

PIP Project: Serving the Underserved at TODCO - Outreach Results and Research

By Rutu Shah and Nicole Shinkawa, DDS 2020

Background

Access to healthcare is a problem that many demographics face around the world. Often times, dental care is neglected altogether, and people do not start to seek care until they have a toothache that can no longer be ignored. As students here at Dugoni, we have found ourselves reaching out to help the global community by volunteering around the world and going on mission trips to places like Jamaica, Fiji, Mexico, and Guatemala. However, through our courses here at school, we saw the importance of providing care to those who are underserved right here at home in the United States alone.

We have been extremely lucky to live and study in San Francisco for the past two and a half years. However, we both realize it is an expensive place to live. Although the highest salaries in the world can be found in San Francisco¹, we are hard-pressed to find a city with more of a disparity between its highest and lowest earning inhabitants. The mean household and individual salary in San Francisco was \$137,761 and \$103,124 respectively, whereas the nation's median household income (in 2017) was \$61,372.² According to the U.S Department of Housing and Urban Development, the low income limits in San Francisco were defined as \$117,400 for a household of four people and \$82,200 for an individual, and an estimated 10% of residents were considered to be in poverty in 2018 - of those, residents 65 and older were mostly likely to be in poverty than any other age group.³

Ironically enough, the geriatric group of the population often is neglected by a large part of society, when in reality, they need the most amount of support and care. They often are polypharmacy patients, meaning that they take medications that affect their nutrition - a study of "community-dwelling elders found that polypharmacy was associated with a reduced intake of fiber, fat-soluble and B vitamins, and minerals as well as an increased intake of cholesterol, glucose, and sodium"⁴. Often times, the most

prescribed hypertension medications can also cause xerostomia. A great part of nutrition comes from the patient’s ability to eat, but due to much of the geriatric population’s missing dentition and lack of dental care, eating and proper nutrition become very difficult to do on a daily basis. We noticed this from our very first visit to the TODCO (Tenants and Owners Development Corporation) site in San Francisco during our first year. That is when we knew we wanted to make a difference in the elderly, low-income population of San Francisco and give them a resource to get their much-needed dental care.

Overview

Our project aimed to provide a dental outreach program to the low-income seniors and residents of TODCO (Tenants and Owners Development Corporation) in San Francisco. In total, we visited about four different sites throughout the city. We provided a presentation of general dental facts and provided information about coming to University of the Pacific School of Dentistry and becoming a patient, as well as gave out oral hygiene aids such as a toothbrush, toothpaste, and floss. During our presentations, we took a pre-survey before the presentation and a post- survey after the presentation. Below are the results.

Questions	Number Correct	Number Incorrect
1. Oral health is related to your entire overall health. (True or False)	Pre- survey: 22 Post- survey: 13	Pre- survey: 5 Post- survey: 2
2. You should visit the dentist at least 2 times every year. (True or False)	Pre- survey: 21 Post- survey: 13	Pre- survey: 5 Post- survey: 2

<p>3. If you wear dentures you should brush them after eating and soak them in water or denture solution overnight. (True or False)</p>	<p>Pre- survey: 20 Post- survey: 13</p>	<p>Pre- survey: 7 Post- survey: 1</p>
<p>4. How many times a day do you brush your teeth? 2</p>	<p>Pre- survey: 20 Post- survey: 11</p>	<p>Pre- survey: 7 Post- survey: 4</p>
<p>5. How many times a day do you floss your teeth? 1</p>	<p>Pre- survey: 8 Post- survey: 9</p>	<p>Pre- survey: 20 Post- survey: 5</p>
<p>6. Do your gums bleed when you brush or floss your teeth? (Yes or No)</p>	<p>Pre- survey: 13 Post- survey: 2</p>	<p>Pre- survey: 12 Post- survey: What patients learned</p> <ul style="list-style-type: none"> - “Taking care of my teeth is important” - “Need regular dental check-ups” - “Where to go to start my dental care program with professional provider” - “How comprehensive the school is”

Results/Conclusion

We surveyed approximately 30 different people throughout our outreach project on some general dental facts. As you can see some people did not answer all of the questions or only did one of the surveys. This made it difficult to have consistent results. Overall we found that the population had a good background on general dental facts such as knowing that oral health is related to your overall health and that you should visit the dentist at least twice a year. The question that showed improvement after our presentation was how many times a day do you or should you floss. Many people surveyed reported no flossing for the pre-survey and then after our presentation said at least 1 time or more for our post survey. Our presentation helped reinforce these facts and gave them more information about using University of the Pacific School of Dentistry as a resource for their dental needs.

References

1. Reid, Jim, et al. "Mapping the World's Prices 2019." *Deutsche Bank Research*, 16 May 2019.
2. Reed, Eric. "The Average Salary in San Francisco." *Smart Asset*, 4 March 2019.
3. "Poverty in San Francisco" *City Performance Scorecards - City and County of San Francisco*.
4. Maher, Robert L et al. "Clinical consequences of polypharmacy in elderly." Expert opinion on drug safety vol. 13,1 (2014).

Reflections

Rutu:

Community outreach has been a core pillar in my life, and when Nicole and I first went to the TODCO (Tenants and Owners Development Corporation) housing communities through our ICS I course, we instantly knew that there was a great partnership between them and the dental school waiting to be re-established. The tenants of TODCO mostly consist of an underserved and

low-income population that are always in need of more dental and medical care. During our first tour there, the social worker Debbie Sue introduced us to some of the tenants – as soon as the tenants realized we were dental students, they pointed to their mouths and talked about a tooth that was hurting or a denture that wasn't fitting well. The need for dental care was there, and Debbie Sue told us that many of the tenants had Medi-Cal or Denti-Cal already, but even she was not aware of the fact that the dental school was accepting DentiCal patients again after a short hiatus. There was a huge gap in the resources available at the school, which was actually just a few steps from many of the TODCO housing communities, and the tenants of TODCO actually utilizing those resources.

Nicole and I knew that we wanted to help in some way, so we centered our project on helping the TODCO residents. We wanted to bridge the gap and start a partnership and make the tenants aware of the resources they had at the dental school. We were first years when we first came up with the idea of our PIP project, and did not have much clinical experience. But we had both participated in various SCOPE (Student Community Outreach and Patient Education) events and given oral health instructions (OHI) to various populations around the San Francisco community. At the beginning of our second year, when we started forming a more concrete outline of what our PIP project would be, we realized that as much as we wanted to screen and be more hands-on with the patients and render care, that would require hurdling over a lot of legal and financial obstacles. Instead, we decided that we could at least take a bit more passive approach and give a presentation that busted common dental hygiene myths and gave more information on the dental school as a dental health resource. We decided to give a pre- and post-survey during our presentation to see if the participants learned anything new.

We ran into several obstacles with this. There were some language barriers when we went to certain TODCO housing communities, as most of the residents at a particular one spoke only Chinese. Neither Nicole nor I spoke Chinese, so we worked with the social workers and the housing community team to help us translate, and we also brought one of Chinese-fluent classmates to help us give our presentation. Another obstacle we ran into was scheduling the presentations themselves. Our class schedule conflicted with the housing communities' free slots available, and as a result, we were only able to give a couple of presentations. However, those were scheduled in advanced so that more residents were aware and available to attend. We also had a difficult time getting the attendees to fill out our surveys – many of them only filled out either the pre- or the post-survey, making getting results and forming trends very difficult for us. However, we did get a lot of positive feedback, as attendees learned “where to go to start my dental care program with professional providers”, “how comprehensive the school is”, and that “taking care of my teeth is important”, and “I need regular dental checkups”.

Overall, this was a great experience, as I got to engage the local community and disperse more information on how important good oral hygiene is. We also helped connect potential new patients to the school to get the care they so desperately need. The attendees of our presentations were very grateful for us coming and talking to them, and were excited to use the dental school as a resource. Looking ahead, I would want other students to continue to give OHI presentations year after year to continue the partnership between the dental school and TODCO, as well as track the number of patients that come into the school through the housing community. Ideally, a screening could be organized at the school for the TODCO residents, if adequate funding was available.

Nicole:

The purpose of my PIP project was to spread awareness about proper oral health to the low-income community in San Francisco and provide University of the Pacific School of Dentistry as a potential resource to where these people can receive dental care. The project focused on outreach to the residents of Tenants and Owners Development Corporation (TODCO), a low-income senior housing facility.

Reflecting back on the project I learned how to effectively organize an outreach program and the importance of good communication. It was interesting to see that many people at these housing facilities had a generally good background in knowledge of dental care. I was happy to see that there was a lot of participation and questions being asked during our presentation. This made me realize how essential it was to be prepared. Many of the residents that we presented to wore dentures so it was important that we geared our presentation to how to take care of dentures and how maintaining them is different from regular teeth.

One of the biggest challenges when presenting was a language barrier between us and the population we were presenting to. Fortunately, we were able to use one of our classmates as a translator but it still made it difficult to track our surveys. During our presentation to a

predominately Cantonese speaking audience their main concern was finding a provider that would speak the same language as them. We were able to educate them and let them know that some students at the school are able to speak multiple languages and that we do our best to pair people up so that they can be together. Overall we found that our audience was interested in knowing more about the school and the process in which to become a patient.

If I had to do something differently for this project, I would have made sure that the audience was filling out the survey before and after the presentation. The biggest challenge was tracking our surveys because some people only filled out one but it was unclear on if they took it before or after our presentation. If we would have collected the surveys before the presentation and then after it could have made tracking more efficient. I would have also liked to go to more of the TODCO sites. Unfortunately because of scheduling conflicts we were only able to attend two sites. A subsequent follow up PIP project idea would be to continue this project by attending the rest of the sites, keep good tracking of the surveys, and presenting to them.