Running head: SERVICE LEARNING FIELD PROJECT
Oral Health Education and Dental Service Promotion for International College Students
Nataliia Zhalivtsiv
Zoe Stern
Maxine Fuchs
Natallia Mikhelis
Vlada Yakimidi
Prianka Roy
City University of New York, New York City College of Technology

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#### Introduction

The need for education about oral health conditions has become growingly popular in recent years. Oral health education can be defined as the process of provision of oral health information for people to apply beneficial principles and habits to everyday routine. Oral health education helps to develop positive dental health attitude and habits. While many studies of research have concentrated on children and adolescent education, it remains crucial that parents and older generations receive the necessary instruction so that they may properly watch and monitor their children at home, as well as gain awareness and control of their own behaviors. For our presentation, we chose students ranging in age from 18 to approximately 30 years old. These students were foreign immigrants to the United States, all enrolled in English as a Second Language curriculum. While American culture plays a major role in promoting and encouraging the importance of oral health, many foreign cultures are not as motivated. Studies have shown that the length of stay in the United States has been positively associated with better oral health status, possibly indicated by cultural, socio-economical differences, or ease of access to the oral health care system in the United States. (1) The background of knowledge about oral health among students was not known, but the majority of students had never used floss in their lifetime. As future dental hygienists, our role was to educate the community in the best possible way, as to help educate these students and their children. Some of the goals we aimed to achieve

were to introduce the importance of oral health, increase awareness of oral health, explain the influence of the oral cavity in relation to the whole body, explain how our diet or habits can influence our oral health, and discuss most common diseased conditions in oral cavity. One of the researches that we have read has shown correlations between oral and systemic disease. Disease entities have been connected to bacteremia and inflammatory process. Also, we concentrated our attention on articles that describe oral hygiene of healthcare providing students, specifically nursing students, and results show that a lot of them due to lack of time had not been brushing their teeth twice a day; only 3% of nursing students brushed their teeth before bed. (2)

"Students in dental hygiene, health care management and nursing programs can play a vital role in this education. By jointly creating and operating an educational Center for Oral Health Promotion, they can better understand each other's professions".

#### Assessment

The target population for this Service-Learning Field Project were English as a second language (ESL) students in age range 18 to 30 years old. We don't know their knowledge background, but we assumed that their knowledge is insufficient and have room to grow, because they are new to this country, they have to work and study at the same time, so luck of time and constant stress have a big influence on proper oral hygiene. So, our role a dental hygienist and goals for this project was to explain them the proper dental hygiene, importance of it, importance of constant dental visits and how our habits and nutrition can influence on our oral health. Our presentation is containing a few parts and approximately 30 minutes in length with all explanations and demonstrations. We include a lot of different details, because our audience is adults and every piece of power point information can be related to them. We include nutrition

because we want to worn our audience about pluses and minuses of acids that they eat and drink, because these type of products very accessible in US. One of the main points of our presentation is smoking, influence of cigarettes or even more - vapes are huge on oral health and health overall, so we would like to stress the harmfulness of this bad habit. Besides presentation we would like to do demonstration of proper brushing and flossing techniques to the students, and also let them try themselves, because as our experience in our clinic shows when patient demonstrating to us, they remembering much better and we will have a chance to correct them if they doing something wrong.

# **Planning**

The target population for our project, international college students ages 18-30 years old, are similar to any others in their age group for being risk takers and no longer having parents in their immediate presence to remind them to brush their teeth. The combination of being from a foreign country, taking risks (i.e., alcohol, tobacco, oral sex/HPV) and lack of awareness of our on-campus dental hygiene services is a recipe for an oral health disaster. Current dental issues may be caused by their poor oral health care, but future dental issues may also be the cause of their current poor oral health care. For this reason, it is crucial that we educate these foreign international college students about the importance of dental health now, and at all stages in life, to prevent dental health issues and oral cancers in their futures.

The goal of our program. Our goal is to educate foreign students about the importance of dental health for both the present and future, as well as, increase awareness and utilization of our on-campus dental hygiene services.

*Measurable objective.* Many studies have shown that there is a direct correlation between developing third-world countries and poor oral health. Often the result is due to low income, lack of education and lack of access to healthcare. By eliminating these barriers, we believe we can see an improvement in the students' oral health care routine and an increase in the number of students who take advantage of our on campus dental hygiene services. This would be measured via a 5-question questionnaire that would be distributed and collected before our in-class 30 minute presentation.

# Questionnaire Sample:

- What is your oral hygiene routine? (circle all that apply)
   Brush | Floss | Rinse | None
- 2. Did you regularly visit the dentist growing up?

  YES | NO
- 3. When was the last time you received a dental hygiene cleaning & examination:
- 4. Have you been /are you aware of the dental hygiene clinic on campus that provides free services for students? YES | NO
- 5. Is purchasing toothpaste, toothbrush and dental floss a financial concern, in your opinion?

YES | NO

**Planning Activity.** After filling out the questionnaire, we will present a 30 minute presentation to the students educating them about the importance of dental health throughout all stages of life. We will highlight key points including how oral health impacts overall health, the

connection to systemic conditions and the dangers of gingivitis advancing to periodontitis. We will also make sure to thoroughly explain the positive role nutrition and a balanced diet play in obtaining good oral health, as well as, the negative effects of alcohol, smoking and vaping. Using the "tell-show-do" method, we will explain and demonstrate the proper way to brush and floss. Additionally, we will tell and show them some other dental aid products such as a tongue scraper and oral irrigator. Most importantly, we will make sure to provide all necessary contact information to our DH clinic and help the students schedule their first appointment via phone, email, or directions to the 7th floor.

# **Implementation**

After assessing needs and resources, establishing priorities, developing a program plan, mobilizing resources, and reviewing best practices, it is time to move to program implementation. Implementation is the act of carrying out the dental hygiene plan of care. Care should be delivered with optimized benefits of oral health for the audience. Through our presentation we tried to show the students the plan of correct dental hygiene home care. Health promotion and self-care are integral aspects of the care plan that should be customized and implemented according to the ESL students' interest and ability.

- I. Review and confirm the dental hygiene educational care plan.
- II. Modify the plan as necessary and obtain any additional consent.
- III. Implement the appropriate self-care intervention; adapt as necessary throughout future interventions.
- IV. Confirm the plan for continuing care or maintenance.

# V. Maintain the students' privacy and confidentiality.

Programs comprise specific components or activities, each linked to a particular outcome. It is often helpful to identify the key activities of each component, determine who will take the lead on activities and the resources needed. Keeping education program efforts can allow for working out problems and making changes early on without using resources unnecessarily.

Educational interventions for personal dental biofilm control, diet, preventive agents, tobacco/alcohol/drug related to oral diseases. Professional preventive and therapeutic services for management of periodontal diseases, caries, etc. can increase a positive effect to the oral health in this specific group of people.

During our presentation we used the principle of "tell-show-do". We used visual and verbal material such as the brochures, Power Point slides. We showed the correct technique of flossing, tooth brushing methods. The students saw that 100% of oral care, we can reach just do everything in the complex. Twice a day brush the teeth and floss them, use mouthwash, it will do 75% of oral hygiene. The good nutrition part is not less important than just do all hygiene routine. We tried to demonstrate how harmful is alcohol, vaping and drugs for people oral and systemic health. This part we chose due to the appropriate age of our audience. Also, after presentation, we checked the correct technique from the students (practical part). We choose to do these sequences because it increases the benefits of our presentation. If we use more sense of feelings, it is better to memorize the material and increase the chance that our audience will use our recommendations as their daily routine.

# **Evaluation**

In order to properly evaluate the effectiveness of the learning activities as well as the visual and verbal presentation, we used the 5-question questionnaire in comparing pre and post outcomes. By giving the questionnaire as a way to start off our program, we were able to gain insight as to the needs of our target population. In gaining familiarity of their oral health background through this questionnaire, we obtained baseline information pre-presentation to measure if our group adequately accomplished our goals. A second questionnaire was sent via email to the students one week following the presentation to access the effectiveness after our program. Examples of post-presentation questions included similar questions as the pre-program questionnaire, such as:

#### *Questionnaire Sample:*

- 1. Following what you learned in our program, what is your oral hygiene routine look like now? (circle all that apply)
  - Brush | Floss | Rinse | None
- 2. Have you, since our last program, visited or made an appointment with the dental hygiene clinic on campus that provides free services for students?

  YES | NO
- 3. Have you, since our last program, visited or made an appointment with your local/family- dentist?

YES | NO

4. Following what you learned in our program, have you made changes in your wellness and health lifestyle choices? (Explain if yes)

5. Have you, since our last program, purchased a new toothpaste, toothbrush and dental floss?

YES | NO

These questionnaires will be used as a measurable tool in comparing pre and post evaluation of their oral health needs, as well as the effectiveness of our program. When comparing the answers of the student population, most had been positively influenced by their hands-on educative experience. Of the 30 students that had been involved in the program, 25 had added an additional oral hygiene habit. 20 of the students had made appointments with the school dental hygiene clinic. 5 had made appointments with their local/family-dentist. And all students had given an example of a positive lifestyle change that they implemented, including quitting vaping, drinking water, eating healthier, and avoiding brushing after drinking coffee. As an overall evaluation, our program had accomplished its goal in bringing awareness to oral health, and implementing positive oral habits to our student population.

#### Conclusion

Practicing good dental hygiene is essential as it significantly helps prevent gum disease, bad breath, and tooth decay. It is an excellent habit to take care of our mouth, teeth, and gums. While American culture plays a significant role in promoting and encouraging the importance of oral health, many foreign cultures are not as motivated. Many studies have shown that there is a

direct correlation between developing third-world countries and poor oral health, often due to low income, lack of education, and lack of access to healthcare. Lack of awareness of our oncampus dental hygiene services has also been noted to be a recipe for an oral health disaster among international students.

However, as future dental hygienists, we have developed an educational program that provides oral health information to students so that they can develop a positive dental health attitude and habits. Our prime goal is to educate international students about the importance of dental health for both the present and future, as well as increase awareness and utilization of our on-campus dental hygiene services. Our educational program intends to create educational awareness for personal dental biofilm control, diet, preventive agents, stress the harmfulness of smoking, and demonstrates to the student how they can adequately brush and floss their teeth, mouth, and gums. We genuinely believe that through these professional preventive and therapeutic services for the management of periodontal diseases, caries, etc., we as future dental hygienists can increase a positive effect on oral health among international students. We are optimistic that through our program, we will make a significant improvement in the students' oral health care routine and increase the number of students who take advantage of our on-campus dental hygiene services.

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