

Food as Medicine in Underserved Community: Diverse Responses of the Veggie Rx Model

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People with the lowest socio-economic status, often ethnic minorities residing in impoverished neighborhoods, are disproportionately affected in health. Research studies employing a “bottom-up” approach offer excellent insights into the intersection of poverty and health. This research investigates the effectiveness of the Veggie Rx program by exploring participants’ sustained lifestyle changes and the dissemination of these new practices within their families and social networks 12 months after program completion. Despite the potential benefits of Veggie Rx, not everyone who participates in the program is able to make sustainable lifestyle changes. This is often due to various barriers, such as macroenvironment, socio-cultural environment, and patients’ internal factors, such as mental state and other health issues. By examining the lived experiences of individuals from underserved communities, we can gain a deeper understanding of behavior change over time and assist health advocates in developing strategies to enhance community well-being.

Existing research of diabetes self-management education (DSME) has primarily focused on the intervention’s impact on health outcomes through changes in patients’ biomarkers, such as BMI and HbA1c (Rafie et al., 2021; Veldheer et al., 2021). However, research studies employing a “bottom-up” approach offer excellent insights into the intersection of poverty and health (Blocker et al., 2023; Lee, Ozanne, & Hill, 1999; Martin & Hill, 2012).

In this research, we further the investigation of Veggie Rx’s effectiveness by probing the participants about their continued adoption of new lifestyles and how they have shared these practices with their families and social networks. We discovered that participants continued enacting new practices, such as making conscious choice about vegetable and fruit intake, controlling portion size, and reading nutrition labels. Nevertheless, we identify three types of barriers that may dampen the effectiveness of the Veggie Rx program on patients’ health outcomes and subjective well-being, namely macroenvironment, socio-cultural environment, and patients’ mental status.

To maximize the effectiveness of the diabetes self-management education classes, the content should be delivered in a culturally appropriate manner. This includes having bilingual community health workers present at classes and providing pamphlets and flyers in participants’ native languages. These elements make the knowledge relevant to the participants and enhance their self-efficacy in adopting new practices. Lastly, considering that many informants do not have a conventional 9-5 schedule, it is crucial to emphasize topics such as timing and frequency of eating in future nutrition classes, as these aspects also significantly impact blood glucoses fluctuations among diabetic patients.

This study revealed several areas for future research. First, subjective comprehension of nutritional knowledge can differ significantly from objective comprehension. While most participants felt empowered to make healthy food choices after completing the program, a pilot test that attempted to objectively measure nutritional knowledge (Weiss et al., 2005) revealed that they did not demonstrate sufficient objective understanding of nutritional labels. We conducted another pilot test of label knowledge using a series of nutritional label images among Stage 2 participants. Further empirical research is needed to develop a culturally appropriate measure to objectively measure nutritional knowledge comprehension.

Secondly, the study found that it is crucial to examine program outcomes beyond one year after graduation. Various macroeconomic conditions (e.g., inflation) and personal factors (e.g., hospitalization, loss of insurance, death of family members) may influence the health outcomes of program participants

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over time. Additionally, as patients age, they may experience different symptoms and complications of diabetes, depending on the type, duration, and management of the disease. By revisiting the participants at different intervals, researchers may identify pivotal moments that necessitate additional interventions, such as Veggie Rx refresher courses, diabetes support groups, or bariatric surgery.

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