Mobile Health Van for the Immigrant Population

Old Dominion University

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Goal

Increase overall community health as assessed by an increase in dental screening in the immigrant population by 25% from June 2021 to June 2022. Increase dental screenings in the immigrant population by 10% each year thereafter.

Background

The mobile health van provides resources to the immigrant population that live in rural areas, have mobility or transportation issues, or are not able to get to an in-house clinic. Mobile health vans provide these communities access to dental screenings, COVID-19 testing and vaccinations, blood pressure checks, diabetes screening, and health education. The mobile health van is federally funded through the Community Health Center.

Role of Healthcare Professionals

Implementing a registered dental hygienist alongside a healthcare provider in the health service

van for immigrants will ensure those communities in need have access to all preventative first line healthcare essentials. There is a strong correlation between cardiovascular disease and periodontal disease (also known as gum disease), along with diabetes, periodontal disease and many other oral health factors that can cause negative effects on the body. A study shown in Bui et al's research found that periodontitis was found in 58% of type 1 diabetes patients and in 15% of non-diabetic controls. When periodontal status in children and adolescents with type 1 diabetes was examined, a prevalence of 21% of gingivitis and 6% of periodontitis was detected (Bui et al., 2019, p.29). "According to the CDC, periodontal disease is considered to be a worldwide pandemic, causing disability, speech impairment, low self-esteem, and reduced quality of life". (Bui et al., 2019, p.27)

Prevention Approach

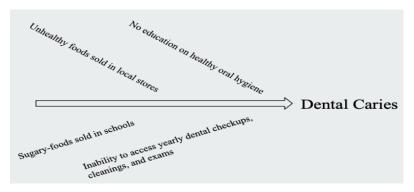
Increase the overall community health of the immigrant population through the addition of a comprehensive oral health screening which would include: nutritional counseling, education on gingivitis, education on periodontitis, education on the oral-systemic link, education on periodontal disease, smoking cessation, oral home care instructions, oral cancer screening, sleep apnea screening, TMD screening, and oral infection screening. A study investigating the importance of oral health in immigrant and refugee children, concluded "multiple factors"

influence the development of dental caries and oral health problems in immigrant and refugee children. Knowledge of protective factors as well as the important role culture plays in the way different ethnic communities interact with health systems can help improve outcomes for high risk populations. Healthcare providers in all disciplines should strive to build therapeutic relationships with at-risk populations and deliver care that is culturally appropriate and can address oral health disparities". (Crespo, 2019, p.5) This study stresses the importance of cultural competence. Medical providers providing treatment to patients of immigrant background must be culturally responsive to the patient's country of origin, role of acculturation, their diet, and their culture's attitude towards healthcare services in order to provide the most efficient and quality healthcare services. Delivering healthcare services while being culturally competent further encourages the trust between patient and provider and motivates the clients to improve their health outcomes.

An analysis of the 2013 to 2014 National Health and Nutrition Examination Survey found that more than 50 percent of noncitizens in the United States were diagnosed with periodontal disease and 38 percent had dental caries. (Manchir, 2018) It is important to address oral health disparities within immigrant communities as it is directly connected to their overall health and well-being. The use of a mobile health service van that provides various health and dental screenings along with providing education would be beneficial to underserved populations that may be less likely

to visit traditional health clinics and hospitals. "In a cohort of 5900 patients who visited the Family Van of Harvard Medical School between 2010 and 2012, patients who initially presented with high blood pressure exhibited average reductions of 10.7 mmHg and 6.2 mmHg, in systolic and diastolic blood pressures respectively, during their follow-up visits. These reductions are associated with a 32.2% and a 44.6% lower relative risk of myocardial infarction and stroke respectively". (Yu et al., 2017, p. 4) In another example, "the Health Hut in Louisiana has shown that 30% of its patients initially presenting with high blood pressure at their mobile health clinic saw decreased readings over three-month periods, and a number of diabetic patients saw a decrease of 20% or more in their glycated hemoglobin (HbA1c) levels" (Yu et al., 2017, p. 4). "The HABITS for Life mobile screening program noted that 78% of its screening participants engaged in healthier behavior changes as a result of having participated in the screening" (Yu et al., 2017, p. 5). This evidence supports the benefits of the intervention and the positive impact it can have within the communities served.

Ishikawa Diagram



Conclusion

Intervention is needed to address the lack of easy healthcare access for the underserved immigrant community. Mobile health service vans provide access to preventative care at a reduced cost, eliminating barriers to healthcare. The interprofessional collaboration between registered dental hygienists and public health professionals can help improve the overall community health of the immigrant population. This coordination is effective because implementation of comprehensive oral health screenings as a preventative approach can not only aid in improving the client's oral health, but will also aid in the assessment of the general systemic health, thus influencing the clients to seek out further recommended treatment.

References

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