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Nutrition and Exercise Resources for Uninsured Patient Populations

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Purpose

The goal of this study is to determine if there is a lack of accessibility and a need for nutrition and/or exercise resources for patients who are uninsured.

Abstract

Proper nutrition and exercise is integral for the prevention and management of chronic diseases such as type two diabetes, hypertension, high cholesterol, and cardiovascular disease. However, health care disparities in the United States, such as lack of access to primary health care, has been an ever growing problem. The purpose of this study is to determine if there is a correlation between being uninsured and having worse health outcomes, and to determine if there is a need for accessible nutrition and/or exercise resources for this population. To conduct this research, a survey was distributed at the Cherry Hill Free Clinic and the Cooper Rowan Clinic in South Jersey. The survey data was imported into Qualtrics and then exported into SPSS Statistics. In SPSS, a combination of chi square tests and t-tests were conducted. The results showed that there is a correlation between BMI, age, and less access to exercise, to the prevalence of chronic conditions. The results also showed that participants with a BMI greater than thirty and those that have one or more chronic conditions ranked their health lower on a scale of poor to excellent and expressed interest in receiving nutrition and exercise resources if made accessible to them. Understanding the health care disparities that exist for uninsured individuals and the risk factors that lead to poor health outcomes will provide awareness to the importance for more accessible care as it is related to nutrition and exercise.

Introduction

Two major factors for the prevention and management of chronic diseases include a healthy diet and adequate exercise. However, access to healthy foods, a safe environment to exercise, and primary care is not equal among populations in the United States. The United States, in comparison to other high-income countries, has the highest health care expenditure despite also having a higher prevalence of chronic disease. It is also the only country in this group without publicly-financed universal health care (Bush 2018). In terms of disease prevention and management, various empirical studies have explained the power of utilizing exercise and nutrition as a means to combat various medical conditions. For instance, high duration physical activity of 120 minutes per week was found to increase high-density lipoprotein (HDL) cholesterol, with larger increases occurring with longer durations of exercise. Additionally, visceral fat, a risk factor for the development of many chronic diseases, was reduced significantly with regular aerobic training (Pedersen and Saltin 2015). In terms of diet, inadequate consumption of fruits, vegetables, nuts, seeds, and whole grains, in combination with excessive consumption of sodium, were found to be the main dietary risk factors for premature death (Di Renzo, Gualtieri et al. 2021). Despite this knowledge, little research has addressed accessibility to nutrition and exercise resources for populations in the United States that are uninsured. This paper sets out to address this research gap and to determine if there is a lack of accessibility and therefore a need for more resources for this community. We investigated the correlation between health care access, insurance status, prevalence of chronic disease, current diet and exercise habits, and barriers in patients either seeking or receiving care at a community free clinic. It was hypothesized that less access to resources would be associated with worse health conditions and outcomes.

Results

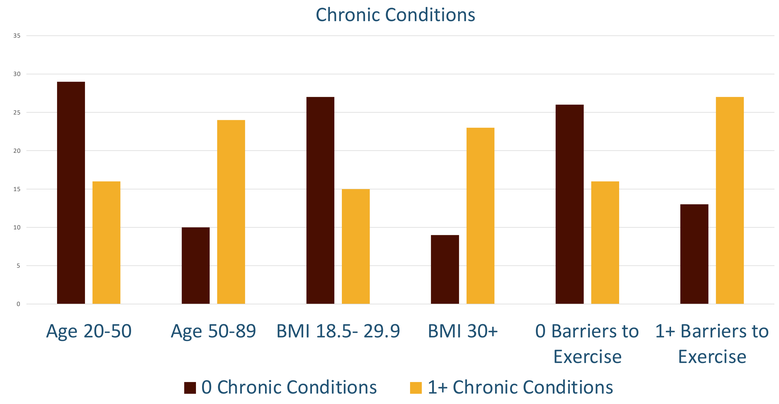

Figure 1. The prevalence of chronic conditions in relation to age, BMI, and exercise barriers. Chronic conditions include diabetes, hypertension, obesity, high cholesterol, heart disease, and depression.

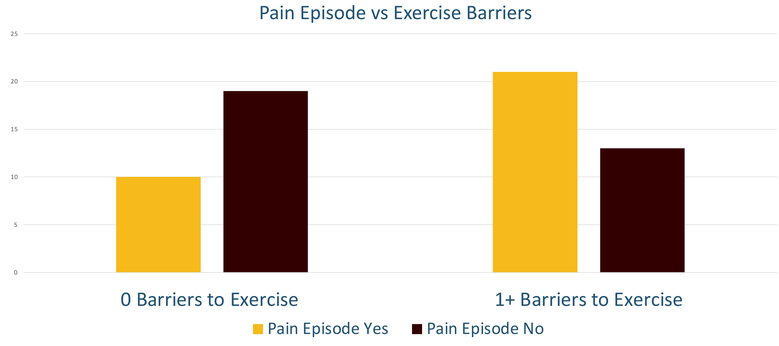

Figure 2. Experiencing an episode of low back/neck pain lasting greater than one week in relation to exercise barriers.

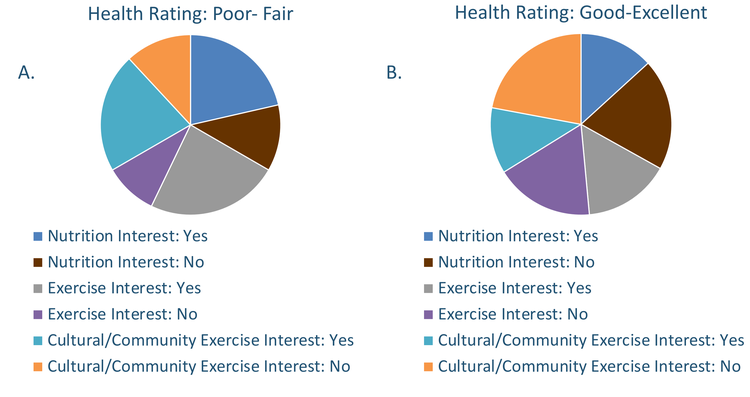

Figure 3. A. Interest in resources for patients who assessed their health as 'poor to fair.' A poor to fair rating corresponded to patients with one or more chronic conditions and a BMI greater than 30. B. Interest in resources for patients who assessed their health as 'good to excellent.' A good to excellent rating corresponded to no chronic conditions and a BMI less than 30.

Methods

A quantitative study was conduced to determine accessibility of exercise and nutrition resources. A survey consisting of 37 questions was distributed at the Cherry Hill Free Clinic and the Cooper Rowan Clinic in South Jersey. Participants were chosen based on if they are seeking care, or regularly receiving care, at a free clinic, if they are uninsured, and if they are between the ages of 18 and 90 years old. The survey was available in English and Spanish, and all results were anonymous. The participants filled out the survey with paper and pen, and all of the data was imported into Qualtrics. The data was exported from Qualtrics into SPSS Statistics. A combination of chi square tests and t-tests were conducted in SPSS to determine the results. Graphs were created in Excel.

Discussion

The results from this research study demonstrated that health care disparities exist within uninsured patient populations that need to be addressed. For instance, patients with a BMI classified as obese by the Centers for Disease Control and Prevention correlated with unemployment, the prevalence of one or more chronic conditions, and a 'poor to fair' health self assessment. In regards to diet, patients who followed a specific diet reported eating more servings of vegetables daily and having greater confidence in eating a healthy diet than patients who do not follow a specific diet. Additionally, patients who reported a 'poor to fair' health self assessment expressed interest in connecting with a nutrition resource, an exercise resource, and a community based/culturally personalized exercise program if it were made available to them. These results indicate that certain vulnerabilities, such as barriers to exercise, high BMI, and age, may be correlated with poorer health outcomes. Therefore, these populations need access to resources that target these issues and prevent/manage comorbidities. Additionally, this study shows that there is a desire for help by patients who ranked their health lower. This suggests that access to resources would be well utilized. The limitations of this study are that only one population, uninsured patients seeking/receiving care at a free clinic, was studied. A future study comparing the factors tested in the study between insured patients, uninsured patients at a free clinic, and uninsured patients receiving no form of primary care, would give a better understanding on the limitations uninsured patients face and how to better provide for them.

References

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Acknowledgments

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