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Adapting the AHA's Blood Pressure and Nutrition Management Program into Digestible Teaching Plans for Low-Income Communities

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**Executive Summary: Adapting the AHA's Blood Pressure and Nutrition Management
Program into Digestible Teaching Plans for Low-Income Communities**

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Executive Summary: Adapting the AHA's blood pressure and nutrition management program into digestible teaching plans for low-income communities

According to the American Heart Association (AHA), 46% of American adults have high blood pressure (Whelton et al., 2017). High blood pressure, especially for those above the age of 50, is associated with a higher prevalence of heart disease and a shorter life expectancy. The AHA's Check Change Control program (CCC), is an evidence based, self-directed blood pressure management guide (American Heart Association, 2021). The CCC program incorporates four lesson topics related to lifestyle changes to manage hypertension. The four topics are: self-monitoring of blood pressure, healthy eating and reducing sodium, exercise, and stress management. Our group's mission focused on creating educational plans on the first two topics, self-monitoring of blood pressure and healthy eating. Our goal was to provide future educators at an independent senior living facility with a condensed framework of the CCC program that would be more easily understood for an older adult population.

Background

For our project, we worked alongside a nonprofit organization that provided sustainable housing and services for seniors and families. Our group consisted of eight quarter-five Seattle Pacific University (SPU) nursing students working with a representative from the AHA, our clinical instructor, and a representative from the site to create an educational plan based on a needs assessment of the community. Our primary community was an independent living facility for low-income older adults located south of Seattle, Washington.

Based on prior assessments by the community management and AHA, they found a knowledge deficit in blood pressure management and understanding of nutrition. In our site assessments we validated these needs. Residents had limited knowledge of the importance of

blood pressure management, had no way to self-monitor, and had limited access to healthy food options. Representatives of the food pantry reported that they had no consistent supplies, relying on internal donations. The pantry consisted primarily of high-sodium prepackaged foods like instant noodles and canned beans. A new addition to the community was a garden; but, for the autumn and winter, fresh vegetables were scarce. In our review of the AHA's CCC program, we found barriers to its implementation. The document itself was wholly online and utilized many hyperlinks, PowerPoints, and videos. For low-income adults with limited knowledge or access to technology, this program was found to be hard to access by themselves. The complex modules the AHA had prepared were difficult for the residents of the community to use and understand due to the sheer size and depth of the content. For future SPU students who would be implementing the education, the length and depth of the program were also much larger than what was possible to cover within a regular ten-week school quarter. Our group worked to reduce these barriers by condensing the material into weekly teaching activities.

Activities

We generated a lesson outline to target two main areas of concern within the community as determined by site assessments: blood pressure management, and nutrition, for use by future SPU students. From the CCC program, we curated a five-week outline for nursing students or similar educators to implement over the course of a ten-week school quarter. The first two weeks we focused on blood pressure management, and the second two weeks on nutrition, with a flexible fifth week for review, open activity, or a separate teaching topic.

The first week's topic was blood pressure literacy, measurements, and tracking. This included a review of what blood pressure is, the importance of monitoring, an open discussion of barriers to monitoring, how to accurately check and analyze the readings, and physically getting

their blood pressure taken by the educators. The second week's topic was medications and adherence. The education plan included for students to have a brief check in and review of the content from the previous week and hold information sessions on specific medications. These information sessions would be private and personalized by being held in a one-on-one manner. The education plan also focuses on identifying potential struggles, assessing a lack of education on their medications such as indications, symptoms, and management, as well as reinforcing adherence.

The third week's topic was nutritional literacy. The education plan includes having students assess the residents' understanding of what a healthy diet consists of, and then they would provide education on sodium intake with a demonstration of serving sizes. The focus of the fourth week was healthy nutrition options. The education plan included having residents create meals with provided food pages and discuss their choices. The fifth week's topic would be a flex week, where students and/or residents would pick a topic based on their own community needs assessments. The activities in the education plan include different styles of engagement, including lecture, presentations, PowerPoints, videos, hands-on activities, games, surveys, one-on-one sessions and open discussions, and distribution of educational materials and resources to monitor health effectively. We also have incorporated a weekly survey to assess the effectiveness of our project goals.

Outcomes

Our project was based on goals and topics organized by facility leadership in collaboration with the AHA. We were tasked with creating teaching materials and educational plans for future SPU Nursing Students to teach the residents during their clinicals. Our lesson outline was provided to agency staff in order to ensure the success of the project goals.

Evaluation surveys was provided to the students in the implementation document to allow the students to have sources to use to assess the effectiveness of the teaching plan, activities, and resources. Based on survey responses, adjustments, a weekly focus could be made. Further evaluation of the effectiveness of our plan would be overseen by the AHA representative.

For this project we have created a lesson outline at the request of the community manager, using AHA resources along with the assessments by the site management and by our group. This was done in order to aid future SPU Nursing Students in the implementation of our lesson plans for the community. Future nursing students will continue to gather and add information based on their own observations and experiences to ensure the continuity of this project and the health outcomes of the focused community.

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