# An Evaluation of Eastman Institute for Oral Health's

**Dental Sealant Program** 

Name

SUNY Cortland

Eastman Institute for Oral Health (EIOH)

HLH 499: Fieldwork in Health

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## Problem

Tooth decay is the most common oral disease among children. Over half of children aged 6-8 years have had a cavity in one or more of their primary teeth, and over half of adolescents aged 12-19 years have had one or more cavities in their permanent teeth (Centers for Disease Control and Prevention [CDC], 2022). It has been found that children between ages 5 and 19 years are more than twice as likely to get cavities (dental caries) if they are from low-income households (25% of children get cavities) rather than higher-income households (11% get cavities) (CDC, 2022). Among 3<sup>rd</sup> grade students in New York State, 60% of those students from low-income families and 48% of those students from higher-income families were found to have tooth decay (New York State Department of Health [NYSDOH], 2012).

A cavity, also known as dental caries, is a permanently damaged area that develops in the hard surface of the teeth (Mayo Clinic, 2022). This damaged area develops into a hole in the tooth. Caries can be caused for several reasons. These include bacteria living in the mouth, snacking too often, consuming drinks that have a high sugar content, and poor teeth cleaning. If a cavity is left untreated, the short-term consequences result in the cavity becoming bigger and affecting deeper layers of that tooth, tooth sensitivity, mild or sharp pain, and staining. If left untreated for too long, long-term consequences include severe toothache, infection, and even tooth loss.

Many children and their families struggle to maintain good oral health and hygiene because they lack the resources necessary to obtain routine oral health care. Barriers that contribute to lack of access to oral health care include financial hardship, geographic location, lack of insurance, poor oral health literacy, and language, education, or cultural barriers (American Student Dental Association [ASDA], 2022). Geographic location can serve as a barrier to access because those who live in rural areas may not have transportation accessible to oral health care that is often located in more metropolitan areas. Dietary risk factors may also be more prevalent among low-income families because unhealthy food such as sweets and fast food is typically less costly than healthier choices such as fruits and veggies. The ASDA states that to help reduce barriers to accessing oral health care, we can provide oral health education, Medicaid expansion, children's health insurance programs, emergency room referral programs, teledentistry, and student loan forgiveness programs for working in rural or underserved areas (ASDA, 2022).

Although tooth decay is the most prevalent oral disease among children and adolescents, it can easily be prevented with routine oral hygiene, good dietary habits, and regular dental visits. Tooth decay can be further prevented with fluoride varnish application and dental sealant application (CDC, 2022). Dental sealants can prevent cavities for years after application and may be applied to the chewing surfaces of the molars to prevent 80% of cavities (CDC, 2022). The Eastman Institute for Oral Health (EIOH) received a grant from the New York State Department of Health (NYSDOH) that allows them to be able to provide dental sealants and oral health education to students in Rochester city schools and in the surrounding areas at no cost. This allows those students who may not typically have access to routine dental care to receive the sealants for free that will allow tooth decay to be prevented and educates them about preventing oral diseases. EIOH's mission statement is to "improve oral health [EIOH], 2022). It is through this mission statement that programs such as the Dental Sealant Program have come about, and execution of the mission statement will be evident throughout the completion of this

program. In this program, 2<sup>nd</sup> and 3<sup>rd</sup> grade students will continue to benefit from oral health screenings and dental sealants. The program demonstrates the needs of the population and the resources needed. Oral health education will be provided to the students so they can understand how to properly care for their oral health and prevent oral health diseases in the future. Lessons learned from this program include the type of resources needed to help specific populations, gaining cultural competency, in addition to providing this population with education to improve their oral health and prevent oral diseases.

#### Intervention

The Eastman Institute for Oral Health (EIOH) received funding for the Dental Sealant Grant from NYSDOH for five years. With this grant funding, free oral health screenings, free dental sealant application, and free retention check-ups were provided to all to 2<sup>nd</sup> and 3<sup>rd</sup> grade students who signed up for the program with parental consent. Dental sealant application involved painting a thin, tooth-colored coating onto the chewing surface of the permanent molars (CDC, 2022). This coating protects the tooth from decay by keeping food and bacteria out of those areas of the tooth that have deep grooves on the surfaces. Retention check-ups involved examination to see if any sealants that were previously applied remained properly in place after one year had gone by. In the EIOH Dental Sealant Program, retention check-ups are performed 1-2 years after placement. In addition, oral health education for the children is provided via PowerPoint presentations, although this component was not conducted at the schools that participated in the first quarter of the program due to starting the program later than anticipated.

The intervention consisted of multiple visits to each school. An initial visit to each school was made to drop off consent forms. Thereafter, another visit was made to each school to pick up all the consent forms that were returned, or some schools chose to scan the forms to us instead

and we would then collect the original forms when we made a visit to provide oral health screenings. We made a third visit to screen children's teeth before sealant placement. This involved an examination of the teeth and mouth. A fourth visit to each school was made to place sealants on half of the children that signed up for the program. A fifth and final visit was made to each school to place sealants on the remaining half of children that signed up for the program. During this visit, we added any children that were absent during our prior visit to our schedule for that day. In some instances where students were absent for the oral health screening visit, both oral health screening and sealants were completed on those children the same day.

The program included outreach and incentives. Flyers were disseminated and displayed at each school and throughout the community to provide knowledge and awareness of the program. The students who received the dental sealant application were rewarded with their own baggies full of dental essentials and a prize. This included fluoride toothpaste, a toothbrush, floss, and a toy (for example, a bouncy ball). These incentives were intended to reinforce positive oral health habits.

The intervention is provided during the school year from September to June. Sixteen schools in total will benefit from the intervention. This report covers the portion of the program that ran during the fall 2022 semester. Said portion ran from September to December 2022 and covered the first four schools that benefitted from the program.

The EIOH Dental Sealant Program allowed the institution to be able to provide dental sealants to students in the surrounding areas at no cost. This allowed those students who may not typically have access to routine dental care to receive the sealants for free, which allowed tooth decay to be prevented and informed students on preventive care. The dental sealant program provided by the Eastman Institute for Oral Health allowed for 2<sup>nd</sup> and 3<sup>rd</sup> grade students to

receive free dental sealants and have them checked for retention if they were applied last year. It is important to prevent tooth decay before it begins because many people do not have access to the resources to treat dental caries. It costs less to place sealants for preventive measures rather than to treat tooth decay. Dental sealants tend to cost \$30-\$40 per tooth (Humana, 2021), while a dental filling without insurance typically runs from \$200-\$600 but can cost anywhere from \$100-\$4,000 depending on the severity of it (Humana, 2022). By preventing tooth decay by providing free dental sealants, we addressed risk factors including plaque formation on the teeth, frequent snacking, too many sugars and starches, inadequate brushing, lack of fluoride, etc. (Mayo Clinic, 2022). Eastman Institute for Oral Health prevented and treated tooth decay by administering the Dental Sealant Program.

My role in the intervention included design, planning and implementation. I worked closely with the dental hygienist running the program to plan the intervention. This included us reaching out to four rural schools: Naples, York, Avon, and Cal-Mum elementary schools to distribute consent forms. We were in close contact with each school to monitor the distribution of consent forms, when we could pick them up, when we could provide oral health education, and when we could begin screening and providing application of dental sealants to the 2<sup>nd</sup> and 3<sup>rd</sup> grade students. I designed an interactive oral health education PowerPoint for the students that will participate in the next three quarters of the program to educate them on topics such as cavities, fluoride varnish, dental sealants, prevention, foods that should and should not be eaten, and oral health maintenance. I also designed separate flyers for each school's community that were distributed throughout the community to educate students and parents about the Dental Sealant Program and its benefits. I will not be here to execute the entire intervention, but I participated in the intervention in the first four schools and planning for the intervention in the

next quarter of schools. The intervention for the first four schools began in September 2022 and ended in November 2022. The intervention for the next four schools began in late November of 2022 and hopefully will be completed sometime between January and February of 2023. As for the remaining two quarters, the timeline for completion depends on when the second quarter, which consists of 16 schools, is completed. Regardless, the intervention will be finished by June 2023 when the school year ends.

The program benefitted and will continue to benefit EIOH by helping to achieve the goals listed in their mission statement. EIOH also reports the outcomes of the completed intervention back to the grant agency, NYSDOH. If the intervention is successful, the agency recognizes EIOH's success, and they may become eligible for other grants in the future. Through this system, EIOH has become eligible for multiple grants.

My role in the intervention benefitted me both professionally and personally. Through completing research for this program, to educate both myself and the target population, I gained knowledge that provides a great basis for my future dental career. I explored the research question "How many students will sign up to receive dental sealants with parental consent if they are provided at no cost?". I also worked with the population that I hope to work with in the future, which is children. In doing so, I gained knowledge by going out into the clinical field of dentistry and working with children, which was an opportunity I would not have had without this program. I also gained references for dental school by working on this intervention. I met various people who are established in the dental field and made connections with them. Through this, I had multiple offers for references on my dental school applications. Personally, I gained cultural competencies and rewarding experiences by working with younger, rural, and in-need populations. These have always been populations of interest to me, so I felt excited and I knew would feel rewarded for making a difference by the end of my time working with this program.

This program can be explained with the transtheoretical model theory of behavior change (TTM) (Hashemzadeh et al., 2019). The five stages of change conceptualized by TTM are precontemplation, contemplation, preparation, action, and maintenance (See Table 2). In precontemplation, the population of interest may be unaware that they need sealants, unaware of what sealants are, unaware of their tooth decay or risk of it, etc. The 2<sup>nd</sup> and 3<sup>rd</sup> grade students would be the population of interest in these scenarios, but this theory can also apply to their parents/guardian, as parents play a key role in their child's oral health at that age. In contemplation, 2<sup>nd</sup> or 3<sup>rd</sup> grade students or their parents/guardian may be aware that they have poor oral health. Perhaps they don't know how to properly take care of their teeth, or they know they have dental caries, but are not quite ready to visit the dentist or change their behavior. In the preparation stage, 2<sup>nd</sup> or 3<sup>rd</sup> grade students or their parents/guardian may have unsuccessfully attempted better oral care before, but they intend to take action to change their behavior within the next month. In this stage, a parent may be signing a consent form for their child to get dental sealants applied. The next stage is action. In this stage, the 2<sup>nd</sup> or 3<sup>rd</sup> grader is changing their behavior. They could be brushing their teeth twice per day and flossing, getting the sealants applied, visiting the dentist, etc. They could have learned these behaviors that will benefit their oral health from receiving oral health education at school. Their parent is also changing their behavior. This could be by bringing their child to their dentist appointment. The final stage is maintenance. Once the individual doing the behavior change has been doing it consistently for 6 months, they move into the maintenance phase. This means the individual continues their

behavior change. This could look like a 2<sup>nd</sup> or 3<sup>rd</sup> grader getting their sealants checked for retention, brushing their teeth twice per day and flossing, etc. (Hashemzadeh et al., 2019).

Stage of Change (TTM)	What's Happening in This	Example
	Stage?	
Precontemplation	Target population is unaware	2 <sup>nd</sup> and 3 <sup>rd</sup> graders and their
	they need to make a behavior	parents are unaware they or
	change.	their child could benefit from
	_	sealants, are unaware of what
		sealants are, are unaware of
		their tooth decay or risk for it.
Contemplation	Target population is aware	2 <sup>nd</sup> and 3 <sup>rd</sup> graders and their
	that they need to make a	parents are aware of the
	behavior change but may not	child's poor oral health but
	know how to do it or may not	aren't quite ready to visit the
	have the resources to make	dentist or make a behavior
	the change.	change.
Preparation	Target population is getting	2 <sup>nd</sup> and 3 <sup>rd</sup> grade students
	ready to make a behavior	may have unsuccessfully
	change and will do so within	attempted to have better oral
	the next month.	health in the past but intends
		to have better oral health
		within the next month. In this
		stage, a parent could be
		signing a consent form for
		their child to receive dental
		sealants.
Action	The target population is doing	2 <sup>nd</sup> and 3 <sup>rd</sup> graders are
	the behavior change.	brushing their teeth twice per
		day and flossing.
		2 <sup>nd</sup> and 3 <sup>rd</sup> graders are getting
		sealants applied.
		D ( )1' (1' 1'11
		Parents are taking their child
		to the dentist.
Maintenance	I ne target population	$2^{11}$ and $3^{11}$ graders are getting
	continues to do the behavior	their sealants checked for
	change for at least 6 months.	retention.

 Table 2: Transtheoretical Model Relating to Dental Sealants and Oral Health Care

	2 <sup>nd</sup> and 3 <sup>rd</sup> graders continue brushing their teeth twice per day and flossing.
	Parents continue to take their child to each dentist visit (every 6 months-1 year).

This program including the intervention is evidence-based. There has been a lot of research conducted that proves that integrating dental care into schools is an effective manner of care and allows dental professionals to reach a population that could be hard-to-reach without having access to schools (Horst et al., 2018). Research also verifies that sealant application is an effective way to prevent dental caries in children who have developed their permanent molars and having access to schools provides dental professionals with the ability to prevent caries among the age groups that will benefit from dental sealants (Cvikl et al., 2018; Splieth et al., 2020). Integrating dental practices into schools has been shown to increase annual dental visits from 12% to 43% (Horst et al., 2018).

# **Data Collection**

The purpose of data collection in this intervention was to evaluate the intervention. Types of data collected included the number of children whose parents consented to their participation, number of children who received oral screening, number of children who received 0, 2, 3, and 4 sealants, number of children whose sealants were not retained at reassessment, and number of sealants not retained if lack of retention was present. Data collected during the first quarter was quantitative. This data is represented in a table (Table 1) and is displayed as counts.

The transtheoretical model (TTM) was used to explain the questions used for data collection. Examples of how the stages of TTM directly relate to the Sealant Program can be seen in Table 2. The data collection questions address three stages of TTM. These steps are preparation, action, and maintenance. For example, data collection question #1 in Table 1 was

regarding the number of 2<sup>nd</sup> and 3<sup>rd</sup> grade children from each school whose parents consented for their child to participate in the intervention. This would be an example of preparation because by turning in their signed consent form, parents were preparing to change their behavior by getting dental treatment for their child. Questions #3, #4, #5 and #6 in the table related to the number of 2<sup>nd</sup> and 3<sup>rd</sup> grade students who received sealants during the intervention. This related to the action stage because by getting the sealants applied, they were acting. Questions #7 and #8 in the table related to the number of 3<sup>rd</sup> grade students whose sealants were not retained at reassessment, and how many sealants were not retained. This refers to the maintenance stage of TTM because sealant retention was checked between 6-15 months post-application. By getting their sealants checked for retention, the 3<sup>rd</sup> graders were in the maintenance stage. If sealants were retained when checked (remained in place), this implied that they were properly applied. If sealants were not retained when checked, this could mean that the sealant was not applied properly and may have failed because of moisture contamination while being applied.

Data was collected from 2<sup>nd</sup> and 3<sup>rd</sup> grade students whose parents consented to and the children participated in the intervention. Data was collected from the 44 students whose parents gave consent for them to participate in the first quarter of the sealant program. These 44 students served as our sample size for the first quarter of the intervention. The timeline for data collection for the program in its entirety began in October of 2022 and will continue through June of 2023 but, for the first quarter of the program it began in October of 2022 and ended in December of 2022. Since the first quarter of the program is completed, 3 quarters of schools remain to collect data from and perform an intervention at following this first quarter, so data collection will continue through June 2023.

## **Results and Analysis**

Quantitative data was organized into a table, which presents the data collected from the completed first quarter of the program. The data collected from each school that participated in the first quarter of the program was counted and organized into the table. From this, we compared trends across different schools that participated in the first quarter of the Sealant Program. As seen in Table 1, data was collected from the four elementary schools that participated in the first quarter of the program. These schools were Naples, Avon, York, and Cal-Mum elementary schools. Seven children from Naples Elementary School were allowed to participate in the program along with 10 children from Avon, 16 children from York, and 11 children from Cal-mum. This gave us a total of 44 children from these four schools that participated in the program. This was the sample size for the first quarter of the intervention. Out of these 44 2<sup>nd</sup> and 3<sup>rd</sup> grade students, 37 total received oral screening. Zero of these 37 children were from Naples, 10 from Avon, 16 from York, and 11 from Cal-Mum. From this, we can tell that all the children who participated in the first quarter of the program received oral screening, except for those children that attend Naples Elementary School. This was due to loss of communication from Naples Elementary School. We attempted to reach out to Naples Elementary School by both phone call and email to schedule visits to provide oral screenings and sealants to the children whose parents gave consent, but despite five separate attempts to reach someone from the school, nobody answered our calls, emails, or attempted to get back to us as per two voicemails that I had left the school nurse. Out of the 44 students who participated in the first quarter of the program, two students received two sealants. One of these students was from York and the other was from Cal-Mum. The reason for these students only receiving two sealants was because the other two teeth of one student were only partially erupted and could not support sealant placement yet (Cal-Mum), and the other student was noncompliant when it came to

placing the remaining two sealants (York). Out of the 44 students in the first quarter, only one student received three sealants. This student was from Cal-Mum and only received three sealants because one of their teeth was partially erupted and could not support sealant placement yet. The rest of the students from Avon, York, and Cal-Mum received four sealants because all four of their premolars were erupted and were healthy enough to support sealant placement. The students who received four sealants totaled 10 students from Avon, 14 students from York, and seven students from Cal-Mum. This gave us a total of 31 students during the first quarter who received four sealants. Out of 44 students in the first quarter, 10 students received zero sealants due to noncompliance or absence. We reported all seven students from Naples who were allowed to participate as receiving zero sealants due to the inability to schedule any children from this school for sealant placement due to lack of communication. One child from York received zero sealants due to repetitive absence on the days that we visited. There were two students from Cal-Mum that received zero sealants. One student from Cal-Mum was noncompliant and we did not place any sealants on this student as result. The remaining student was absent on the days that we placed sealants, and as result received zero sealants. Out of 44 children, four children from the first quarter experienced lack of retention of their sealants that were placed last year. Of these four children, one was from York and three were from Cal-Mum. Of these four children, all four sealants for each child that experienced lack of retention were not retained. This gave us a total of 16 sealants that were not retained if lack of retention was present.

Based on Table 1, we can calculate frequencies and averages to compare the outcomes of the program among different schools. As calculated from Table 1, Naples accounted for about 16% of 2<sup>nd</sup> and 3<sup>rd</sup> grade students who were consented to participate in the first quarter of the program but accounted for 0% of students that received sealants. Avon accounted for about 23%

of students who were consented to participate, York accounted for over one-third of students who were consented to participate with their students, representing 36% of those who were consented to participate in the program, and at 25%, Cal-Mum students accounted for one-fourth of students who were consented to participate. As for the percentage of students who received four sealants from each school, Avon accounted for 32% of students who received all four sealants, Cal-Mum accounted for 23%, while York accounted for 45% of students who received all four sealants. Naples accounted for 70% of students who received zero sealants due to the lack of communication from Naples. Aside from this, York accounted for 10% of these students and Cal-Mum accounted for 20%. Cal-Mum students experienced the greatest lack of retention compared to any other school. Cal-Mum accounted for 75% of students who experienced lack of retention, while York students accounted for only 25% despite having the highest percentage of students who participated in the program.

#### Discussion

Based on Table 1, York Elementary School had the highest rate of participation in the Sealant Program when compared to other schools. York Elementary School also had the highest rate of students that received 4 sealants when compared to the other schools. Even though York Elementary School had the highest consent rate when compared to the other schools, there was only one student from York that experienced lack of retention. Cal-Mum had the second highest rate of participation in the program when compared to other schools. However, when compared to Avon and York, Cal-Mum also experienced a higher percentage of students who received zero sealants due to absence and noncompliance. Cal-Mum also had the highest percentage of students who experienced lack of retention from the sealants placed last year. Naples Elementary did not benefit from the Sealant Program at all because even though some parents consented to

their children's participation, none of the children received oral screening or sealants. It is safe to say that Avon had the most success with the Sealant Program compared to any other school. All students who consented to participate from Avon received oral screening, four sealants, and none had experienced any lack of retention from sealants placed last year. Based upon these findings, we determined that Avon and York elementary schools had more success with the Sealant Program than Cal-Mum and Naples elementary schools. After completion of the first quarter of the Sealant Program, my research question was answered. Of the 44 students that were consented to participate in the first quarter, only 34 students received sealants. I concluded that some schools had better turnout with the Sealant Program than others. Turnout can depend on several factors: size of school, promotion for the program, need for sealants, etc. We do not have access to some of the data relating to these factors. Regardless, York had the best turnout for the program. I noticed that throughout the first quarter, there were not many students from each school whose parents consented for them to participate in the Sealant Program. Compared to the entire 2<sup>nd</sup> and 3<sup>rd</sup> grade classes from each school, there were only a handful of kids from each grade that would participate, even though the sealants are offered at no cost.

Some problems that may be related to the implementation and data collection that could have impacted our results were: 1) Naples not participating in the program, which skewed the results of the data; 2) lack of retention may not be present because students that received sealants last year may not have been allowed to participate in the program this year. This means that the number of children who experienced lack of retention could be zero in Table 1 because students who may have participated in the program last year, may not have participated this year, so there would be no way to know if those students are experiencing lack of retention; and 3) the number of children from each school who were allowed to participate may be representative of the size of the school. In other words, York may have had the best turnout for the program because they may have had the most children in 2<sup>nd</sup> and 3<sup>rd</sup> grade compared to the other schools. Unfortunately, we didn't have the size of the classes, so we are not able to compare the turnout rates. These problems were handled by explaining data findings with and without Naples, included and displaying data in Table 1 so that true results can be viewed, and providing as accurate information as possible in Table 1.

School Name	Naples	Avon	York	Caledonia-	Total
	Elementary	Elementary	Elementary	Mumford	
				Elementary	
1: # Of	7	10	16	11	44
Children					
Consented to					
Participate in					
Program					
2: # Of	0	10	16	11	37
Children who					
<b>Received Oral</b>					
Screening					
3: # Of	0	0	1	1	2
Children who					
Received 2					
Sealants					
4: # Of	0	0	0	1	1
Children who					
Received 3					
Sealants					
5: # Of	0	10	14	7	31
Children who					
Received 4					
Sealants					
6: # Of	7	0	1	2	10
Children who					
Received 0					
Sealants due to					
Noncompliance					
or Absence					
7: # Of	0	0	1	3	4
Children					

**Table 1: First Quarter Program Results** 

Whose Sealants					
Were Not					
<b>Retained from</b>					
Year Prior					
8: # Of	0	0	4	12	16
Sealants Not					
<b>Retained if</b>					
Lack of					
<b>Retention was</b>					
Present					

## Recommendations

Based on the results shown for the first quarter of the Sealant Program, I believe there are two things the agency could do differently to ameliorate the intervention. First, I believe that providing paper copies of consent forms to schools and families made starting the program more difficult than it had to be. Many people prefer to fill documents such as consent forms out online now rather than filling out a paper document. Providing a digitized version of the consent forms could ensure that consent forms are sent directly to parents, most-to-all the parents will be aware of the program, and the form can easily be filled out while parents or guardians are using their electronics anyways. Providing a digital version of the consent forms that is sent directly to parents or guardians also depletes the chance that their student will forget to give their parent the consent form or lose it. This leaves a chance for the student's parent or guardian to never see or even know about the consent form. Another thing the agency could do differently to ameliorate the intervention is to provide more incentive to participating in the program than receiving a baggy full of dental essentials. Many children who participate in the Sealant Program have never even visited a dentist, and regardless, a lot of them are scared or nervous. Providing more incentive to participating in the program (for example, a free ice cream coupon at school) could get the students more excited to participate in the program and increase participation.

## Reflections

Even though this project was very involved for me and took a lot of time during my fieldwork experience, I truly enjoyed doing it. When I learned that I had to do a fieldwork project, I figured it would be the biggest headache of my semester and drag down my experience a little bit. To my surprise, my project was the most enjoyable aspect of my fieldwork experience. I worked on this project 2 out of 5 days each week for my entire fieldwork experience. At first, it was a lot of work getting in touch with schools and scheduling days to come visit repeatedly. What was once such a daunting task for me soon became routine and got easier with time. I realized while I was learning things such as how to schedule our program with schools, how to input different types of insurances into the electronic system, and how to charge for the services we were providing, were tasks that I would likely one day need to learn how to do regardless working in the healthcare field.

Working on this project for me included meeting so many new people, one of whom would be the hygienist that I worked closely aside each week and had truly learned the most from. The things that seemed so scary at the beginning of my fieldwork experience, I am now confident in. I explored new challenges every day. I had to learn the process of oral screenings, placing sealants, and what teeth 2<sup>nd</sup> and 3<sup>rd</sup> grade students typically have around their age. This fieldwork taught me a lot of how to figure things out for myself based on seeing these things done repetitively. At the beginning of this project, I had no idea how to fill out a screening chart, how screenings were done, how sealants were applied, or even how to comfort young children. By the end of my experience, I know what teeth 2<sup>nd</sup> and 3<sup>rd</sup> grade students typically have and what ones they don't, I am familiar with the process of how oral screenings and sealant applications are completed, and I have a few tricks up my sleeve that work to calm nervous children down and help them to feel comfortable when they're scared.

I truly value having had the opportunity to participate in a fieldwork project that I enjoyed so much. I met health professionals in the dental field that I now feel comfortable around and have guided me throughout my entire fieldwork experience. Tera, the hygienist I worked with during my project had a great impact on my personal growth and my experience. I spent most of my time with Tera working on this project. We were great partners and provided support for each other. Despite many challenges I overcame throughout this project, I learned so much and found the entire experience rewarding. I found that knowing I was helping some children who really needed oral care and treatment was the most rewarding aspect of this project. Some of the children we serviced were in pain and needed help. We were able to alert the schools of the kids that really needed help and made sure a letter went home to each parent who had a child in need of immediate treatment. The letter contained a list of referral sites where parents could seek oral health care for their child. I also found it very rewarding when I was able to comfort a nervous student enough to where they were no longer scared. Growing up I always had a difficult time understanding and working with children, so was rewarding for me to learn what works and what doesn't when comforting children.

## References

- American Student Dental Association. (2022). *Barriers to care: ASDA*. American Student Dental Association. <u>https://www.asdanet.org/index/get-involved/advocate/issues-and-legislative-priorities/Barriers-to-Care</u>
- Centers for Disease Control and Prevention. (2022, April 6). *Children's oral health*. Centers for Disease Control and Prevention. <u>https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html#:~:text=More%20than%20half%20of%20children,their%20baby%20(pr imary)%20teeth.&text=More%20than%20half%20of%20adolescents,one%20of%20their% 20permanent%20teeth</u>
- Cvikl, B., Moritz, A., & Bekes, K. (2018). Pit and fissure sealants- a comprehensive review. *Dentistry Journal*, 6(2), 18. <u>https://doi.org/10.3390/dj6020018</u>
- Eastman Institute for Oral Health. (2022). *About us*. University of Rochester Medical Center. <u>https://www.urmc.rochester.edu/dentistry/about.aspx#:~:text=Mission%20%26%20Strateg</u> ic%20Plan-,Mission,%2C%20discovery%2C%20teaching%20and%20learning.
- Hashemzadeh, M., Rahimi, A., Zare-Farashbandi, F., Alavi-Naeini, A. M., & Daei, A. (2019).
  Transtheoretical model of health behavioral change: A systematic review. *Iranian Journal* of Nursing and Midwifery Research, 24(2), 83–90.
  <a href="https://doi.org/10.4103/ijnmr.IJNMR\_94\_17">https://doi.org/10.4103/ijnmr.IJNMR\_94\_17</a>

- Horst, J. A., Tanzer, J. M., & Milgrom, P. M. (2018). Fluorides and other preventive strategies for tooth decay. *Dental Clinics of North America*, 62(2), 207–234. <u>https://doi.org/10.1016/j.cden.2017.11.003</u>
- Humana. (2021). What are the benefits of dental sealants? Humana. <u>https://www.humana.com/dental-insurance/dental-resources/dental-</u> <u>sealants#:~:text=Dental%20sealant%20costs,the%20best%20dental%20sealant%20price</u>.
- Humana. (2022). *How much does a dental filling cost?* Humana. <u>https://www.humana.com/dental-insurance/dental-resources/dental-</u> <u>sealants#:~:text=Dental%20sealant%20costs,the%20best%20dental%20sealant%20price</u>.
- Mayo Clinic. (2022, March 19). *Cavities/Tooth decay*. Mayo Clinic. <u>https://www.mayoclinic.org/diseases-conditions/cavities/symptoms-causes/syc-20352892</u>
- New York State Department of Health. (2012, September). Priority area: Healthy mothers, healthy babies, healthy children - Dental Caries Disease among New York State's children. New York State Department of Health. <u>https://www.health.ny.gov/prevention/prevention\_agenda/healthy\_mothers/dental\_health.h</u>

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Splieth, C. H., Banerjee, A., Bottenberg, P., Breschi, L., Campus, G., Ekstrand, K. R., Giacaman,
R. A., Haak, R., Hannig, M., Hickel, R., Juric, H., Lussi, A., Machiulskiene, V., Manton,
D. J., Jablonski-Momeni, A., Opdam, N., Paris, S., Santamaría, R. M., Schwendicke, F.,
Tassery, H., ... Doméjean, S. (2020). How to intervene in the caries process in children: A

joint ORCA and EFCD expert delphi consensus statement. Caries Research, 54(4), 297-

305. <u>https://doi.org/10.1159/000507692</u>