Weight in Community College Students: A Move to Intervention Design

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Introduction

An increased body mass index (BMI) is associated with several chronic conditions, including hypertension, type 2 diabetes, and heart disease [1,2]. An increased BMI is the most prevalent public health concern in the United States, impacting over two-thirds of US adults. One young adult is at a high risk for overweight and obesity as they transition from adolescence into adulthood. Several factors are believed to be associated with increasing risk for being overweight and obese. These factors include poor diet, lack of physical activity, and stress [3].

More than 6 million students attend community colleges, totaling about 36-40% of all undergraduate students in the country [4]. The demographics of community colleges are very diverse, with 25% of students identifying as Hispanic and 13% identifying as Black [5]. Fifty-four percent of students attending community colleges are under the age of 22 and only 9% are above the age of forty [5]. Literature has shown that two-year community college students engage in less healthy behaviors, including poorer dietary choices and less physical activity compared to four-year college students.

Additionally, female community college students were more likely to be overweight and obese [6]. Students report other conditions associated with cardiovascular disease as well; about 1.2% report having diabetes and 3% report having high blood pressure [3]. Two-year community colleges also have an increased enrollment of Hispanic and African American students compared to four-year universities, both of which experience higher rates of overweight and obesity [2,7]. However, the community college population is understudied. According to the American College Health Association, only 9% of schools surveyed for the National College Health Assessment were community colleges [3]. In a recent review of the literature focused on community college students and health, it was indicated that there were only 10 studies focused on diet and six studies focused on physical activity behaviors in the past 25 years in this population [8]. This review is focused on examining factors related to weight gain and weight loss in community college students to design tailored interventions for weight loss.

Discussion

Health behaviors related to weight

A comprehensive examination of health behaviors in community college students led to results indicating poor eating habits and poor exercise habits. In a study conducted in diverse
inner-city community college students, 60% reported not meeting physical activity guidelines and only 1.5% had the recommended fruit and vegetable servings per day [9]. In another study, more than 50% of community college students reported buying fast food at least 1-2 times per week and consumed, on average, 22 sugary or sugar-free drinks per month. In addition, levels of physical activity were below the recommendation and students reported 5 or more hours per day of sedentary time [10]. An additional study examined fruit intake in female community college students and 33% indicated eating less than two servings per day [11]. When examining factors that are related to BMI, Pelletier et al. reported that high stress levels are associated with a higher prevalence of overweight/obesity and financial strain was significantly associated with overweight/obesity [12]. Obesity has been shown in community college students to negatively impact a student’s education. One study reported that community college students who were overweight or obese receive significantly lower grades but show no differences in intelligence or achievement test scores [13]. Another study in two-year colleges reported that students who feel that they have poor physical health and have a poor sense of well-being are more likely to consider dropping out of college [14].

Focus group trials have been conducted in community college students. To date, we located two trials that included qualitative methods designed to understand weight perceptions and weight loss/maintenance interventions. In one study, students expressed a lack of time, stress, and lack of sleep leading to unhealthy eating habits and a lack of focus on health [15]. Students also expressed that the college environment could be a place for intervention delivery and that the school could do more for student health. Students also want a comprehensive program and to choose their mode of delivery [15]. Another focus group trial conducted in 2018 confirmed the results that students desire a comprehensive program for weight, including nutrition, physical activity, and other lifestyle habits [16]. Students also stressed having too many responsibilities and therefore a lack of time. Students suggested for interventions to include health coaches who have been overweight or obese previously and also to tailor the program to their specific needs [16].

Current intervention studies

There have been very few intervention studies focused specially on the community college population. One study, called the Choosing Health Options in College Environments and Settings was a randomized controlled trial focused on the prevention of weight gain for students entering two-year colleges [17]. Using a college course on health weight behaviors and a social networking and support website researchers examined changes in BMI and weight at 24 months. Although there were no significant differences in BMI at 24 months, those in the intervention who were overweight or obese at baseline were more likely to be at a normal weight post trial [17]. This is currently the only intervention study the authors found solely focused on the community college population and weight.

Conclusion

Community college students make up a large proportion of the undergraduate student population, however, are dramatically understudied in terms of health outcomes, specifically overweight and obesity. Given their unique circumstances and reportedly poor health, the community college population is a crucial setting to promote health behavior and implement health interventions focusing on weight control and weight gain prevention. A program designed to help minimize weight gain or promote weight loss should be tailored and specific to those participating. In addition, researchers should strive to personalize the delivery of content and should make programs comprehensive and not solely focused on diet and physical activity.

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