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Primary Care Provider Education on Behavioral Interventions for Management of Adult

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This is to certify that the doctoral study by

Rose Kajuru

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
2022

Abstract

Primary Care Provider Education on Behavioral Interventions for Management of Adult

Obesity

by

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MSN, FNP Walden University, 2017

BSN, Bowie State University, 2009

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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February 2022.

Abstract

The high prevalence of obesity continues to pose significant health challenges globally. According to the U.S. Preventive Service Task Force, obesity affects more than 35% of men and 40% of women in the United States. The national annual cost of medical care related to obesity is estimated at $147 to $210 billion. Intensive behavioral interventions in adults with obesity can lead to clinically sufficient improvements. The project aimed to determine if the current evidence-based clinical guideline of behavioral weight loss interventions to prevent obesity-related morbidity and mortality in adults would improve primary care providers' knowledge of adult obesity management. The DNP project created an educational model to review behavioral weight-loss interventions to manage adult obesity in primary care. The staff education program was developed using the chronic care model, the analyze, design, develop, implement, and evaluate model, and integrated behavioral health care. Five primary care providers in a primary care setting in Maryland participated in the educational module. Pretests and posttests were administered to participants to determine if there were any changes in staff knowledge regarding using behavioral weight loss intervention to manage obese adults. The pretest scores ranged between 88% and 100%; posttest scores ranged between 96% and 100%. A comparison of the scores indicates no significant differences in knowledge. The recommendation is to continue using the module to teach staff nurses and medical assistants. The project could have implications for positive social changes by enhancing staff knowledge of obesity management using behavioral weight loss intervention, leading to improved patient health outcomes and decreased health care costs.

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Dedication

I dedicate my doctoral project to God Almighty, my source of inspiration, wisdom, and knowledge. He has been the source of my strength throughout my academic years. I also dedicate this dissertation to my late parents, Grace and Raphael Njoku, whose value for education has impacted my pursuit of knowledge to earn this terminal nursing degree. However, both passed away and did not live to see me reach this educational goal. I will never forget them. I also dedicate this DNP project to my husband who has been there for me all the way and whose prayers and encouragement have made me persist to finish even when I almost gave up. Jude, I love you so much for being my soulmate and number-one cheerleader. Thank you for always being there for me. My two loving, caring, and understanding children, Peter, and Paul: Thank you both for your patience and understanding of Mommy's busy schedule.

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I would also like to acknowledge Walden University for its pace-setting programs. It is truly a great privilege and honor to attend and complete my Doctor of Nursing practice program at Walden University.

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Section 1: Nature of the Project

Introduction

The high prevalence of obesity continues to pose significant health challenges globally. According to the U.S. Preventive Service Task Force (USPSTF), obesity affects more than 35% of men and 40% of women in the United States. The national annual cost of medical care related to obesity is estimated at between $147 and $210 billion (Mendy et al., 2017). Obesity is associated with health problems such as the increased risk for coronary artery disease, Type 2 diabetes, disability, and increased risk for death, particularly among adults younger than 65 years (USPSTF, 2018). The USPSTF found adequate evidence that intensive behavioral interventions in adults with obesity can lead to clinically sufficient improvements in obesity and reduce the incidence of Type 2 diabetes, coronary artery disease, disabilities, and death among adults. Thereby, the USPSTF recommended that clinicians or primary care providers educate their obese adult patients to use behavioral weight-loss interventions to prevent obesity-related morbidity and mortality (USPSTF, 2018).

As important, "obesity was first recognized as a disease in 1948 by the World Health Organization" (Obesity Medicine Association [OMA], 2021, para. 3). In the United States, the American Medical Association recognized obesity as a disease in 2013 (OMA, 2021). The World Health Organization defined *obesity* as abnormal or excessive fat accumulation that presents a risk to health because obesity occurs when a person's body accumulates and stores excessive body fat that can impair health (OMA, 2021). Many factors contribute to obesity, including genetics (OMA, 2021). However, genes

predisposing an individual to obesity do not mean that developing the disease is inevitable. Specific foods like refined carbohydrates and unhealthy saturated fats significantly increase obesity (OMA, 2021). Other factors are hormones, medicines, environments, and sleep deprivation (OMA, 2021). The World Health Organization, the Centers for Disease Control and Prevention (CDC), and the National Heart, Lung, and Blood Institute describe obesity in adults using body mass index (BMI) categories. According to CDC, BMI, or a person's weight in kilograms divided by the square of their height in meters, measures obesity. As important, "individuals with a BMI of 30 or higher are considered to have obesity" (OMA, 2021, para. 1).

Recognizing obesity as a disease encourages practitioners to research interventions to prevent obesity and implement evidence-based treatments with those affected by obesity. The treatments for obesity include behavioral and nutritional interventions, medical treatment, and even surgery (OMA, 2021). Individuals who opt to use medical interventions and surgery to treat obesity could return to their obesity state if they did not incorporate behavioral weight loss with exercise and nutritional interventions into their management (OMA, 2021). Therefore, the need to educate primary care providers to use behavior weight loss intervention to prevent obesity-related morbidity and mortality in adults is recommended by the USPSTF (2018).

Problem Statement

Obesity is a preventable disease that affects over one-third of the world's population. According to the CDC, the age-adjusted prevalence of obesity among U.S. adults was 42.4% in 2017–2018. The majority was 40.0% among younger adults ages

20–39, 44.8% among middle-aged adults ages 40–59, and 42.8% among older adults ages 60 and over (Hales et al., 2020). The increase in a sedentary lifestyle and processed, high-calorie diet consumption is a predisposing factor to obesity. If not controlled, over 85% of adults will be obese in the United States, and 38% globally, by 2030 (Hruby & Hu, 2015). The National Health and Nutrition Examination Survey indicated that 78.6 million U.S. adults were obese between 2011 and 2012 (Mendy et al., 2017). The national annual cost of medical care related to obesity is estimated at $147 billion to $210 billion (Mendy et al., 2017). The first contact for a patient with obesity for any medical treatment or any other issue is their primary care provider. Therefore, primary care providers' obesity management education is essential (Durrer et al., 2019).

The rising number of adults living with obesity and its related chronic disease leads to an increased demand for primary care practitioners to identify and manage obesity as a chronic condition (Sturgiss et al., 2018). Although obesity is reaching epidemic proportions, many studies have illustrated that screening and counseling for obesity are not common in primary care. The most cited challenge for primary care providers counseling their patients about obesity includes inconsistent primary care team integration of obesity management guidelines (Rust et al., 2020). In 2018, the USPSTF reaffirmed its recommendation that primary care health providers screen all adults for obesity and offer those affected intensive, multicomponent behavioral interventions (Wadden et al., 2020). Obesity is associated with severe health risks. Severe obesity increases the risk of obesity-related complications, such as coronary heart disease and end-stage renal disease (Hales et al., 2020).

Obesity in adults is an ever-increasing condition seen among patients in the primary care setting. Primary care providers are ideal for identifying, evaluating, and managing obesity (Grief & Waterman, 2019). Based on currently available research and the family medicine style of providing comprehensive, continuous care, setting goals, and establishing regular follow-up appointments with patients as they engage in lifestyle modification is the best way to help patients achieve and maintain weight loss (Grief & Waterman, 2019). Many studies and clinical observations have noted that obesity is a preventable condition. Primary care providers can control obesity-related problems like coronary artery disease, Type 2 diabetes, and depression if they use evidence-based practices and recommended guidelines like behavioral weight loss intervention. This project aims to improve primary care providers' knowledge of current evidence-based behavioral weight loss intervention to help prevent obesity-related morbidity and mortality in adult patients.

Purpose Statement

This DNP educational project aims to improve the primary care providers' knowledge of adult obesity management using current evidence-based clinical guidelines of behavioral weight loss intervention to prevent obesity-related morbidity and mortality in adults, as recommended by the USPSTF. Obesity costs hundreds of billions of dollars to the health care system annually, is associated or directly related to 60% of Type 2 diabetes diagnoses and is a well-recognized risk factor for high blood pressure, heart disease, and stroke (Grief & Waterman, 2019).

Behavioral weight loss intervention to prevent obesity-related morbidity and mortality can reduce obesity and its complications at no cost to the patient, the primary care provider, and the insurance company. According to USPSTF (2018), behavioral weight loss intervention is non-invasive and does not cause any harm to the patient. Evidence has shown that behavior-based weight loss maintenance interventions are associated with less weight gain after the cessation of interventions. Most of the intensive behavioral weight-loss interventions considered by the USPSTF last for 1 to 2 years, and most patients have 12 or more sessions in the first year. Behavioral weight-loss interventions encourage self-discipline and support weight loss and weight loss maintenance.

Developing this educational module to encourage primary care providers to continue using evidence-based guidelines of behavioral weight loss intervention to prevent obesity-related morbidity and mortality in adults requires input from the primary care providers as the project stakeholders. Behavioral weight loss intervention includes modifications in nutrition and physical activities that yield weight loss (Grief & Waterman, 2019). Primary care providers can assist their patients in achieving and maintaining weight loss of (> or = to 5% of initial weight) by providing intensive, brief lifestyle counseling sessions on a scheduled basis. The USPSTF also recommends high-intensity behavioral interventions at a frequency of 12–26 sessions per year as the most likely form of intervention to achieve weight loss success (Grief & Waterman, 2019).

The rates of obesity are above the Healthy People 2020 targets of obesity among adults (age-adjusted, percent, 20+ years) at 30.5% and obesity among children and

adolescents (percent, 2–19 years) at 14.5% (Grief & Waterman, 2019). Most primary care providers are aware of the adult obesity epidemic but appear nonchalant about their contributions to abate obesity (Fitzpatrick et al., 2016). However, because of the complexity of adult obesity and its management, most primary care providers recommend pharmacotherapy and bariatric surgery for obese adults (Grief & Waterman, 2019). Consequently, primary care providers were educated and encouraged to continue providing obese adult patients with behavioral weight loss intervention sessions to prevent obesity-related morbidity and mortality in adults.

This project included reminding primary care providers to empower themselves to start the obesity-related conversation with their adult patients, starting with effective communication. Effective communication encouraged using obesity-related terms and languages that did not offend patients (Wadden et al., 2020). As a result, these patients are better informed about obesity-related health issues.

Nature of the Doctoral Project

The nature of the DNP project is to develop and implement an evidence-based educational program. The project was designed to address adult obesity management by primary care providers. The education program improved primary care providers' knowledge of adult obesity management. It encouraged the use of current evidence-based clinical guidelines of behavioral weight loss intervention to prevent obesity-related morbidity and mortality in adults, as recommended by the USPSTF.

First, a literature search was conducted to create an educational program on adult obesity management for primary care providers. Then, the educational project, written in

simple English, was presented to primary care providers the project stakeholders for their approval. Next, the stakeholders' contributions were incorporated into the final educational program.

Significance

Most striking is that "the age-adjusted prevalence of obesity among U.S. adults was 42.4% in 2017–2018" (Hales et al., 2020, para. 1). The majority was 40.0% among younger adults ages 20–39, 44.8% among middle-aged adults ages 40–59, and 42.8% among older adults ages 60 and over (Hales et al., 2020). Obesity is associated with severe health risks. Extreme obesity increases the risk of obesity-related complications, such as coronary heart disease and end-stage renal disease (Hales et al., 2020). Many studies have illustrated that although obesity is reaching epidemic proportions, screening and counseling for obesity is not common in primary care (Rust et al., 2020).

The first contact for a patient with obesity for any medical treatment or other issue is their primary care doctor. Therefore, primary care providers' obesity management education is essential (Durrer et al., 2019). The USPSTF reaffirmed its recommendation that primary care health professionals screen all adults for obesity and offer those affected intensive, multicomponent behavioral interventions in 2018 (Wadden et al., 2020). This DNP project contributed to the existing body of knowledge regarding the management of adult obesity by primary care providers. The project also contributed to satisfactory obesity management programs because behavioral weight-loss interventions encourage self-disciplines and support weight loss and maintenance.

Summary

In Section 1, obesity was defined, and the obesity-associated problems in the adult population were explained. Additionally, obesity management in primary care was presented, concentrating on current adult obesity management. The USPSTF recommendation of behavioral weight loss intervention was used to prevent obesity-related morbidity and mortality in adults.

Section 2: Background and Context

Introduction

This DNP project is a continuing education program for professional staff to help inform and improve knowledge and skills using current evidence-based practices. The project aimed to improve obesity management by primary care providers by creating an educational model that aided primary care providers in their use of behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults. According to Jin (2018), behavioral interventions for weight loss and obesity prevention or management can be provided in many ways. Patients can complete the behavior interventions in a group or individual setting, and the interventions can be delivered in person or virtually and in print or through online materials. Interventions often last 1 to 2 years and have about one to four sessions per month. The interventions included counseling, self-monitoring, and education about nutrition and exercise (Jin, 2018). In addition, behavioral weight loss intervention often provides help to identify barriers to weight loss, help with problem-solving related to obesity challenges, and facilitation of support from other people who are also working on weight loss. After completing interventions, education usually focuses on weight loss and weight maintenance (Jin, 2018).

Theory, knowledge, and an evidence-based literature review were used in this project. A comprehensive literature search was conducted to determine what other scholars have articulated about obesity in adults and the management of obesity. In fact,

this literature review included searching on behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults.

Concepts, Models, and Theories

The chronic care model (CCM) served as one of the frameworks for this project. Additionally, the analyze, design, develop, implement, and evaluate (ADDIE) model was used to support the project models. Lastly, integrated behavioral health care (IBHC) also served as a basis for this project.

Chronic Care Model

CCM is a comprehensive, collaborative health care approach developed to treat chronic diseases, such as diabetes, and is particularly appropriate for treating obesity (Sheesley, 2016). Obesity is correlated with many costly and chronic medical conditions, such as metabolic syndrome, diabetes, and heart disease. Although obesity's root causes require ongoing investigation, obesity is a multifactorial disease with psychological, physiological, social, and environmental contributing factors. Because of the high correlation with serious disease processes, obesity is described as a chronic disorder requiring long-term care (Sheesley, 2016).

CCM was developed to improve the quality of care for chronic medical conditions by increasing the integration of health care systems and the communication among health care professionals, such as primary care providers and nutritionists (Sheesley, 2016). Although CCM was not explicitly developed for obesity treatment, the concept is logically applicable to the adult obesity epidemic. Obesity treatment requires an integrated team approach among health care professionals addressing patients' needs.

There is significant empirical support for the effectiveness of CCM in improving patient

outcomes and reducing health care costs for a variety of chronic diseases related to

obesity (Sheesley, 2016). Thereby, the CCM application in this DNP staff education

project was helpful. Patients are expected to commit to using behavior weight loss

intervention to manage and prevent obesity-related morbidity and mortality in adults.

Analyze, Design, Develop, Implement, and Evaluate Model

Researchers agreed that achieving higher quality care at a lower cost will require

fundamental commitments to the incentives, culture, and leadership that foster continuous

learning (Patel et al., 2018). The ADDIE model creates a teaching curriculum or training

to produce specific learning outcomes and behavioral changes. ADDIE provides a

systematic approach to analyzing learning needs, the design and development of a

curriculum, and the implementation and initial evaluation of a training program (Patel et

al., 2018). The ADDIE model aided in analyzing the practice problem and identifying the

need for further staff education for primary care providers' adult obesity management. I

designed an educational model based on the learning objectives and goals.

The Integrated Behavioral Health Care Framework

The Agency for Healthcare Research and Quality (n.d.) described IBHC as the

care a patient receives from primary care providers and behavioral health clinicians. This

team works with patients and families using a systematic and cost-effective approach to

provide patient-centered care for a defined population. This care may address mental and

physical health, health behaviors, and their contribution to chronic medical illnesses

(Agency for Healthcare Research and Quality, n.d.). IBHC can describe any situation in

which behavioral health and medical providers work together (Agency for Healthcare Research and Quality, n.d.). Adult obesity is a recognized medical condition, and patients will benefit from integrating care among primary care providers, nutritionists, psychotherapists, patients, and family members. Therefore, knowledge of IBHC can assist primary care providers in managing adult obesity and preventing obesity-related morbidity and mortality.

Definitions

In this project, terms with universal meanings were used, but specific terms may have meanings in another context, as noted below.

Behavior interventions: Based on the theory that all behaviors are learned through classical and operant conditioning, maladaptive behaviors can be changed using principles such as reinforcement, modeling, graded tasks, and habit formation (Brigden et al., 2019). Behavioral interventions are used to prevent, manage, and treat a wide variety of conditions, including obesity, diabetes, chronic pain, asthma, and emotional difficulties (Brigden et al., 2019).

Body mass index (BMI): A person's weight in kilograms divided by the square of their height in meters (OMA, 2021). BMI is the current criterion for distinguishing healthy from unhealthy weight in scientific literature, popular discourse, and media (Gutin, 2018).

Morbidity and mortality: Two measures commonly used for epidemiological surveillance describe the progression and severity of a given health event. They are useful tools for learning about risk factors of diseases and comparing health events between

different populations (Hernandez & Kim, 2021). In fact, "morbidity is the state of being symptomatic or unhealthy for a disease or condition and is calculated by dividing the number of new cases within a designated period by the number of individuals within the population" (Hernandez & Kim, 2021, para. 3). In contrast, Hernandez and Kim (2021) mention that mortality is connected to the number of deaths caused by a particular health event. Mortality can be listed as a rate or absolute number and is usually represented as a rate per 1,000 individuals, also called the *death rate* (Hernandez & Kim, 2021). Most importantly, "mortality alongside morbidity allows epidemiologists to study further the burdens that a health event may place on a population. These metrics also allow stakeholders to more effectively prioritize which health events to allocate resources toward and proactively manage the potential onset of a health event" (Hernandez & Kim, 2021, para. 6).

Obesity: Defined by the World Health Organization as abnormal or excessive fat accumulation that may impair health. A patient with a BMI of 30 or higher is considered to have obesity (OMA, 2021).

Primary care providers: According to the Healthy People 2020, a primary care provider is usually an internist, family physician, pediatrician, or nonphysician providers, such as a family nurse practitioner or physician assistant. Primary care providers offer a usual source of care, early detection and treatment of disease, chronic disease management, and preventive care. Patients with a familiar source of care are more likely to receive recommended preventive services, such as flu shots, blood pressure screenings,

obesity management, and cancer screenings (Office of Disease Prevention and Health Promotion, 2020).

Relevance to Nursing Practice

Obesity is a multifactorial health event encompassing genetic, physical, environmental, and psychological components; obesity transcends regions, races, and genders (Bowen et al., 2018). Obesity management for most primary care providers is complex. However, primary care providers are ideal candidates for making overall positive health changes for obese patients (Bowen et al., 2018). Primary care providers can vote, have medical expertise, and are poised to promote obesity reduction by (a) influencing patients and families to make healthier lifestyle choices; (b) providing patients with individualized, evidence-based health information; (c) encouraging healthcare systems and workplaces to provide healthy environments for all stakeholders; and (d) advocating for local, state, and national healthcare policy changes (Bowen et al., 2018). The use of behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults is crucial in managing adults' obesity by the primary care provider and is relevant to nursing practice and can improve nursing practice.

Published clinical practice guidelines currently identify obesity, metabolic syndrome, diabetes, and heart disease as chronic interrelated conditions. Prevention of these chronic diseases must include ongoing assessment of patient BMI, waist circumference, and willingness to adhere to healthier lifestyle behaviors (Bowen et al., 2018). If all primary care providers used clinical guidelines to manage and treat obesity,

the continuity of care for this patient population might improve, leading to reductions in obesity prevalence (Bowen et al., 2018). Therefore, I developed this project to encourage primary care providers to use evidence-based clinical guidelines of behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults, which is relevant to nursing practice.

Health care professionals need to update their skills regularly. Continuing education or continued professional development enables the renewal and updating of healthcare settings skills (Mlambo et al., 2021). Health professionals also serve as the bridge between patients, the knowledge generated by scientific research, and the policies and practices to implement that knowledge (Mlambo et al., 2021). The public trusts health professionals to provide safe, efficient, effective, timely, patient-centered, and equitable care. Educating professionals about new theories and evidence promotes better health care (Mlambo et al., 2021). Americans spend more on health care than any other country globally and often receive frequently unsafe care (Lyford & Lash, 2019).

Healthcare costs have increased anxiety among Americans across "society, inducing fears that a single hospitalization or illness could wipe out a lifetime of savings and saddle them with decades of debt" (Lyford & Lash, 2019, p. 7). Any actions at the local, state, and national levels for providing greater access to safe, high-quality care for all Americans is relevant to nursing practice. Therefore, the project's relevance to nursing practice is the encouragement of primary care providers to continue to use the evidence-based clinical guidelines of behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults.

In the DNP Project, staff educational modules were used to improve primary care providers' adult obesity management. The project also enhanced primary care providers' obesity management using behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults as directed by the USPSTF. Overall, the results will benefit both the DNP Project experience and primary care provider's adult obesity management skills.

Local Background and Context

The identified current practice problem is obesity in adults. The doctoral project uses an educational module to encourage the primary care providers to use behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults as directed by the USPSTF implemented in a primary care setting. Obesity in adults has reached an epidemic in the United States and is a global health issue (Hales et al., 2020). Therefore, the local evidence justifies using an education module to teach primary care providers to use behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults.

The DNP project setting is a primary care clinic in Maryland (United States). This clinic's mission is to provide personalized, high-quality care on an as needed or preventative basis to the adult population. Their vision is to create a practice they believe in and choose for their family members and friends. The clinic staff includes a medical doctor, three nurse practitioners, a registered nurse, a desk clerk, and two medical assistants. The clinic attendees are mainly the adult population, most of the patients are either underinsured not insured, but they also have patients with health insurance. The

primary care clinic serves patients from all the American demographic groups,

Caucasians, Hispanic and African Americans. The clinic has a twenty-four-hour

answering emergency service. They provide physical care from Monday to Friday a.m. to

5 p.m. they are open two Saturdays in a month from 9 a.m. to 1 p.m., using a

collaborative patient-centered care approach, and they are closed Sundays and holidays.

Most adults seen in this primary care clinic are obese or have obesity-related issues, for

example, diabetes. Therefore, the decision for this DNP project is to use an education

module to teach behavior weight loss intervention to manage and prevent obesity-related

morbidity and mortality in adults in this clinic.

<div align="center">**Role of the DNP Student**</div>

According to studies, the DNP degree prepares Advanced Practice Registered

Nurses (APRNs), i.e., clinical nurse specialists, nurse practitioners, nurse midwives, and

nurse anesthetists, for leadership in clinical practice (McCauley et al., 2020). The creation

of the DNP coincided with the Institute of Medicine's reports on medical errors (1999)

and quality and safety. Based on these landmark reports, in 2003, the IOM called for

health system transformation through interprofessional, evidence-based care, including

expert clinical leadership by nurses. The belief was that health care would benefit from

doctorate-educated practitioners (McCauley et al., 2020). Therefore, the DNP scholar is

an expert in translating evidence into practice (White et al., 2021).

As a DNP scholar, I identified a gap in using behavior weight loss intervention to

manage and prevent obesity-related morbidity and mortality in adults during the

practicum experience. A staff educational module encouraged primary care providers to

use behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults to close the observed gap. Essentially, this project allowed me to improve the current adult obesity crisis in society if the providers continue to use behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults in the primary care clinic.

Some resistance to this project was expected from certain providers who have already settled with their obese adult's management methods. Project explanations and evidence-based research were provided to providers at the project's start to mitigate this resistance. Additionally, a short timeline for this project was set to avoid the fatigue and disinterest of a prolonged project.

The project used a pretest and posttest regarding knowledge of adult obesity management using the behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults. The data collected from the pretest (given prior to posttest) was then used to provide a PowerPoint educational module. After the education module's distribution, a post test was given to understand the module's effectiveness in providing education on adult obesity management using the behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults.

Summary

Section 2 discussed the concept, model, and theories about obesity management in primary care using behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults. In addition, terms and their use in the project

were defined. The relevance of the DNP project to nursing practice, the local background

and context of the project, and my role as a DNP scholar were also explained in Section

2. Section 3 discussed the DNP project's collection, source, and appropriate evidence.

Section 3: Collection and Analysis of Evidence

Introduction

Obesity is a growing global public health issue. In fact, obese patients are at substantial risk for developing a range of comorbid conditions, including cardiovascular disease, gastrointestinal disorders, and Type 2 diabetes (Fruh, 2017). Obesity can also lead to joint and muscular disorders, respiratory problems, and psychological issues, significantly affecting daily life and increasing mortality risks (Fruh, 2017). Primary care providers are important to helping patients achieve weight loss through assessment, support, motivation, goal setting, management, and treatment (Fruh, 2017).

This DNP project occurred in a primary care clinic in Maryland. The project's goal was to provide an educational module to aid primary care providers in using behavior weight loss intervention to manage and prevent obesity-related morbidity and mortality in adults as recommended by the USPSTF. This educational module serves as a sustainable module to enhance the DNP students and primary care providers.

Practice-Focused Question

The identified practice-focused issue was adult obesity. The project used an approved clinical guideline and tools to produce the educational module. *The practice-focused question is:*

Will using the current evidence-based clinical guideline of behavioral weight loss intervention to prevent obesity-related morbidity and mortality in adults improve primary care providers' knowledge of adult obesity management?

This practice-focused question supports the identified gap in a behavioral weight loss intervention to manage adult obesity in primary care and the need to educate providers to continue using behavioral weight loss intervention in adult obesity management.

<div align="center">**Sources of Evidence**</div>

The source of evidence for this project came from a literature search of online databases, including Medline with Full Text, the Cumulative Index to Nursing, Allied Health Literature Plus with full text, and Google Scholar. I searched the databases using the following keywords and phrases: *obesity, obesity in adults,* and *obesity management at the primary care*. I used Boolean operators AND OR to combine the keywords into a search phrase that included *policies* AND *obesity management*. The source of evidence was current evidence-based practice guidelines to manage obesity from peer-reviewed articles and respected organizations, such as the American Medical Association, the American Diabetes Association, the CDC, the USPTF, the American Obesity Society, American College of Cardiology, and the American Association of Clinical Endocrinology. I used white papers and positions from these organizations in the educational module development.

Participants

Participants in this DNP project education program were five experts chosen to review and evaluate the project. The requirements for each selected expert were based on their clinical knowledge and their clinical expertise in the management of adult obesity in primary care. Participants were the following:

- Participant 1 was a male board-certified primary care physician with more than 20 years in adult obesity management in primary care.

- Participant 2 was a female board-certified nurse practitioner with a DNP qualification with 15 years of clinical primary care experience.

- Participant 3 was a female board-certified nurse practitioner with 6 years of clinical primary care experience.

- Participant 4 was a female board-certified nurse practitioner with 3 years of clinical primary care experience.

- Participant 5 was a female registered nurse with 7 years of clinical primary care experience.

Procedure

An educational module was developed to improve primary care providers' adult obesity management for this project. The Walden University staff education manual was used to conduct a literature review to identify current evidence-based clinical guidelines for adult obesity management. As a result, an educational module was created with a pretest and posttest from the findings of an extensive literature review of resources published within the past 5 years. Then, this new education module was presented to a selected expert panel of five individuals, who provided feedback using a Likert-type scale to validate the educational module. Moreover, the panel's Likert scale input was added to the reviewed final educational module and presented later to the clinic staff.

Tools

An educational module was provided to assist and empower primary care providers to start the obesity-related conversation with their adult patients with effective communication. These included using evidence-based teaching tools, like the assess, advise, agree, assist, and arrange (the 5As) tool for adult obesity management by primary care providers. The USPSTF screening recommendations for behavior counseling interventions tool were also included and presented in a PowerPoint educational module to the providers.

Furthermore, the obesity treatment guidelines included a treatment algorithm based on the 5As framework, developed by the Society of Behavioral Medicine, as shown in Table 1 (Fitzpatrick et al., 2016). The 5As framework is an effective behavior-change counseling model and tool. As important, some studies indicate that each additional 5A step delivered by health care providers is associated with increased patient motivation to lose weight, change diet, and exercise regularly (Fitzpatrick et al., 2016).

Table 1

5As Model for Adult Obesity Management Counseling in Primary Care

A	Definition
Assess	Assess obesity-related risks and causes of weight gain.
Advice	Advise on treatment options.
Agree	Agree on weight loss expectations and treatment plan.
Assist	Assist the patient in the ongoing process of losing weight.
Arrange	Increasing accountability through regular follow-ups.

Note. From "An evidence-based guide for obesity treatment in primary care," by S.

Fitzpatrick et al., 2016, *American Journal of Medicine*, *129(1)*, p. 115.e1–115.e7

(https://doi.org/10.1016/j.amjmed.2015.07.015). Copyright 2016 by American Journal of

Medicine.

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Behavior-based weight loss maintenance was designed to maintain weight loss

using dietary changes and physical activity (USPSTF, 2018). USPSTF (2018)

"recommends screening for abnormal blood glucose levels as part of cardiovascular risk

assessment in adults aged 40 to 70 years who, are obese" (para. 1), as shown in Table 2.

Obese adults with risk factors include a family history of diabetes, personal history of

gestational diabetes, or polycystic ovarian syndrome. Other risk factors are being a

member of certain ethnic groups like African American, American Indian, or Alaskan

Native, Asian American, Hispanic, Latino, or Native Hawaiian or Pacific Islander should

be considered for screening (USPSTF, 2018).

Table 2

Tools as Recommended by the USPSTF

Risk factors	Normal weight (BMI 18.5 to < 25)	Overweight (BMI 25 to < 30)	Obese (BMI ≥30)
No hypertension, dyslipidemia, or abnormal blood glucose levels	Individualize the decision to provide or refer to behavioral counseling	Individualize the decision to provide or refer to behavioral counseling	Provide or refer to intensive. Behavioral counseling
Hypertension, dyslipidemia, or both	Individualize the decision to provide or refer behavioral counseling	Provide or refer to intensive behavioral counseling	Provide or refer to intensive behavioral counseling
Abnormal blood glucose levels or diabetes	Provide or refer to intensive behavioral counseling	Provide or refer to intensive behavioral counseling	Provide or refer to intensive behavioral counseling

Note. From "Behavioral weight loss interventions to prevent obesity-related morbidity and mortality in adults: US preventive services task force recommendation statement," by US Preventive Services Task Force et al., 2018, *JAMA, 320(11)*, p. 1163 (https://doi.org/10.1001/jama.2018.13022). Copyright 2018 by JAMA.

Protection of Participants

The Walden University Institution Review Board (IRB) provides guidelines and protection of the human subject. Unfortunately, my current practicum site did not have an IRB to seek approval or guidance. Therefore, Walden University required that ethical approval from the university's IRB be obtained through an application process after the proposal was approved. The Walden University IRB approved this study (Approval #11-10-21-0536465).

The organization's name was not mentioned to meet ethical guidelines, and all personal panelist data were kept confidential. A brief discussion of their clinical backgrounds and expertise was formally added to the paper. However, the project did not include identifying location, name, age, or personal private information. Each panelist was notified of their involvement in the project and how they would be represented in the paper for their approval. Moreover, no patients were enrolled, and no patient records were reviewed or utilized for this project. All information collected from the panelists was stored in a locked cabinet and destroyed after this project. Additionally, each panelist was assigned a numerical letter to their Linkert scale to protect their anonymity.

Analysis and Synthesis

The project evaluated the relevance of the chosen topic for this DNP project by using a pretest and posttest for the proposed educational project. The pretest and posttest measured new insight the primary care providers gained in their knowledge of adult obesity management using behavioral weight loss intervention to prevent obesity-related morbidity and mortality in adults. The project used a Microsoft Office Excel spreadsheet to organize the data collected from the pretest and the posttest scores. As important, the final educational project was condensed using Microsoft PowerPoint and presented to the Doctor of Nursing Practice project site for inclusion in the DNP staff academic guide.

Summary

Section 3 provided the collection and analysis of evidence for this Doctor of Nursing practice project. The practice-focused question asked whether using the current evidence-based clinical guideline of behavioral weight loss intervention to prevent

obesity-related morbidity and mortality in adults improves the primary care providers'

knowledge of obese adult management. Utilizing sources of evidence, the project team

explored the topic with evidence and validity tools. The plan is to present the educational

module after Walden University's IRB approved it to the primary care clinic where the

project occurred. The project findings, implications, and recommendations to support

practice are discussed in Section 4.

Section 4: Findings and Recommendations

Introduction

Obesity contributes to many public health issues that include cardiovascular disease, gastrointestinal disorders, and Type 2 diabetes, to mention but few (Fruh, 2017). Primary care providers play a significant role in helping patients achieve weight loss through assessment, support, motivation, goal setting, management, and treatment (Fruh, 2017). The USPSTF recommended that primary care providers use behavioral weight loss intervention, low or no cost to patients, providers, insurance companies, and health care, to manage obesity.

While completing the DNP student practicum experience at a Maryland primary care clinic, a gap in using behavioral weight loss interventions to address adult obesity was observed. Therefore, an educational module was developed to encourage and remind primary care providers to use behavioral weight loss intervention tools to manage adult obesity and prevent obesity-related morbidity and mortality. Consequently, the Walden University Staff Educational Manual and the CCM, ADDIE, and IBHC models were used to guide this project.

Findings and Implications

The participants for this DNP project were selected after IRB approval was received. Five primary care providers participated in the educational program. The PowerPoint presentation was presented individually to accommodate providers' time and adhere to current COVID-19 restrictions; the primary care clinic did not allow group meetings at the time of this educational module. The consent form for study participants

was sent with the pretest and posttest questions (see Appendix A) to each participant via

email and asked them to return it via email. After reviewing the pretest answers, I met

with the participants and presented the PowerPoint (Appendix B) individually. The

participants were then asked to answer the posttest questions and return the results via

email. Five primary care providers attended the educational session at the primary care

clinic. Each educational module lasted about 20 to 30 minutes with each attendee. The

results of the pretest and posttest are summarized in Table 3.

Table 3

Results of Pretest and Posttest

Participants	Pretest (x1)	Posttest (x2)	Differences (x2–x1)
1	90	100	10
2	92	100	8
3	100	100	0
4	90	98	8
5	88	96	8

The pretest scores ranged from 88% to 100%. The average pretest score was 92%.

The posttest scores ranged from 96% to 100%, with an average of 98.8%. The five

participants (N = 5) did well in the pretest and posttest questions. There was no

significant difference between the pretest and posttest scores after the educational

module. The test scores showed no knowledge deficiency in using behavioral weight loss

management to prevent obesity-related morbidity and mortality in adults. The findings

indicate that the educational module did not increase knowledge as predicted. The results

are likely because the participants have prior knowledge of managing adult obesity and

using behavioral weight loss to prevent obesity-related morbidity and mortality. The pretest questions were probably not challenging to the providers.

Despite the unexpected finding, the average post score of 98.8% is higher than the average pretest score of 92%. As such, the educational module enhances the provider's knowledge of using behavioral weight loss to prevent obesity-related morbidity and mortality in adults. It will be best to use the educational module to teach clinicians like registered nurses or medical assistants in the future. However, the advantage of the study is that the educational module is now available to the clinic and can aid the providers and their nurses in their patient's teachings. The project can affect positive social changes by improving providers' knowledge, decreasing poor patient outcomes, reducing obesity-related morbidity and mortality, and minimizing healthcare costs.

Unanticipated Limitations

An unanticipated limitation that affected this DNP project is the COVID-19 restriction. The DNP project PowerPoint presentation was planning a one-time lively group presentation. Due to the COVID-19 condition, I presented the educational module differently to individual participants. Although the personal PowerPoint presentation helped to accommodate the provider's time, it prolonged the amount of time spent at the project site. Another limitation is the level of difficulty related to the questions to providers. A reevaluation of the pretest and posttest questions will likely produce a better result for future studies.

Recommendations

The use of behavioral weight loss intervention to manage obese adults is of little or no cost to the patient, the providers, the insurance companies, and health care. The primary care providers need to be proficient in providing the intervention to their obese adults. Another recommendation derived from this project is the importance of staff education. Providing continuous staff education improves knowledge of adult obesity management and promotes patient outcomes (McCauley et al., 2020). Also, performing a similar project to teach staff nurses and the medical assistants at the primary care setting to use behavioral weight loss intervention to manage obese adults.

Contribution of the Doctoral Project Team

The project team consisted of five primary care providers who agreed to participate in the study. The team was supportive and receptive throughout the project and the delivery of the educational module teaching. They completed the pretest and the posttest questions. Although the result of the study did not show significant improvement in knowledge, the team agreed that the educational module helped enhance their learning.

Strengths and Limitations of the Project

The positive aspect of the study includes that the information presented was not overwhelming or difficult to understand because the attendees were primary care providers who have prior knowledge of using behavioral weight loss intervention to manage adult obesity. The one-to-one teaching allowed the providers to ask their questions and add their recommendations for the educational module. I conducted the presentation at a time that was convenient for the attendees.

Some limitations to the project include the prolonged amount of time spent at the project site to get to the providers individually due to the COVID-19 restrictions. Also, some providers do not have zoom, making it difficult to get to more than one provider at a time. The small sample size is also a limitation to the project because it makes it difficult to generalize the result of the study. Also, the project was limited only to providers working in the same primary care clinic. There was a possibility for information sharing among participants leading to the similarity of their answers, which might have influenced the project findings.

Section 5: Dissemination Plan

The project was developed to educate primary care providers on the importance of using behavioral weight-loss interventions to manage adult obesity in patients and prevent obesity-related morbidity and mortality in adults. The staff educational module addressed a knowledge gap regarding using behavioral weight loss intervention to manage obese adults at the project site. The educational module was developed using USPTSF recommendations and presented to five participants individually. The teaching module was easy to understand. The information included topics the primary care providers would have prior knowledge of, making it a great tool to remind providers to continue behavioral weight loss intervention to prevent obesity-related morbidity and mortality. It also provided information on how to promote health and reduce obesity-related costs to the patient, the health care providers, the insurance companies, and the nation.

The current restrictions for the COVID-19 pandemic have affected information dissemination. Consequently, the presentation could not be conducted with a large group of individuals in person. The educational PowerPoint was presented to two groups (Nigerian Nurse Practitioners Association and the Nigerian Nurses Association) during Zoom's an annual, quarterly meeting. As a note, I am a Nigerian Nurse Practitioners Association member and the Nigerian Nurses Association.

Analysis of Self

I have been a nurse for many years and have read, seen, and understood the problem posed by obesity in adults. As a primary care provider and a DNP student, I have

noted a behavioral weight loss intervention gap in managing obese adult patients. The primary goal of my project was to develop a teaching module to remind primary care providers to use behavioral weight loss intervention to manage obese adult patients and prevent obesity-related morbidity and mortality.

Obesity, especially in adults, is a complex, chronic disease that requires medical attention. I have seen patients take medications and have surgeries for obesity treatment. Most of these patients who did not include behavioral weight loss intervention with their obesity management went back to their obese state or developed another complication. As an advanced practice nurse, I understand the importance of staff education. Creating the educational module confirmed my experience as a competent leader in behavioral weight loss intervention to manage adult obesity at the primary care level.

As a DNP scholar, I am a positive change agent who can address institutional changes to improve healthcare delivery and outcomes. I have learned how to develop and apply relevant models and implement and evaluate evidence-based interventions through my studies. Conducting the project gave me the skills to recognize the gap in practice search and read evidence research articles, systematic reviews, and journals to gain additional knowledge regarding the topic, thereby developing the staff educational material.

Summary

As an advanced practice nurse, the importance of a continuing education program is noted to help improve knowledge and skills on current evidence-based guidelines for effective patient management. An educational program that encourages primary care

providers to use behavioral weight loss intervention to manage obese adult patients can lead to better outcomes for this population. This project helped primary care providers recognize their responsibility regarding behavioral weight loss intervention to manage obese adults and was presented to the clinic. After my DNP graduation, I will follow up with the clinic's medical director for effectiveness and usability. The knowledge gained with the project will be shared with fellow advanced practice providers.

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Appendix A: Participants Pretest and Posttest Questionnaire

1- What BMI measurement is considered class 1 obese?

   a- BMI 25 – 30 kg/m2.

   b- BMI 30 – 35 kg/m2.

   c- BMI 35- 40 kg/m2.

   d- BMI above 40 kg/m2.

2- What BMI measurement is considered class 3 obese?

   a - BMI above 40 kg/m2.

   b- BMI 30 – 35 kg/m2.

   c- BMI 25 – 30kg/m2

   e- BMI 35- 40kg/m2

3- How often is BMI calculated for patients?

   a – Quarterly?

   b- Every visit?

   c – Yearly?

   d – When the patient requests?

4- Using the recommended 5As in adult obesity management, the provider uses
   a what component of the 5As when discussing food intake and physical
   activity with the patient in the context of health risks and appropriate dietary
   approach, and medication that affects weight or appetite?

   a- Assess

   b- Advice

c- Arrange

d- Agree

5- Using the recommended 5As in adult obesity management, the provider is using what component of the 5As when they discuss the appropriateness, cost, and effectiveness of meal replacements and dietary supplements with the patient.

a- Arrange

b- Agree

c- Assess

d- Advice

6- Using the recommended 5As in adult obesity management, the provider is using what component of the 5As when doing the following: If the patient chooses to diet, physical activity, and medication, set weight loss goal 10% from baseline.

a- Assess

b- Arrange

c- Advice

d- Agree

7- A 39-year-old AA male with no medical history came to your clinic today for a routine physical examination. His BMI today is 24.5. How do you manage this patient based on the recommended USPSTF behavioral weight loss intervention to prevent obesity-related morbidity and mortality in adults?

a- You do not need to do anything

b- Individualize the decision to provide or refer to behavioral counseling.

c- Provide or refer to intensive behavioral counseling.

d- Tell the patient to increase his calorie intake.

8- A 40-year-old female with a history of hypertension and hyperlipidemia presented to your clinic for a routine physical examination. Today, the patient's BMI is 38, and the patient is willing to work with you to lose weight. What is the USPSTF recommendation for behavioral weight management for this patient?

a- You do not need to do anything, and the patient's weight is not your problem.

b- Provide or refer to intensive behavioral counseling.

c- Advice, the patient to take some diet pills to lose weight.

d- Ask the patient to come back in six months for a weight management discussion.

9- Which of the following is not correct?

a- Obesity costs hundreds of billions of dollars to the health care system annually and is associated or directly related to the development of type 2 diabetes and is a recognized risk factor for high blood pressure, heart disease, and stroke.

b- obesity is a complex, multifactorial disease that develops from social, behavioral, cultural, physiological, metabolic, and genetic factors.

c- A sedentary lifestyle, such as time spent in front of media sources, shows a strong correlation with the development of obesity.

d- A person whose parents are obese must develop obesity in adulthood.

10- What percentage of weight loss produces clinically meaningful health benefits?

a- 3 to 5 %

b- 5 to 10 %

c- 20% or above.

d- Less than 1%.

11- According to studies, which interventions produced significant weight loss?

a- Interventions that included reduced energy intake, such as 500 kcal or less a day, and increased physical activity, for example, 150 minutes a week of walking, with behavioral therapy.

b- Intervention with only exercises.

c- Intervention with only diet.

d- A person can lose weight by eating all they want and not exercising.

12- According to studies, the many ways to provide behavioral weight intervention to prevent obesity-related morbidity and mortality. Which of the following is not true?

a- The patient must come to the clinic to benefit from the intervention.

b- The intervention can be done with printed or online materials.

c- The intervention can be delivered in person or virtually.

d- The patient can do the behavioral intervention in a group or individual setting.

13- According to studies, interventions for behavioral weight loss management include the following. Which is not true?

a- Behavioral weight loss intervention is only counting calories.

b- Behavioral weight loss intervention includes help to identify barriers to weight loss, help with problem-solving related to the obesity challenge.

c- The behavioral weight loss intervention includes help to identify barriers to weight loss, help with problem-solving related to obesity.

d- The intervention includes counseling about nutrition and exercise and education about how to self-monitor both components.

Appendix B: PowerPoint Presentation

Providers Educational Module on the Management of Adult Obesity in Primary Care Based on the Recommendation from the United States Preventive Service Task Force (USPSTF)

- By
- ROSE C KAJURU. RN, BSN, MSN, FNPBC
- Walden University
- Doctor of Nursing Practice

purpose

- The focus of this educational module is to improve the primary care providers' knowledge of adult obesity management using the behavioral weight loss intervention to prevent obesity-related morbidity and mortality as recommended by the USPSTF.

Behavioral Interventions for Weight Loss

Population
Adults who are obese (have a body mass index of 30 or higher)
Obesity is a common and serious problem among Americans that is linked to heart disease, diabetes, cancer, and disability.

B **USPSTF recommendation**
Clinicians should offer behavioral interventions to help with weight loss in adults who are obese.

Learning Objectives

- **At the end of the presentation, the learner will be able to:**

- Increase their recommendation of lifestyle modification with diet and exercise for adults' obesity management.

- Understand and use the 5As (Assess, Advise, Agree, Assist, and Arrange) adult obesity management plan.

- Understand when to implement the USPSTF recommended behavioral weight loss intervention for the obese adults.

- Understand and utilize the integrated behavioral care in managing their obese adult.

Leaning Goals/ Outcomes

Improve Primary Care Providers adult obesity management Knowledge.

Prevent obesity-related morbidity and mortality in adult.

Background

Obesity is a complex, multifactorial disease that develops from the interaction between social, behavioral, cultural, physiological, metabolic, and genetic factors.

Obesity which affects more than 35% of men and 40% of women in USA show strong correlation with sedentary lifestyle, such as time spent in front of media sources.

Background

Obesity costs hundreds of billions of dollars to the health care, and according to USPSTF, the national annual cost of medical care related to obesity estimated at $147 to $210 billion.

Obesity is associated or directly related to the development of type 2 diabetes and is a recognized risk factor for high blood pressure, heart disease, and stroke.

Background

Obesity is a preventable disease, and Medicare and Medicaid Services reimburses for preventive health.

The USPSTF found adequate evidence that behavior-based weight loss maintenance interventions are of moderate benefit.

The USPSTF found adequate evidence that the harms of intensive, multicomponent behavioral interventions including weight loss maintenance interventions in adults with obesity are small to none.

Overview
Causes of Obesity

Poor eating habits example, overeating.

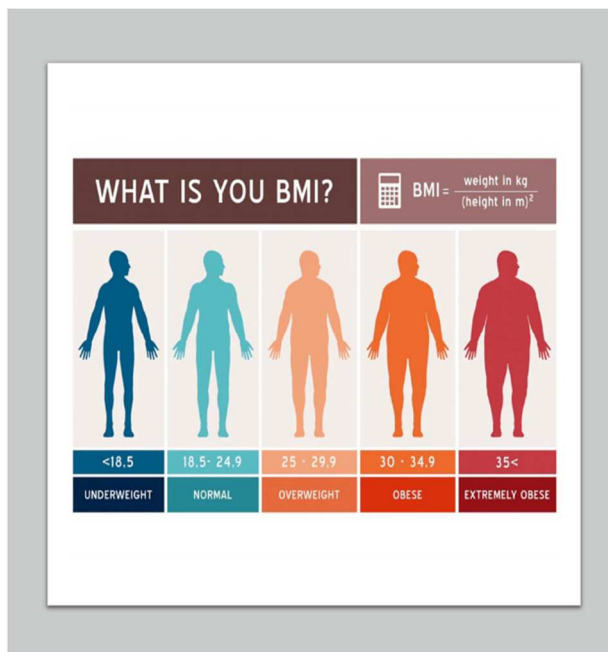Medications example steroid.

Endocrine problems.

Lack of exercise.

Depression and emotional problems.

Family history of obesity.

Diagnosis of Obesity

• Body Mass Index (BMI) is a person's weight in kilograms divided by the square of height in meters. A high BMI can indicate high body fatness.

WHAT IS YOU BMI?

$$BMI = \frac{weight\ in\ kg}{(height\ in\ m)^2}$$

<18.5	18.5 - 24.9	25 - 29.9	30 - 34.9	35<
UNDERWEIGHT	NORMAL	OVERWEIGHT	OBESE	EXTREMELY OBESE

Diagnosis of obesity

• - **The USPSTF uses the following BMI categories to get to the diagnosis of obesity.**

• BMI of 25 to 29.9 is overweight.

• BMI of 30 or higher is obesity.

• BMI of 30.0 to 34.9 is class 1 obesity.

• BMI of 35.0 to 39.9 is class 2 obesity

• BMI of ≥40 is class 3 obesity.

Types of Obesity

Type of obesity	BMI (kg/m^2)
Obesity	BMI >30
Severe obesity	BMI >35
Morbid obesity	BMI >40
Superobesity	BMI >50
Supersuperobesity	BMI >60

Complications of obesity

CLASS OF EVENT	COMORBIDITIES ASSOCIATED WITH OBESITY
Cancer/malignancy	Breast, endometrial, colon and rectal, gallbladder, prostate, ovarian, to mention but few.
Cardiovascular	Coronary artery disease, essential hypertension, dyslipidemia, chronic heart failure, to mention but few.
Gastrointestinal	Gall bladder disease, GERD, etc.
Genitourinary	Stress incontinence.
Metabolic/endocrine	Type 2 diabetes mellitus, prediabetes, dyslipidemia, etc.
Musculoskeletal/orthopedic	Pains, back, hips, ankles, feet, and knees, and back, etc.

Complications Obesity cont.

Neurological and central nervous system (CNS)	Stroke, dementia idiopathic intracranial hypertension, and meralgia paresthesia.
Obstetric and perinatal	Pregnancy-related hypertension, very low birthweight, preterm birth, increased cesarean delivery, gestational diabetes, etc.
Skin	Keratosis pilaris, hirsutism, acanthosis nigricans, psoriasis, intertrigo,, etc.
Respiratory/pulmonary	Obstructive sleep apnea, higher rates of respiratory infections, asthma, etc.
Psychological	Depression, anxiety, personality disorder, and obesity stigmatization.
Respiratory/pulmonary	Obstructive sleep apnea, higher rates of respiratory infections, asthma, etc.
Reproductive, Men and Women	Early puberty, polycystic ovaries syndrome, infertility, decreased libido, etc.

Management of Adult Obesity

There are various methods of Obesity management, example, medications in the form of diet pills, injections, and even surgery.

USPSTF recommend management of adult obesity using behavioral weight loss intervention which is of little or no cost to the patient, the providers, and to health care, to prevent obesity related morbidity and mortality.

Management of adult obesity includes the 5As acronym (Asses, Advice, Agree, Assist, and Arrange) intervention method use to in obesity evaluation and treatment.

Management of Adult obesity cont.

Integrated behavioral health care (IBHC) is the care a patient receives from primary care providers and behavioral health clinicians.

The team works together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population.

Utilizing integrated behavioral health care to manage adult obesity in primary care will aid in the prevention of obesity-related morbidity and mortality.

USPETF recommendation on when to start behavioral weight loss intervention.

Risk Factors	Normal Weight (BMI 18.5 to <25)	Overweight (BMI 25 to <30)	Obese (BMI ≥30)
No Hypertension. Dyslipidemia, or Abnormal blood glucose level	Individualize the decision to provide or refer to behavioral counseling	Individualize the decision to provide or refer to behavioral counseling	Provide or refer to intensive. behavioral counseling
Hypertension Dyslipidemia, or Both	Individualize the decision to provide or refer to behavioral counseling	Provide or refer to intensive behavioral counseling	Provide or refer to intensive behavioral counseling
Abnormal blood glucose level or DM.	Provide or refer to intensive behavioral counseling	Provide or refer to intensive behavioral counseling	Provide or refer to intensive behavioral counseling

Management of Adult Obesity using the 5As obesity evaluation and treatment.

Assess: - Severity of obesity with calculated BMI, waist circumference, and comorbidities
Food intake and physical activity in context of health risks and appropriate dietary approach.
Medications that affect weight or satiety.
Readiness to change behavior and stage of change.

Advice   Diagnosis of overweight, obese, or severe obesity
Caloric deficit needed for weight loss
Various types of diets that lead to weight loss and ease of adherence
Appropriateness, cost, and effectiveness of meal replacements, dietary supplements.
Importance of self -monitoring

Agree   If patient is not ready, discuss at another visit
If patient is motivated and ready to change, develop treatment plan
If patient chooses diet, physical activity, and/or medication, set weight loss goal 10% from baseline.

Management of Adult Obesity using 5As cont.

Assist   Provide a diet plan, physical activity guide, and behavior modification guide
Provide Web resources based on patient interest and need
Identify method for self-monitoring (eg, diary)
Review food and activity diary on follow-up. (Reassess if initial goal is not met.)

Arrange   Follow-up appointments to meet patient needs
Referral to registered dietitian and/or behavioral specialist for individual
counseling/monitoring or weight management class.
Maintenance counseling to prevent relapse or weight regain.

Management of adult obesity using integrated behavioral health care.

structure
- Health care professionals with a range of expertise and roles are available.
- They can be tailored into a team to meet the needs of specific patients and populations example, obese adults.

process
- •The health care clinicians conduct an individual needs assessment for a specific patient.
- •Develop a unified care plan to care for a given patient.

Healthy Behavior

- Healthy behaviors include regular physical activity and healthy eating.
- Balancing the number of calories consumed from foods and beverages with the number of calories the body uses for activity plays a role in preventing excess weight gain.

Diet   Exercise

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Exercise Recommendation.

- The Physical Activity Guidelines for Americans recommends adults do at least 150 minutes a week of moderate intensity activity such as brisk walking.

- In addition, adults need to do activities that strengthen muscles at least 2 days a week.


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Dietary Recommendations

- A healthy diet pattern follows the Dietary Guidelines for Americans emphasizes eating whole grains, fruits, vegetables, lean protein, low-fat and fat-free dairy products, and drinking water.

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Questions

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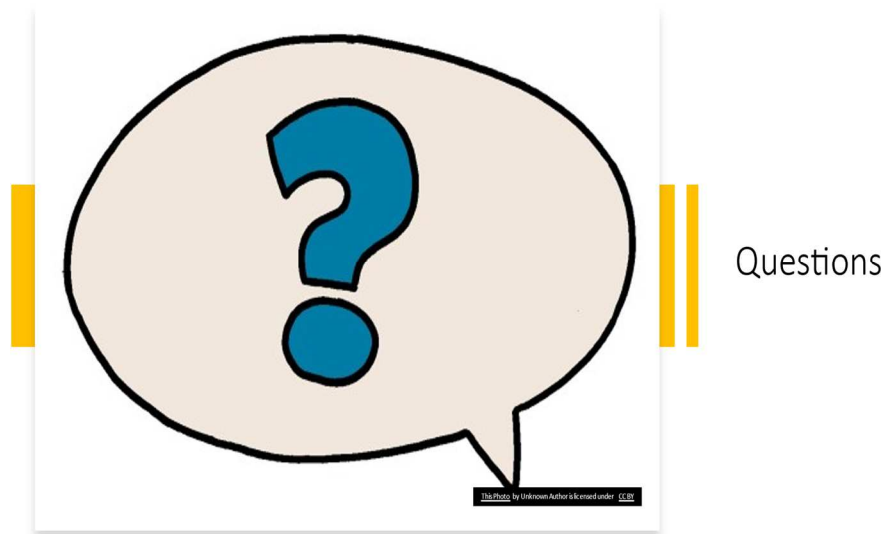
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