Denture Care Education: A Simple Guide to Care

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Introduction:

As we age, our oral health becomes increasingly important, and dentures are a common solution for those who have lost some or all of their teeth. However, simply having dentures is not enough to maintain optimal oral health. It is crucial for older adults to keep their dentures clean to prevent the buildup of harmful bacteria and maintain the health of their gums and remaining teeth. "The dental pathology can lead to chewing problems or a reduction in social interaction, therefore, in time nutritional deficiency can occur or apparition of psychosocial distress. These problems are especially prevalent in elderly institutionalized patients." [1]. Inadequate cleaning of dentures can lead to a range of oral health problems, such as gum disease, bad breath, and infections. Additionally, failing to keep dentures clean can also lead to discoloration and damage to the dentures themselves, which can make them uncomfortable to wear. "Regular oral and denture hygiene habits play important role in maintenance of oral health and long- term use of removable prostheses." [3]. Geriatric patients may face additional challenges when it comes to keeping their dentures clean, such as limited mobility or difficulty in manual dexterity. However, there are a variety of denture cleaning products and techniques available that can make the process easier and more effective.

Overall, taking care of dentures is an important aspect of maintaining oral health as aging. By prioritizing regular cleaning and maintenance of their dentures, older adults can help prevent a range of oral health problems and continue to enjoy a comfortable and healthy smile.

Assessment:

For the Service Learning Project, the target populations are the seniors who need to be educated more in taking care of their dentures in preventing more bacterial formed oral disease. Due to this reason, the focus of the project was on education for these seniors on how to adequately clean their dentures and natural teeth. Our focus is on a group of seniors at a Nursing home named Buena Vida located in Brooklyn, New York. Most of the seniors are starting to lose their teeth or they have completely lost all teeth, they may wear partial denture or complete denture or still have full mouth natural teeth. These seniors are at an age in which they need more education on how to take care of their oral health in order to prevent oral diseases from happening, to suppress their immune system or affecting their medical conditions.

As dental hygiene professionals, we have to learn, read and implant along with the updated resources and knowledge to supply the information to the seniors about how to maintain a good quality and control bacteria growth on their dentures or natural teeth. By questioning the seniors' knowledge of dental care, introducing them to the simple way of cleaning the denture and reviewing the precaution of cleaning the denture in there for aiming them to properly clean the denture to prevent the quality of denture worsen. Moreover, we will introduce the brushing techniques that we learned in school and show the seniors how to brush their natural teeth.

There are many options for assessment methods that could be applied to this scene. Some methods are in the form of surveys such as asking closed-ended questions and seeing how many seniors were raising their hands to the questions we ask so we were able to classify them with denture/partial denture or natural teeth. This question allows us to see how many seniors are completely losing their teeth/partial losing teeth/retaining full mouth natural teeth. This could

make us plan better for which oral hygiene instructions are the best for these groups of seniors. We verbally and use internet sources to obtain some pictures about denture/natural teeth and explain the importance of maintaining their dentures cleanness and oral cavity in order to prevent more teeth from falling out. In addition we had shown them how to properly clean their dentures by using a cleaning denture product -Polident- 3 Minutes Antibacterial Denture Cleaner.

The most important thing for us to present to these seniors are their needs for dental care! According to the peer reviewed article "Care aide abilities in oral care delivery and seniors' oral health outcomes", it mentioned that the seniors living in the long term facility have growing concern about their public health- taking care of their teeth, most of them are having periodontal disease and caries. Due to these oral diseases, it can direct the seniors to have difficulties on social interaction, chewing and swallowing. [2]

Planning:

One of the main things we were concerned about was if the residents were going to understand the step-by-step instructions on how to clean their dentures. We had decided to add an activity to our presentation, 'tell-show-do' since it helps people remember at least 90% of the information. The activity was to demonstrate the steps to maintain a clean denture but also to show the products that would help them achieve that goal. Although our program goal was to educate these residents on how to properly clean their dentures, we also had to educate on proper tooth brushing and flossing.

We had asked multiple questions so that we could understand how to begin our activity. There were 13 residents on the floor, two of them did not have dentures, nine had partial dentures and two had full upper and lower dentures. We had 11 residents that still had their natural teeth, so we decided to demonstrate tooth brushing on a typodont. We passed the typodonts around to see if they could manage demonstrating what they saw. However, most of them were having difficulties with grasping the toothbrush due to dexterity issues. For the residents who were having difficulties with grasping the toothbrush we provided a triple bristle toothbrush. Overall, they were able to retain the information and understood so we proceeded to the next part of the activity.

The product, Polident, has multiple tablets for a different type of denture. It was really important to explain to the residents that they should use the best tablet for the type of denture they currently have. If they have a partial denture with metal clasp, Polident: Partial tablets are their best option because it helps protect the metal clasps from corrosion. If they have dentures without metal clasp, Polident: antibacterial denture cleanser tablets are their best option.

We had set up a denture box with luke-warm water, placed the denture model in the box and added the tablet. As per the instructions, we waited 3 minutes and then rinsed the denture. Used the denture brush to show how they can remove any excessive particles on the denture. A few of the group members were passing the items around so that they could present to us what they grasped from the demonstration. Most of them were able to follow the instructions but a few were confused so we helped them retain the information. Also we informed them that if they forget the instructions, they are written in the back of the Polident pack.

<u>Implementation:</u>

Oftentimes, the geriatric community is neglected. In order to create a light atmosphere where we could implement our knowledge onto them, we started off with an icebreaker. We introduced ourselves and started off with open ended questions like, "Who here knows how to maintain their mouth clean?", "Who here wears dentures,?" and "Who here knows how to properly brush their teeth?" As the questions were being asked, we found out that the majority of the residents were dentures.

After ensuring we created a comfortable environment for them, our group showed them the PowerPoint that showed unhealthy food that can lead to cavities. In addition, we showed the healthy foods that will aid in their mouth being less of a cariogenic environment. Then, we proceeded to the products used to maintain their oral hygiene. As we were showing them the images of oral hygiene products, a few of our team members started to hand out the oral hygiene supplies. This included a typodont model, denture cases, polident cleansing tablets, denture brushes, regular brushes and Listerine access flossers. While two members of the group handed out the supplies, another member of the group began showing the residents how to use the denture brush, as well as the "Do's and Don'ts" on how to brush the dentures. One of the residents that regular toothpaste is not to be used on dentures because it has abrasive particles that create microscopic tears where bacteria can grow. Instead, we suggested that if denture tablets were not an option, it is better to use soap and water with a soft bristle toothbrush.

Afterwards, we proceeded to teach them how to floss with the Listerine Access flossers, which are great for those who suffer from dexterity issues and makes it much easier to reach the

posterior teeth. Overall, the residents were very thankful for everything we taught them; and for the free supplies. It was an amazing outcome and learning experience for everyone involved.

Evaluation:

The residents at Buena Vida Nursing and Rehabilitation center were unfortunately inept on the proper way to brush their natural teeth and clean their dentures. Upon questioning during our presentation, all residents suffered from a mild to severe form of dexterity issues, which limited their ability to brush for 2 minutes and hold the toothbrush in a 45-degree angle to clean underneath the gum line. Also, of the 13 residents who attended the presentation, 9 wore removable partial dentures (69.4%) and only 2 wore full dentures (15.3%). The other 2 residents, which account for the remaining 15.3%, had their natural teeth. However, upon asking a few follow up questions, the residents with all natural teeth stated they did not feel "good" about the appearance of their teeth; and their overall oral health. Also, they stated they do not keep up with a regular 3-6 month cleaning interval at the dentist.

The main goal for our group was to teach the residents that wear removable appliances and dentures the proper way to clean and maintain them. Shockingly, all the residents who wore removable appliances and full dentures stated that they do not properly clean them using denture tablets and brushing with a denture brush to remove debris and bacteria. Instead, many used a regular toothbrush and toothpaste; not knowing the abrasive properties can damage the dentures and cause microscopic crevices where bacteria can grow. Some stated they used plain hot water. After the presentation, we asked the residents if they could demonstrate the proper way to use the denture brush and tablets with cups of water we prepared. Out of the 11, approximately 7 (64%) were able to retain the information we taught and demonstrated. The other 4 had some difficulty, so we worked with them for a short time and reiterated to always follow the instructions on the package of the dental supplies if they are confused.

Conclusion:

Our project, "Denture Care Education: A Simple Guide to Care," was presented to the residents of the Buena Vida Nursing and Rehabilitation Center because they were among the population most likely to have missing teeth and use removable appliances.

The goal was to draw their attention to dentures maintenance as it related to their oral health. It is crucial that we, as dental hygiene students, educate them on how to properly take care of their dentures in order to avoid further oral diseases such as denture stomatitis and periodontal disease. They were surprised that the lack of knowledge about denture maintenance could cause so many oral conditions and even have an impact on their overall health.

Using interviewing and questioning methods, we found that a majority of elderly people neglected denture maintenance, and some of them slept with dentures on.

Our presentation focused primarily on the denture cleaning method and the products available. Most of them could actively understand and participate with their own dentures or our models after a step-by-step demonstration. During the feedback poll, a large percentage of them stated that they would begin caring for their removable appliances following the instructions they learned from the presentation.

It was a very meaningful experience in our careers because it gave us the opportunity to use our knowledge to help not just one individual, but a group of vulnerable people.

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