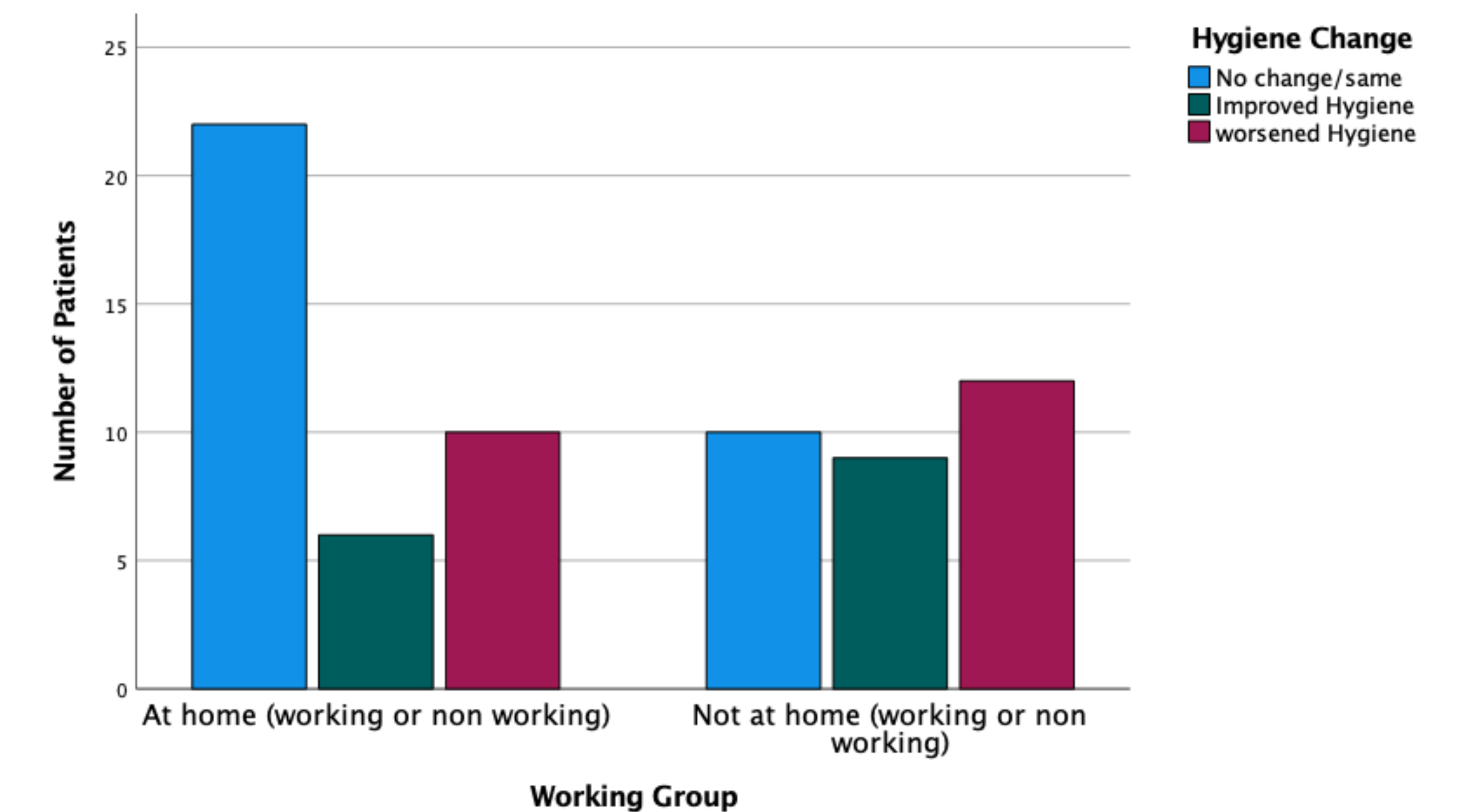


Figure 1. Change in oral hygiene based on parental work setting. The figure shows that majority of the children whose parents were at home had no change in hygiene habits.

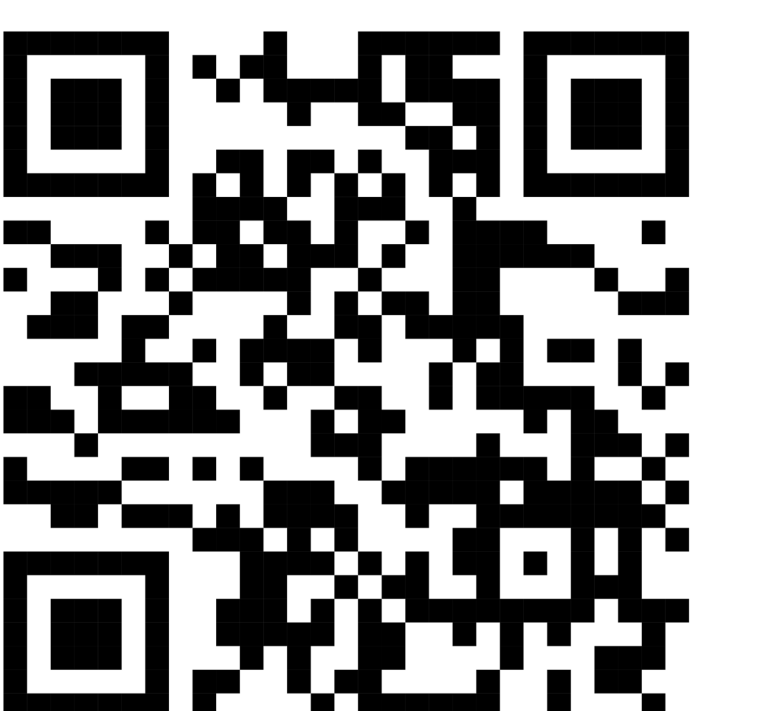
Discussion

- The hypothesis was that there would be an increase in poor oral hygiene adherence due to a change in parental supervision and lack of access to dental care.
- The general outcome from this project demonstrated that children whose parents were at home had better hygiene habits compared to those whose parents were not at home. Our results, consistent with previous studies, showed that the absence of parental supervision played a role in children's oral hygiene during the COVID-19 pandemic lockdown.
- This further reinforces the importance of parental supervision while children are participating in oral hygiene activities.

Conclusions

- In the group where parents were not at home (working or non-working) 41% of children had worse hygiene and 28% had improved hygiene.
- The majority (61%) of children whose parents were at home (working or non-working) had no change in hygiene habits.
- Children with parents who were absent had 2.39 times the odds of worsened hygiene compared to those with parents at home.

References



Please scan for references