AUGMENTING HEALTHY SENIOR HABITS: A PROGRAM TO DECREASE RISK OF TYPE 2 DIABETES AMONG SENIORS IN SACRAMENTO COUNTY, CALIFORNIA

A Project

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MASTER OF PUBLIC HEALTH

by

Paolo Christian Joven Tayros

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by
o Christian Joven Tayros
, Committee Chair

Student: Paolo Christian Joven Tayros
I certify that this student has met the requirements for format contained in the University format
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, Department Chair
Michael Mink, PhD, MPA Date
Department of Public Health

Abstract

of

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Problem Identification:

Diabetes is a serious public health problem posing a risk to seniors, ages 65 and older. This project examines the scope and significance of modifiable diabetes risk factors among seniors in Sacramento County, California.

Analysis:

The social-ecological model is utilized to illustrate the interactions of multiple factors that contribute to Type 2 diabetes development among seniors in Sacramento County, California. A comprehensive analysis of these contributing factors includes poor dietary habits, social isolation, food deserts, and CalFresh pandemic aid.

Intervention (Solution) Proposal:

The Augmenting Healthy Senior Habits program aims to decrease the modifiable risk factors and vulnerability of Type 2 diabetes development among seniors by improving dietary habits, social connection, and access to healthy food options. Health promotion strategies utilized as part of the intervention design include a fresh and nutritious meal service, meal

preparation workshops and contextualized recipes, a senior connection space, a market of local farmer stands and grocers, and market vouchers.

Implementation and Evaluation:

Components of *Augmenting Healthy Senior Habits* are designed to effectively change modifiable factors of Type 2 diabetes development among senior participants. Staff volunteers necessary for program success are recruited from the community. The program will utilize both process and summative evaluation methods to ensure quality control, and fidelity.

Heather Diaz, DrPH, MPH	, Committee Chair
Date	

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Chapter 1: PROBLEM IDENTIFICATION

Defining the Public Health Problem

Diabetes is a chronic disease that occurs when the body cannot adequately produce enough insulin to control blood sugar levels (type 1) or when the body does not utilize insulin effectively to normalize blood sugar levels (type 2) (World Health Organization [WHO], 2023). Both types of diabetes are reported together in the epidemiological data presented in this chapter. Symptoms of diabetes include persistent thirstiness, frequent urination, blurred vision, fatigue, and unintentional weight loss (American Diabetes Association [ADA], 2024; Centers for Disease Control and Prevention [CDC], 2023a). If left untreated, diabetes can lead to serious health complications such as heart disease, stroke, blood vessel damage, kidney disease, permanent vision loss, nerve damage, and amputation (CDC 2022; WHO, 2023).

Diabetes can occur at any age but seniors, ages 65 and older, are disproportionately vulnerable since the risk of health complications to chronic diseases increases with age (ADA, 2023). Untreated or poorly managed diabetes among seniors can lead to kidney disease, blindness, amputation, decreased brain function, cognitive decline, and death (ADA Professional Practice Committee, 2021; Be Healthy Sacramento, 2024).

Epidemiological Data

National

Diabetes is the eighth leading cause of death in the United States (U.S.), with over 103,000 deaths in 2021, and seniors making up about 70.1% of those deaths. (CDC,

2023c; CDC, 2023d). Over 38 million American adults live with diabetes, representing about 14.7% of the total population (CDC, 2023d). Of the 38 million adults, 17 million are seniors, about 45% of the adult population living with diabetes (CDC, 2023d). Although data is not specifically available for seniors, the trend of adults diagnosed with diabetes increased significantly over time from 7.1% between 2001-2004, to 10.1% between 2017-2020 (CDC, 2023d). National data also indicates non-Hispanic Black (13.4%), Hispanic (10.6%), and Asian (9.6%) adults are more likely to be diagnosed with diabetes than non-Hispanic White (8.6%) adults (CDC, 2023d).

California

Diabetes is also considered the eighth leading cause of death in California, with over 11,000 deaths in 2021, and seniors making up roughly 71.3% of those deaths (CDC, 2023b; CDC 2023c). Almost 4 million California adults live with diabetes, representing about 8.9% of the total population (CDC, n.d.-c). Of the 4 million adults, almost 2 million are seniors, which is half of the state's adult population living with diabetes (CDC, n.d.-e). Although data is not specifically available for seniors, the trend of adults diagnosed with diabetes has increased significantly over time from 7.1% in 2000, to 10.9% in 2021 (CDC, n.d.-b). State data also indicates non-Hispanic Black (13%), Hispanic (16.3%) and Asian (12.1%) adults are more likely to be diagnosed with diabetes than non-Hispanic White (6.9%) adults (CDC, n.d.-a).

Local: Sacramento County

Sacramento County, California is considered an economic and cultural hub, with a diverse mixture of urban, suburban, and rural communities (Sacramento County, 2024).