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A Nutrition Education Program for Advanced Practice Registered Nurses Caring for Obese Patients

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Walden University

College of Health Sciences

This is to certify that the doctoral study by

Kathy Wilson

has been found to be complete and satisfactory in all respects,
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Walden University
2018

Abstract

A Nutrition Education Program for Advanced Practice Registered Nurses Caring

for Obese Patients

By

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MSN, Southeast Missouri State University, 2006

BSN, Southeast Missouri State University, 2009

Project Submitted in Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2018

Abstract

Obesity is a major U.S. public health epidemic. A review of the current literature identified a lack of obesity counseling with individuals. The gap in practice was a lack of understanding of nutrition, nutrition labeling, and how foods affect health. The objective of this project was to identify the community assessment need related to obesity and then educate APRNs on ways to better communicate with obese patients. This project focused on an education program for advanced practice registered nurses (APRNs) on using the 5 A's framework for obesity counseling to improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic. Knowles' adult learning theory was used to develop the education project. The education program was presented to and evaluated by 2 APRNs at a rural health clinic. The providers requested the information be placed online so they could give the presentation their undivided attention. The audio-based PowerPoint presentation and printed copies of the presentation content were e-mailed to each of the providers. The presenter went to the clinic 3 days after placing the presentation online to obtain the evaluations and answer any questions. An impact evaluation assessed the presenter, audience learning experience, and confidence and skill of the participant. The participants reported they had a better understanding of the reality of the obese population and how they could improve their communication by using the 5 A's method of assessment. Both participants reported the presentation was clear and easy to understand. A recommendation was made to conduct a future quality improvement project expanding the use of the educational program. This project has the potential to impact social change by improving health care education and ultimately reducing obesity.

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February 10, 2018

Dedication

I dedicate this paper to my family for their support in my decision to return to college. I pondered the thought of returning to school for a few years and always found a reason not to sign up for classes. With that said, I especially dedicate this to my youngest son, Dalton. Son, I know your past few years have been difficult. Always learn from your experiences and turn them into good for yourself and others. Your young life experiences provided the nudge I needed to return to college and learn how to improve in my abilities to help others. We have both learned a lot over the past few years, and I am proud of both our accomplishments. I am especially proud of your growth and maturity and look forward to watching you achieve your future goals.

Acknowledgments

Dr. Diane Whitehead, I cannot begin to express my gratitude of having you as my chairperson. Your knowledge and guidance is something I will never forget. I don't know how you did it, but you always knew exactly what to say to help me over the bumps in the road. You have helped me to gain knowledge and confidence as I worked to achieve the title of Doctor of Nursing Practice.

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Section 1: Introduction to the Study

Introduction

Healthy People 2020 (2016) reported from 2005 to 2008 that 33% of the adult population in the United States was obese. The goal of Healthy People 2020 is to have a 10.5% improvement, affecting 30.5% of the obese population by the year 2020. In addition to obesity, in 2007, Healthy People 2020 reported that 20.8% of the adult population seeking medical care was treated and educated on a diet for heart disease, diabetes, or hyperlipidemia. Recommendations from Healthy People 2020 exist to increase the occurrences of office visits for patients who have a diagnosis of obesity, cardiovascular disease, diabetes, or hyperlipidemia. These office visits for the stated diagnosis would include counseling or education related to the patient's nutritional weight loss, diet, and activity. The purpose of this project was to develop an education program for advanced practice registered nurses (APRNs) to use when counseling obese patients.

Problem Statement

In the United States, the current epidemic of obesity was identified as a public health crisis. An estimated 97 million adults were identified as overweight or obese (Centers for Disease Control and Prevention [CDC], 2015). In 1990, the obese population was less than 15% in the United States. By 2010, the obesity rate increased in 36 states to 25%, with 12 of those states reporting an increase of 30% or greater (Chan, 2015; Wilson, 2016). In the United States one-third (34.9% or 78.6 million) of the adult population is obese (Ogden, Carroll, Kit, & Flegal, 2014; Wilson, 2016).

Missouri ranks 16th highest among states for obesity rate, which was up to 31.7 % in 2016 from 30.2% in 2011 (CDC, nd; Wilson, 2016). In 2010, the total population of the state of Missouri was 5,988,927, and from that number, 76.2% were considered adults at the age of 18 years and older (CDC, 2013; Wilson, 2016). The local county's community 2012 health analysis report indicated that 26.5% of the population were obese adults. (Cape Girardeau County Public Health Center, 2012; Wilson, 2016). The obesity epidemic was the top priority of focus for improving health in the community (Cape Girardeau County Public Health Center, 2012). This DNP project has the potential to change the care provided to the obese population by improving patient education.

Purpose

The long-term benefit of eliminating obesity is improved health and wellness. Costs would be reduced for patients if they did not require medications for treating secondary illnesses. In this rural clinic, the gap was a lack of nutrition counseling with overweight and obese patients. The purpose of this project was to educate the APRNs on the use of the 5 As framework for obesity counseling.

Practice-Focused Question

The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

Nature of the Doctoral Project

The sources I used to collect the evidence to meet the purpose of this doctoral project were from scholarly and peer-reviewed articles retrieved from online sources of the Cumulative Index Nursing Allied Health Literature (CINAHL), EBSCOhost, Agency for Healthcare Research and Quality, Healthy People 2020, the American Dietetic Association, CDC, the Obesity Society, the American Diabetes Association, and Medline. The search terms were *obesity, obesity and comorbidities of diabetes, hypertension and depression, United States (U.S.) and Missouri statistics of obesity, Cape Girardeau, Missouri county statistics, andragogy, transformational learning and provider education, 5 As framework, and motivational interviewing*. Information from articles with the search terms were reviewed and used as sources in the doctoral project.

Significance

The purpose of this project was to educate the APRNs in a rural clinic on the use of the 5 As framework for obesity counseling. The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

According to Lee, Altschuld, and White (2007), stakeholders are categorized using three levels. Level one is the population that will be affected by the program. The stakeholders in level two are the people providing the service or the people under the direction of the provider. Level three consists of the people who are involved in policy

making or who allocate resources. The three levels of stakeholder representatives involved in this program are described in Table 1.

Table 1

Level of Stakeholder

| Level | Description |
|---------|--|
| Level 1 | Overweight and obese patients |
| Level 2 | Family and mental health advanced practice nurse |
| Level 3 | Clinic owner/administrator |

The project impacted all levels of stakeholders. The level one stakeholders benefit by weight loss and improved health. The level two stakeholders, the APRNs caring for the patients, experienced self-satisfaction for promoting the project with a positive result. The APRNs will earn respect and credibility in the community. The third stakeholder, the clinic owner, will benefit because satisfied customers are the best marketing tools, and patients who receive help will share their stories of success.

Studies of the obese population typically reveal a decreased psychological well-being when compared to people of normal weight (Wardle & Cooke, 2005). The impact of obesity on health-related quality of life (HRQL) was examined and showed HRQL was decreased with increasing level of obesity in comparison to people in a normal weight range (Jia & Lubetkin, 2005). The impact of weight loss for a person would be elimination of the stigmatization and discrimination associated with being obese. The person would have a sense of achievement for the weight loss and develop a higher level of self-esteem. A sense of well-being helps diminish depression and improves socialization.

Summary

One out of three adults is obese. Obesity was the most common presenting chronic medical condition. The overweight and obese population is at increased risk of morbidity. Treating the complex population can be a challenge for both the person and provider. Evidence-based guidelines were developed for weight loss counseling, but many providers do not acknowledge awareness of their existence (Dick, 2004). The significance of Healthy People 2020 (2011) was to develop objectives and monitor and improve the health of all Americans. Collaborative effort between the provider and patient will promote education and ensure the patient understands the plan. The provider also will gain a better understanding of what the patient can afford in order to provide suggestions of healthy food choices. The long-term benefit of eliminating obesity is improved health and wellness. The loss of weight and improved health will increase self-esteem and mobility and decrease health care costs.

Section 2: Background and Context

Introduction

According to the Cape Girardeau County Public Health Center's community health analysis report (2012), 26.5% of the adult population are obese. The obesity epidemic has emerged as a top priority for improving health in the community (Cape Girardeau County Public Health Center, 2012; Wilson, 2016). The purpose of this project was to educate the APRNs on the use of the 5 As framework for obesity counseling.

This project focused on providing an education program on the 5 As framework for obesity counseling to the APRN's to assist them when counseling their obese patients. The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic? In this section I discuss the models, relevance to nursing practice, and background of the project, as well as my role as doctor of nursing practice (DNP) student.

Concepts, Models, and Theories

Knowles identified andragogy as the art and science of teaching adult learners. I used Knowles' theory of andragogy as the framework in developing this education program (Gore, 2014; Knowles, 1984). Six principles frame this theory: (a) the need to know, (b) self-concept, (c) prior experience, (d) readiness to learn, (e) orientation to learn, and (f) motivation to learn (Knowles, Holton, & Swanson, 1973). In addition, the 5 As framework for counseling obese patients was used for the education program. The 5

As approach is an evidence-based, behavior-change counseling framework endorsed by the Centers for Medicare and Medicaid Services and the United States Preventive Services Task Force that is emerging as a common method providers use when caring for patients. The 5 As are ask (assess), advise, agree, assist, and arrange (Pollak et al., 2016; Schlair, Moore, McMacken, & Jay, 2012). The 5 As framework offers a platform for a provider to use to “assess risk and readiness to change, advise specific behavior changes, agree on specific goals in a collaborative manner, assist via addressing barriers (motivational interviewing), and arrange to follow-up or refer the patient for further treatment” (Schlair et al., 2012, p. 221). Table 2 describes the relationship between adult learning theory and the 5 As approach.

Table 2

Relationship of Adult Learning Theory and 5 As Framework

| Adult Learning Theory | 5 As Framework | Relationship |
|--|---|---|
| Adult learning is self-directed/autonomous: The learners engage in the process of establishing realistic goals. | Assess risk and readiness to change; BMI and dietary behavior Comorbidities and medications Family, social and physical history Current mood and coping mechanisms Previous weight loss attempts Activity, Readiness for change Barriers to weight loss | The APRN will promote patient autonomy as they assess the person's readiness for change. The collaborative engagement allows for a thorough assessment. |
| Adult learning utilizes knowledge & life experiences: The patient will use experience and knowledge to direct new information. | Advise behavioral changes. Review patient's weight loss goals and discuss reasonable weight loss: plan and time frame. Discuss changes to diet, and physical activity. Discuss treatment options for psychosocial comorbidities such as medications, behavioral counselling, and surgical intervention. Address any concerns. | Allowing the patient input in the conversations enables them to self-reflect to realize their areas for improvement. Once the person identifies their area of need for improvement, they will be open to discussion about treatment options. |
| Adult learning is goal-oriented: Nutritional goals are formulated based on the persons past experiences. | Agree on specific goals. Clarify/reflect on the patient's behavior change plan. Engage with the patient and have them identify 1–3 behavior change goals. Give written instructions based on the goals. Make sure the goals are SMART (specific, measurable, achievable, realistic, and time-bound). Discuss when to follow up with the patient to evaluate the goals and make sure that these goals are revisited and evaluated | Allow the patient to verbalize their goals to lose weight. The APN should determine if the patient goals are reasonable. The goals should belong to the patient but may need to be directed by the provider. |
| Adult learning is relevancy-oriented: What is the reason the person wants to lose weight? | Assist in addressing needs. Address barriers to change. Have the patient identify a support system. Be empathetic and supportive of the patient's goals. Discuss support services such as group therapy, exercise group (if available). Prescribe medications. Refer to bariatric surgery (if appropriate). Apply motivational interviewing skills to enhance engagement and promote ownership of the plan. | Motivational interviewing will help the patient verbalize their reason for wanting to lose weight. Once the patient self-identifies their reason for improvement, they can identify and address barriers that may impede their plan. |
| Adult learning highlights practicality: Allow the person to ask questions and provide written tools to ensure success when grocery shopping. | Arrange any plans. Frequent follow-up. Referral to weight-management clinic Referral to community resources/commercial programs Bring support person to office visits | By understanding the reasons for change, goals and barriers the patient and APN can collaborate on measures that promote positive outcomes. The plan will be re-evaluated during office visits to determine if they need revised or if a referral is appropriate. |
| Adult learning encourages collaboration: Since andragogy is enhanced through collaborative engagement. | | Collaborative engagement is an act of listening and understanding and is likely to achieve positive outcomes. |

Adapted from Knowles (1984) and Schlair et al. (2012)

Relevance to Nursing Practice

In this section I describe the evidence supporting this quality improvement project. I conducted a literature search using the following online databases: Cumulative Index Nursing Allied Health Literature Complete, EBSCOhost, MEDLINE, and the Cochrane systematic reviews. Key search terms and the combination of search terms included *obesity* and associated comorbidities of *hypertension, diabetes and depression, obesity and rural health clinics, education for providers about obesity, and 5 As framework for obesity counseling*. The scope of the literature search included studies with primary focus on obesity published in English between 2004 and 2016. The search strategy yielded a total of 40 articles. After final review for appropriate evidence, 20 articles were included in the literature review. A literature review matrix (Appendix A) was constructed to present selected articles including the level of evidence suggested by Fineout-Overholt, Melnyk, Stillwell, and Williamson (2010, p. 47). Table 3 summarizes the levels of evidence in the literature review.

Table 3

Levels of Evidence

| Levels of evidence | Number of articles |
|--|--------------------|
| Syst I 1. Systematic review or meta-analysis | 2 |
| Level II: 2. Randomized controlled trial | 1 |
| Level III: 3. Controlled trial without randomization | 0 |
| Level IV: 3. Case-control or cohort study | 4 |
| Level V: Systematic review of qualitative or descriptive studies | 10 |
| Level VI: Qualitative or descriptive study (includes evidence implementation projects) | 6 |
| Level VII: 4. Expert opinion or consensus | 2 |

Adapted from Fineout-Overholt et al, 2010.

Twenty-five articles were deemed appropriate for the literature review. Upon assessing the strength of the evidence from the articles, two were level one (systematic

reviews or meta-analyses), one was a level two, 20 were level 3 (cohort studies, case-controlled, observational studies), and two were level 4 (expert opinion, physiology bench research, or consensus).

Federal Initiatives

The CDC (2013) began tracking the incidence of obesity in 1999. Information was collected by the National Health and Nutrition Examination Surveys. On the CDC website, the current review of the literature regarding obesity is 15,100,000 articles. Despite this wealth of information and measures to promote healthy practices, the problem of obesity prevails, affecting 36.5% of the adult population in the United States (Ogden et al., 2014).

Rural Community

A descriptive study by Wood (2005) was conducted to assess the health literacy of 57 participants of a rural health clinic. The findings revealed that only 50% of the participants could read at a high school level with six participants reading at or below the sixth-grade level. Befort, Nazir, & Perri (2012) compared the association of chronic disease of people residing in rural and urban communities. For the comparison, they used the measurements of height, weight, and body mass index (BMI), along with demographics, nutritional intake, and physical activity of the participants. The authors determined that people from a rural community had a higher incidence of chronic disease than residents of urban communities.

Hageman, Pullen, Hertzog, Boeckner, & Noble-Walker (2012) investigated the correlation of fitness and fatness of participants in a rural community ($N = 289$). The

authors found 100% of the participants were either obese or overweight and 90% of those people had metabolic syndrome.

Another study in a rural community focused on the comparison of fruit and vegetable intake and physical activity of obese people in a rural region. Of 784 survey recipients, 72% were overweight with 29 % of those recipients categorized as obese. In looking at the food intake, 9% consumed fruits and vegetables with 38% reporting physical activity (Hill, You, & Zoellner-Hill, 2014).

Thirty physicians, physician assistants, and nurse practitioners were interviewed about the increased weight issues of people in a rural community. The providers believed the weight issues stemmed from a lack of motivation, poverty, lack of understanding of obesity, and limited healthy food options (Woodruff, Schauer, Addison, Gehlot, & Kegler 2016).

Clinical Practice Guidelines and Recommendations

In 2004, Nammi, Koka, Chinnala, and Boini wrote “obesity is a multi-factorial disorder” that leads to other chronic conditions for people (p. 1). The recommendations for treating obesity are dietary reduction, physical activity, behavioral therapy, pharmacotherapy, and surgery. According to Casanueva et al. (2016), the treatment is the same as stated by Nammi, et al. (2004), but they further stated that the current long-term treatment for obesity is surgical. Horn (2016) provided the same interventions for treating obesity and also provided a future treatment modality of genetic testing.

Chronic Illness

Bays, Chapman, and Grandy (2007), conducted a study to explore the relation between BMI and prevalence of diabetes mellitus, hypertension, and dyslipidemia in hope to improve early evaluation and management of risk factors that lead to diabetes. Surveys were completed by 127,420 adults. The findings revealed an increased BMI was associated with the prevalence of diabetes mellitus, hypertension, and dyslipidemia.

An observational study called Look AHEAD was conducted to substantiate the recommendation that overweight and obese individuals should lose 5% to 10% of their body weight to improve their risk of cardiovascular disease (CVD). In the study, a person with weight loss for a year had notable improvements in glycemia, blood pressure, triglycerides, and HDL cholesterol (Wing et al., 2011).

A longitudinal prospective cohort study was conducted to find the association between body weight and the prognosis of patients with type 2 diabetes. A group of patients ($N = 10,568$) were followed for a median of 10.6 years. The people with type 2 diabetes who were overweight or obese had a higher risk of hospitalization for cardiac related issues (Costanzo et al., 2015).

According to Xiang and An (2014) a longitudinal health and retirement study was conducted from 1994 to 2010 to assess the relationship between obesity and depression. A total of 6,514 adults participated in the health and retirement study. When compared with people of a normal weight range, people deemed overweight and obese had a significantly higher probability of depressive symptoms.

Barnes et al. (2015), randomly reviewed 240 charts in a primary care setting to gather information and describe the management of Appalachian adults associated with sociodemographics, obesity, and depression. The prevalence of obesity was 48%, and there was significant evidence of a correlation between depression and elevated BMI.

A similar study by Agrawal, Gupta, Mishra, & Agrawal (2015) examined psychosocial issues of 325 overweight and obese women in India. From the 325 women examined three out of four women were overweight. Among the group of obese women 95% were considered obese. All women indicated dissatisfaction and felt stigmatized and discriminated against psychosocially because of weight issues.

Faulconbridge, Wadden, Berkowitz, Pulcini, & Treadwell (2011) looked at the effects of combining behavioral weight management with cognitive behavioral therapy for obese adults with depression. Twelve participants attended weekly behavioral and cognitive management meetings for 16 weeks. The participants lost 11.4% of their weight and reported improvements with their depression.

Patient Educational Focus

Farrell (2008) conducted a study to determine whether participation in a Chronic Disease Self-Management Program (CDSMP) would improve outcomes for the underserved population in a rural clinic. Forty-eight participants completed a pretest and posttest after the education of an intervention. Significant improvements were noted in the response of education of health issues.

Cha, Crowe, Braxter, & Mowinski-Jennings (2016) conducted a study to understand health-related decision making among overweight and obese emerging adults.

The goal of the study was to screen participants' diabetes risk and identify characteristics of emerging adults with prediabetes ($N = 107$). Emerging adults choose unhealthy behaviors due to inaccurate information and insufficient competence to practice healthy lifestyles rather than because of laziness or being irrational. Behavioral interventions for emerging adults are needed to help them develop skills to enhance health literacy.

A similar study of 204 overweight and obese participants was conducted to determine if the addition of cognitive therapy to a standard dietetic treatment plan for obesity would prevent relapse. Both the cognitive and behavioral treatment modalities were successful with significant decreases in BMI, and cognitive dietetic treatment was successful and significantly superior to the exercise and dietetic treatment especially in the maintenance phase (Werrija, Jansen, Mulkens, Elgersma, Amenta, & Hospers, 2009).

According to Johns, Hartmann-Boyce, Jebb, and Aveyard (2014), when examining the clinical effectiveness of combined behavioral weight management programs (BWMPs) to single component programs, the weight loss was significantly greater in the combined BWMPs at 3 to 6 months and 12 to 18 months. According to Gao, Griffiths, Chan (2007), obesity is a challenge to public health. The comprehensive interventions with at least physical activity, dietary intervention, and health education may be effective in reducing obesity.

Provider Education

The topic of weight with patients is often uncomfortable but necessary to promote health and well-being. The provider should be respectful and speak in a private area

when they ask the person if they would like to discuss their weight (Boyer, 2010; NIDDK, nd; Viscio, n.d.).

Swift, Choi, Puhl, and Glazebrook (2012) conducted a study with 1036 ($N = 1036$) dietitians, doctors, and nurses about patient demographics, preferred terms, and their comfort level when initiating a discussion about weight issues of patients. Only 58% of the providers felt confident, and 95% reported training would be beneficial when discussing weight issues with the patients.

5 As Framework for Obesity Counseling

From a consumer perspective, The National Ambulatory Medical Care Survey (NAMCS) conducted a cross-sectional survey about ambulatory care in the U.S. The purpose of the study was to determine the occurrence of weight management counseling from 2008 to 2013. The results indicate a decline in weight care management by 10% despite previous recommendations for weight management counseling. Even with the 2008 recommendations for weight reform, obesity management is suboptimal (Fitzpatrick & Stevens, 2017).

Schauer, Woodruff, Hotz, and Kegler (2014), conducted a qualitative study with semi-structured interviews from 31 health care providers to explore how they discuss weight and what they do as a treatment regimen. The providers indicated they discuss weight issues with established patients with patients who have conditions related to being overweight and people who have weight changes since a previous visit. The providers indicated they educate patients about nutrition experientially, using brochures, pre-

existing weight programs, and online resources. They concluded future education needs to include evidence-based practice approaches for weight counseling.

Schlair et al. (2012), completed a comprehensive literature review to review content of the 5 As of Obesity Counseling for providers and develop strategies for working in a typical 20-minute visit. The 5 As (Assess, Advise, Agree, Assist, Arrange) is an evidence-based, behavior-change counseling framework endorsed by the Centers for Medicare and Medicaid Services and the United States Preventive Services Task Force. The 5 As framework has made a positive impact for smoking cessation and is emerging (with adaptation) for weight loss.

A cross-sectional study was conducted (via surveys post office visit) to describe the quality of obesity counseling from providers, as well as, to determine the association of counselling to patient motivation. The survey assessed the physician's use of 5 As counseling techniques, patient-centeredness, and motivation to lose weight. The population consisted of 137 patients reporting on 23 providers. Results showed 85% of the patients were counselled on their weight. Upon further investigation physicians used only a mean of 5.3 (SD = 4.6) of 18 possible for the 5 As counseling practices. The patients who reported higher motivation received more 5 As counseling techniques and patient centeredness than those with lower levels (Jay, Gillespie, Schlair, Sherman, & Kalet, 2010).

Osunlana et al. (2015) conducted a descriptive randomized controlled trial with mixed method evaluation to develop and evaluate a 5 As development tool. The 5 As tool development consisted of a collaborative team effort and occurred through a

practice/implementation-oriented process. During this process, 12 tools were developed and evaluated. Key findings from the study were the need for tools that were adaptive, tools to facilitate interdisciplinary practice, tools to help patients understand realistic expectations for weight loss, and shared decision-making tools for goal setting and relapse prevention. The purpose of the project was to improve compliance of nutritional counselling.

Local Background and Context

Obesity has an adverse impact on a person's health. Some of the health problems are cardiovascular disease, type II diabetes, hypertension, dyslipidemia, and cancers (Teo, n.d.; Wilson, 2015). Decreasing weight would improve a patient's health and well-being. Stigmatization and discrimination are commonplace experiences with the obese population. Obese people are labeled lazy, fat, uneducated, and ugly, leading to lowered self-esteem. Studies of the obese population typically reveal a decreased psychological well-being when compared to people of normal weight (Wardle & Cooke, 2005; Wilson, 2015).

Jia & Lubetkin (2005) examined the impact of obesity on HRQL and showed HRQL decreased with increasing levels of obesity. The most severely obese patients reported the lowest HRQL. A significantly lower HRQL was noted with people who were overweight or had moderate obesity (Jia & Lubetkin, 2005; Wilson, 2015). One impact of weight loss for a person would be a reduction of eliminate the stigmatization and discrimination associated with being obese. The person would have a sense of

achievement for the weight loss and develop a higher level of self-esteem. A sense of well-being helps diminish depression and improves socialization.

The intended practice for the doctoral project is a small rural health clinic in the lower mid-west region of the United States. The clinic has a substantial patient clientele and welcomes walk-in patients. The mission is to respond to the health care needs of the community by improving the health and quality of life of patients who seek care at the clinic. Many patients seen at the clinic are from underserved populations in need of care. The clinic employs two nurse practitioners, one who sees medical patients and one who is a mental health practitioner. Since this is a small clinic, the nurse practitioners and owner collaborate in making decisions for the well-being of the clinic. The nurse practitioners make autonomous decisions about the healthcare needs of the patients.

Definition of Terms

Body mass index (BMI): BMI is a clinical measurement tool to determine if a person may have increased body mass by dividing a patient's weight in kilograms by the patient's height in meters squared.

- Normal (BMI reading: $18.5\text{kg/m}^2 \leq \text{BMI} < 25\text{ kg/m}^2$);
- Overweight BMI measure: $25\text{ kg/m}^2 \leq \text{BMI} < 30\text{ kg/m}^2$;
- Obese BMI: $\geq 30\text{ kg/m}^2$ (Xiang & An, 2015).

Rural health clinic: A rural health clinic is a clinic that has met requirements to received special Medicare and Medicaid reimbursement and is meant to increase access to care for people of a rural community.

Underserved population: An underserved population includes people of the community who cannot afford healthcare services from a physician's office and those who are often uneducated and sometimes homeless or living in poverty.

Role of the DNP Student

Effective leadership is important in a workplace to successfully introduce new evidence into practice (White & Dudley-Brown, 2012). I assessed the need of the community and identified that education for APRNs was indicated in order to improve health and compliance when treating the obese population. I identified and retained the support of stakeholders. An education program will be developed for APRNs who treat the obese population. The purpose of this project was to develop an education program using the 5 As framework for obesity counseling for APRNs to use in counseling obese patients. The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

Summary

People seek health care for various reasons. This project increased the knowledge of the APRNs who work at a small rural health clinic regarding obesity. By using the theory of andragogy, the practitioner has a better understanding of the need to engage with an obese patient. In addition, the use of the 5 As framework provided an outline for practitioners to guide a conversation with patients about their weight management. Appropriate nutrition and healthy diets are necessary to achieve healthy body weights and

healthy lifestyles (Healthy People 2020, 2011). The long-term benefit of eliminating obesity is improved health and wellness.

Section 3: Collection and Analysis of Evidence

Introduction

The health crisis of obesity continues to soar in the United States, and Missouri has one of the highest rates of adult obesity (Ogden et al., 2014). One Missouri county has made the obesity epidemic the number one priority for improving health in the community (Cape Girardeau County Public Health Center, 2012). When people seek care for obesity, they may be given a handout explaining a 1,200-calorie diet, but once they leave, they are unable to follow through with the diet. The problem was that the patients were not engaged in the educational conversation, and the plan was not individualized for them.

The purpose of this project was to develop an education program using the 5 As framework for obesity counseling for APRNs to use in counseling obese patients. The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

A small rural health clinic in southeast Missouri identified obesity as a problem for many of their patrons. Since obesity has an adverse impact on a person's physical and mental health (cardiovascular disease, type II diabetes, hypertension, dyslipidemia, depression, and cancers), decreasing weight would result in improved overall health and well-being (Teo, n.d.; Wardle & Cooke, 2005). This DNP project has the potential to change the care provided to the obese population by improving nutrition education.

Section 3 of this capstone project includes the practice-focused question along with the analysis and synthesis of the project.

Practice-Focused Question

The local problem is the obesity epidemic in one Missouri community (C.G. County Public Health Center, 2012). The gap is a lack of understanding of nutrition, nutrition labeling, and how foods affect health. The purpose of this project was to develop an education program using the 5 As framework for obesity counseling for APRN's to use in counseling obese patients. The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

Sources of Evidence

The rural health clinic collected data to determine the number of obese patients they treat. The clinic administrator obtained the number of patients with overweight or obese ICD entries for 2016. During a 2-week period in March 2016, 76 patients were seen with a diagnosis of obesity and 46 with a diagnosis of overweight. The medical assistant tracked the height and weight of patients for 2 weeks. A total of 120 patient heights and weights were collected.

The data revealed that 73 females and 47 males were treated during the specific dates. Four people were underweight and 36 were in the normal weight range. Of the 120 people, 26 were identified as overweight, 20 were considered obese, 24 severely obese,

and 10 morbidly obese. The 2-week total of the overweight patients was 66%, with 45% obese.

Participants

The two APRNs working at the clinic were invited to participate via flyer (Appendix B) in the education program. They received education on how to implement the 5 As framework during primary care patient visits with their patients. To protect anonymity, APRN and patient names were not recorded.

Procedures

A timeline plan was set that was convenient to both practitioners and the education program (Appendix C). I delivered the program by a PowerPoint presentation (Appendix D) using handouts. An evaluation form about the 5 As education program was provided to the participants (Appendix F).

Protections

Once the proposal was approved, an IRB application was submitted to Walden University for approval. A letter of cooperation was obtained from the administrator of the clinic and submitted to the IRB. The IRB application was approved on August 31, 2017. The IRB confirmation approval number is 08-31-17-0559240.

Analysis and Synthesis

The purpose of this project was to develop an education program using the 5 As framework for obesity counseling for APRNs to use in counseling obese patients. The practice-focused question was: Will an education program for APRNs on using the 5 As framework for obesity counseling improve their knowledge and skill in counseling their

overweight and obese patients in a rural primary care clinic? Providers participating in the program completed an evaluation form regarding the program at the end of the presentation.

Summary

The purpose of this project was to develop an education program using the 5 As framework for obesity counseling for APRNs to use in counseling obese patients. Although there are only two providers at the clinic, the large population of underserved patients with a diagnosis of overweight or obesity along with comorbid diagnoses made this educational intervention important for the patients seeking medical care at the clinic and for their families who depend on them.

Section 4: Findings and Recommendations

Introduction

The local problem identified for this project was the lack of communication between healthcare providers and the obese patient population. One community reported that 26.5% of the population were obese adults (Cape Girardeau County Public Health Center, 2012). The gap in practice is the lack of education for the patient to understand what is necessary to achieve improved health. The purpose of this project was to educate the APRNs on the use of the 5 As framework for obesity counseling.

Implementation

I met with the two providers of the rural health clinic on September 25, 2017, to determine the date and time of the presentation. The providers requested the information be placed online so they could give the presentation their undivided attention. Audio was added to the presentation and it was e-mailed to each of the providers on September 25, 2017. Printed copies of the presentation and evaluation were supplied September 27, 2017.

The time frame of completion of the presentation and evaluation was established for September 28, 2017. The evaluations were completed by September 29, 2017. The information from the impact evaluations was used to determine the response of the educational presentation. The participants completed an impact evaluation after the educational presentation (Appendix D and Appendix E).

The results of the evaluations indicated the effectiveness of the presentation as it related to the following established learning objectives:

- have a better understanding of improving communication with the overweight/obese population,
- be able to apply motivational interviewing when using the 5 As of assessment,
- understand the nature of the obese population in the community and the importance of promoting the discussion with the overweight/obese patients,
- be able to assess the patient's readiness to change regarding nutritional intake,
- have the knowledge to promote engagement and provide patient counseling so the patient feels invested in the plan,
- skillfully ask appropriate questions about the daily nutritional habits of a patient to promote change,
- be able to provide information and motivation for those trying to lose weight helping them reflect on their own objectives, and
- have the confidence to counsel those not interested in losing weight.

The results of the evaluations will provide input on the need to continue education for healthcare providers who treat the obese population and thereby achieve social change.

Evaluation

An impact evaluation was completed by two APRNs who provide care at a small rural health clinic. Initially, I met with the two providers on September 25, 2017, to determine the date and time of the presentation. As stated earlier, the providers preferred the presentation online. The presentation and evaluation form was sent to the providers via e-mail on September 25, 2017. The providers had three days to access the

presentation and complete the evaluation with the target date for completion on September 28, 2017. I met with the providers to answer any questions and collect the evaluations on September 29, 2017. Comparisons of the evaluations and the results are listed in Tables 4, 5, and 6. Three categories were assessed on the evaluation: the presenter, audience learning experience, and confidence and skill of the participant.

Table 4

Presentation: Caring for Obese Patients: A Nutrition Education Program for APRNs

| Presentation Rating | Excellent | Good | Poor |
|---|-----------|------|------|
| Presentation flowed logically and was clear. | 2 | | |
| Presenter was knowledgeable about subject matter. | 2 | | |
| Presenter was able to respond to questions with confidence and knowledge. | 2 | | |

Table 5

Objective

| Audience learning Rating | Excellent | Good | Poor |
|---|-----------|------|------|
| Have a better understanding of improving communication with the overweight/obese population. | 2 | | |
| Be able to apply motivational interviewing when using the 5 As of assessment. | 2 | | |
| Understand the nature of the obese population in the community and the importance of promoting the discussion with the overweight/obese patients. | 2 | | |

Table 6

Confidence and Skill

| Confidence & Skill rating | Very Confident | Confident | Not Very Confident |
|---|----------------|-----------|--------------------|
| Be able to assess the patient's readiness to change regarding nutrition | 1 | 1 | |
| Have the knowledge to promote engagement and provide patient counseling so the patient feels invested in the plan. | 1 | 1 | |
| Skillfully ask appropriate questions about the daily nutritional habits of a person to promote change. | 1 | 1 | |
| Have the ability to provide motivation for those trying to lose weight. | 1 | 1 | |
| Gain the knowledge to help people struggling with weight loss regain motivation by reflecting on their own objectives | 1 | 1 | |
| Have the confidence to counsel those not interested in losing weight | 1 | | 1 |
| Comments: The presentation was excellent. My ability to gain confidence will take practice at the clinic. It has nothing to do with any lack in the presentation. | | | |

The participants reported they had a better understanding of the reality of the obese population and how they could improve their communication by using the 5 As method of assessment. Both participants reported the presentation was clear and easy to understand and that the presenter was knowledgeable and could answer questions. Even though the participants completed the presentation online, the presenter physically went to the clinic to obtain the evaluations and answer any questions.

According to the evaluations, the providers were confident in their skill to assess a patient's readiness to change and promote engagement when discussing nutrition with patients. They reported increased knowledge to skillfully ask questions about the daily nutritional habits of a person and provide patient counseling to promote change. One provider was very confident, and the other was confident in their abilities to provide

motivation to people who were trying to lose weight. They reported gaining knowledge of how to help people struggling with weight loss. One APRN reported a lack of confidence in counseling people who were not interested in weight loss but indicated they would work to gain the confidence. The other APRN was very confident in her ability to discuss weight issues with patients.

One strength of the project was the amount of literature that supports the implementation of education to providers. Another strength for implementation of the program was the support of the project from the APRNs who worked at the clinic. The limitation was that there were only two APRNs to provide the information and collect feedback. My recommendation is to continue the education to providers about caring for the needs of the obese population using the 5 As approach.

Section 5: Dissemination Plan

Introduction

The results of this project were shared with the owner and providers at the rural health clinic. I will offer a presentation to the leaders of the local healthcare system that is in the umbrella of my employment. Further presentations may emerge as a result of the leadership presentation. The educational project will be disseminated through the ProQuest database.

Analysis of Self

Seeking higher education for self-improvement is a humbling experience but also represents a significant achievement. This educational experience was exceptional for me personally and professionally. From a personal standpoint, this opportunity has challenged me intellectually and fulfilled a life goal. From a professional standpoint, I gained skills in leadership, advanced nursing practice, promoting quality improvement, improving health outcomes, and informing health policy.

Leadership

The practicum experience has strengthened my role as a leader. I have a greater level of confidence in my professional abilities since acquiring the knowledge to apply transformational leadership.

Advanced Nursing Practice

I am not an advanced practice registered nurse practitioner. My nursing background ranges from a licensed practical nurse, associate degree in nursing, bachelor of science degree in nursing, and masters of science in nursing. My masters of science in

nursing specialty is nursing education. By obtaining a DNP degree, I have gained knowledge in healthcare policy and patient advocacy, quality improvement, evidence-based practice, information systems technology, advanced practice, as well as, organization and systems leadership (Walden University, 2017-18).

Promoting Quality Improvement

Before the educational journey, my level of promoting quality improvement was adequate. However, I expanded in proficiency for quality improvement because I was involved in developing and establishing goals to sustain change at an organizational level. It is important to continuously investigate avenues for improvement and provide healthcare care based on best practice (American Association of Colleges of Nursing, 2006).

Improving Health Outcomes

While enrolled as a student at Walden University, I learned how to analyze patient care outcomes from different perspectives. I assumed that everyone provided patient education until I began hearing comments about how the lack of patient education was a national issue. By developing and disseminating this educational project, I can educate APRNs on how to open the uncomfortable conversation of weight with the obese population. The education can be provided through in-services and professional meetings. Being attentive to the needs of the obese person may improve their overall health and quality of life.

Summary

The low number of evaluations from the educational project should not reflect the significance of need to educate APRNs to improve their communication with the obese population. The dissemination of the project to the rural health clinic and leadership at one local hospital will help to educate the providers of the community about the need for improved communication with the obese population. I will also integrate these concepts into teaching my undergraduate students about helping patients address their obesity. This educational project will lead to social change by impacting the community in helping promote the local county's top priority to improve population health (C. G. County Public Health Center, 2012).

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Appendix A: Literature Review Matrix

| Full Reference | Research Method | Main Findings | Strength of Evidence |
|---|---|--|----------------------|
| Agrawal, P., Gupta, K., Mishra, V. & Agrawal, S. (2015). The psychosocial factors related to obesity: A study among overweight, obese, and morbidly obese women in India. <i>Women & Health, 55</i> : 623–645. Retrieved from doi:10.1080/03630242.2015.1039180. | Descriptive study | The study was conducted to examine psychosocial issues of overweight and obese women. Results of the study reveal that three out of four women were overweight and dissatisfied as they participated in their day-to-day activities. The women felt stigmatized and discriminated against because of weight issues. | Level 3 |
| Annesi, J. J., & Johnson, P.H., (2015). Theory-based psychosocial factors that discriminate between weight-loss success and failure over 6 months in women with morbid obesity receiving behavioral treatments. <i>Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity 20</i> (2). Retrieved from doi:10.1007/s40519-014-0159-7. | Descriptive comparative study | This study was conducted to improve success rates of behavioral weight-loss treatments and gain a better understanding of the psychosocial factors that discriminate between weight-loss success and failure. Women with morbid obesity were recruited for a treatment of supported exercise paired with either a cognitive-behavioral or an educational approach to eating change over 6 months. Participants in the cognitive-behavioral nutrition group demonstrated significantly greater improvements in all psychosocial variables and success with weight loss. | Level 3 |
| Barnes, E.R., Theeke, L., Minchau, E. Mallow, J., Lucke-Wold, N., J. & Wampler (2015). Relationships between obesity management and depression management in a university-based family medicine center. <i>Journal of the American Association of Nurse Practitioners, 27</i> , 256–261. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C26&ins_t=7311101921447552140&q=Barnes%2C+E.+R.+Theeke%2C+L.+Minchau%2C+E.+Mallow%2C+J.+Lucke-Wold%2C+N.+Wampler%2C+J.+&btnG | Cross-sectional, quantitative, nonexperimental descriptive, and predictive design | This cross-sectional, quantitative study was conducted in a primary care center by random chart reviews ($N = 240$) and describes the management of Appalachian adults associated with socio-demographics, obesity, and depression. The prevalence of obesity was 48% and significant evidence correlated with depression and elevated BMI. | Level 3 |

| | | | |
|---|---|--|----------------|
| <p>Bays, H. E., Chapman, R. H., & Grandy, S. (2007). The relationship of body mass index to diabetes mellitus, hypertension and dyslipidemia: Comparison of data from two national surveys. <i>International Journal of Clinical Practice</i>, 61(5), 737-747. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1890993/pdf/ijcp0061-0737.pdf</p> | <p>Descriptive Correlational Design</p> | <p>This study was conducted using two surveys to explore the relation between body mass index (BMI) and prevalence of diabetes mellitus, hypertension and dyslipidemia. The first survey, The Survey to Help Improve Early Evaluation and management of risk factors Leading to Diabetes. The second survey, The National Health and Nutrition Examination Surveys (NHANES) was mailed to adults. A total of 127,420 respondents provided information to conclude that Increased BMI was associated with increased prevalence of diabetes mellitus, hypertension and dyslipidemia.</p> | <p>Level 3</p> |
| <p>Befort, C.A., Nazir, N., & Perri, M.G. (2012). Prevalence of obesity among adults from rural and urban areas of the United States: Findings from NHANES (2005–2008). <i>Journal of Rural Health</i>, 28(4), 392–397. Retrieved from doi:10.1111/j.1748-0361.2012.00411.x.</p> | <p>Multistage, stratified, clustered probability design</p> | <p>Befort, Nazir, and Perri, (2012) compared the association of chronic disease of people residing in rural and urban communities. Measurements of height, weight and BMI were taken along with demographics, nutritional intake and physical activity of the participants. The findings indicate residents from a rural community have a higher incidence of chronic disease than residents of urban communities.</p> | <p>Level 3</p> |
| <p>Cha, E. S., Crowe, J. M., Braxter, B. J. & Mowinski Jennings, B. (2016). Understanding how overweight and obese emerging adults make lifestyle choices. Retrieved from https://doi.org/10.1016/j.jp.edn.2016.07.001.</p> | <p>A Cross-Sectional Design</p> | <p>A cross-sectional design was used to understand health-related decisions among overweight and obese emerging adults. The goal of the study was to screen participants' diabetes risk and identify characteristics of emerging adults with prediabetes ($N = 107$). Emerging adults choose unhealthy behaviors due to inaccurate information and insufficient competence to practice healthy lifestyles. Behavioral interventions for emerging adults are needed to help them develop skills to enhance health literacy.</p> | <p>Level 3</p> |
| <p>Costanzo, P., Cleland, J. G. F., Pellicori, P., Clark, A. L., Hepburn, D., Kilpatrick, E. S., Perrone-Filardi, P., Zhang, J., & Atkin, S. L. (2015), The obesity paradox in type 2 diabetes mellitus: Relationship of body mass index to prognosis a cohort study. <i>Annals of Internal Medicine</i>. Retrieved from doi:10.7326/M14-1551</p> | <p>Longitudinal Prospective Cohort Study</p> | <p>A longitudinal prospective cohort study was conducted to find the association between body weight and the prognosis of patients with type 2 diabetes? The results indicate 58 % of the group were men, with a median age of 63 years. People with type 2 diabetes and were overweight or obese had a higher risk of hospitalization for cardiac related issues.</p> | <p>Level 3</p> |

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| <p>Farrell, K. (2008). Chronic disease self-management program (CDSMP) impacts perceived health status for underserved rural clients. <i>Southern Online Journal of Nursing Research</i>, 8(3), 1-11.</p> | <p>A quasi-experimental pre-test, post-test design.</p> | <p>A study was conducted to determine whether participation in a Chronic Disease Self-Management Program (CDSMP) would improve outcomes for the underserved population in a rural clinic. Forty-eight participants completed a pretest and posttest after education of an intervention. Significant improvements were noted in response of education of health issues.</p> | <p>Level 3</p> |
| <p>Faulconbridge, L.F., Wadden, T.A., Berkowitz, R.I., Pulcini, M.E., & Treadwell, T. (2011). Treatment of comorbid obesity and major depressive disorder: A prospective pilot study for their combined treatment. <i>Journal of obesity</i>, vol.2011. doi:10.1155/2011/870385.</p> | <p>Descriptive Prospective Pilot Experimental Study</p> | <p>The purpose of the descriptive study was to look at effectiveness of the combining behavioral weight management with cognitive behavioral therapy (CBT) for obese adults who have depression. Twelve obese females that were diagnosed with major depressive disorder participated in the study. After 16 weeks of attending weekly behavioral and cognitive management meetings the results indicated participants lost 11.4% of their weight and with significant improvements in the symptoms of depression.</p> | <p>Level 2</p> |
| <p>Fitzpatrick, S. L., & Stevens, V.J., (2017). Adult obesity management in primary care, 2008–2013. <i>Preventive Medicine</i> 99 128–133. Retrieved from https://doi.org/10.1016/j.ypmed.2017.02.020.pdf.</p> | <p>The National Ambulatory Medical Care Survey (NAMCS) conducted a multistage probability sampling design, cross-sectional survey to collect information about ambulatory care in the U.S.</p> | <p>This study was conducted to determine the occurrence of weight management counselling based on BMI, diagnosis a diagnosis of obesity from 2008 to 2013. Despite recommendations for weight management counselling from primary providers there continues to be a 10 decline. The finding was 73% of patients were obese with only 30% having a diagnosis reflecting the weight. Even with the 2008 recommendations for weight reform obesity management is suboptimal.</p> | <p>Level 3</p> |
| <p>Hageman, P.A. Pullen, C.H., Hertzog, M., Boeckner, L.S., & Noble-Walker, S., (2012). Associations of cardiorespiratory fitness and fatness with metabolic syndrome in rural women with prehypertension. <i>Journal of obesity</i>. doi:10.1155/2012/61878</p> | <p>Descriptive Cross-sectional study</p> | <p>An investigative study was conducted to determine the correlation of fitness and fatness of (n=289) women who have metabolic syndrome in a rural community. The hierarchical logistic regression model (HLRM) indicated in the rural community ninety (31%) participants had metabolic syndrome, 70% had a BMI (≥ 30 kg/m²), and 100% had increased body fat.</p> | <p>Level 3</p> |

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| <p>Hill, J. L., You, W., & Zoellner-Hill, J. M. (2014). Disparities in obesity among rural and urban residents in a health disparate region. <i>Biomedical Public Health (BMC)</i>, 14, Retrieved from http://bmcpubhealth.biomedcentral.com/articles/10.1186/1471-2458-14-1051.</p> | <p>Correlational descriptive design</p> | <p>A descriptive study was conducted to compare the intake of fruits and vegetables and physical activity of obese people in a rural region. The information was collected from ($N = 784$) via telephone survey. The Linear, logistic and quantile regression models were used to determine results. The majority (72%) of respondents were overweight with 29% being obese. Only 9% of residents met recommendations for fruits and vegetables intake and 38% met recommendations for physical activity.</p> | <p>Level 3</p> |
| <p>Horn, D. B (2016). Customizing obesity treatments. <i>Bariatric Times</i>. Retrieved from http://eds.b.ebscohost.com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=3&sid=bc13bc1b-f571-4047-a990-1acec3654ab9%40sessionmgr120&hid=122.</p> | <p>Expert opinion</p> | <p>There are four main domains of obesity treatment.</p> <ul style="list-style-type: none"> • The first domain is intensive lifestyle intervention (ILI). • The second domain, pharmacotherapy. • The third domain is procedures. • Finally, the fourth domain is bariatric surgery <p>All domains involve ILI, and considered before consideration of bariatric surgery.</p> | <p>Level 4</p> |
| <p>Jay, M., Gillespie, C., Schlair, S., Scott Sherman, S., & Kalet, A. (2010). Research article Physicians' use of the 5 A's in counseling obese patients: is the quality of counseling associated with patients' motivation and intention to lose weight? <i>Biomed Central (BMC) Health Services Research</i>, 10 (159). Retrieved from http://www.biomedcentral.com/1472-6963/10/159</p> | <p>Cross sectional study</p> | <p>This study was conducted to describe the quality of obesity counselling from providers as well as determine the association of counselling to patient motivation. Surveys were provided to patients after their office visit. The physician's use of 5 A's counseling techniques, patient-centeredness and motivation to lose weight were assessed. A total of 137 patients of 23 physicians reported 85% were counselled on their weight. Upon further investigation physicians used only a mean of 5.3 ($SD = 4.6$) of 18 possible for the 5 A's counseling practices. The patients reporting higher motivation received more 5 A's counseling techniques than those with lower levels. Patient centeredness was also positively associated with intentions improve activity and nutrition.</p> | <p>Level 3</p> |
| <p>Johns, D.J., Hartmann-Boyce, J., Jebb, S. A., & Aveyard, P. (2014). Diet or exercise interventions vs combined behavioral weight management programs: A systematic review and meta-analysis of direct comparisons. <i>Journal of the Academy of Nutrition and Dietetics</i>. Retrieved from https://doi.org/10.1016/j.jand.2014.07.005.</p> | <p>A Systematic Review and Meta-Analysis Study</p> | <p>A comparative study was conducted to examine the clinical effectiveness of combined behavioral weight management programs (BWMPs) targeting weight loss in comparison to single component programs of 1,022 participants. Pooled results showed significantly greater weight loss in the combined BWMPs at 3 to 6 months and 12 to 18 months.</p> | <p>Level 1</p> |

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| <p>Nammi, S., Koka1, S., Chinnala, K.M., & Boini1, K.M. (2004). Obesity: An overview on its current perspectives and treatment options. <i>Nutrition Journal</i> 3(3). Retrieved from https:// nutritionj. Biomed central.com/ articles/ 10.11 86/1475-2891-3-3.</p> | <p>Expert Opinion</p> | <p>The article explains various treatment options for the management of obesity, which requires a comprehensive range of strategies.</p> | <p>Level 4</p> |
| <p>Osunlana, A.M., Asselin, J., Anderson, R., Ogunleye, A. A., Cave, A., Sharma, A. M., & Campbell-Scherer, D. L. (2015). 5 A's Team obesity intervention in primary care: development and evaluation of shared decision-making weight management tools. <i>Clinical Obesity</i>, 5. doi:10. 1111/ cob. 12105.</p> | <p>Randomized controlled trial with mixed method evaluation</p> | <p>This descriptive study was conducted to develop and evaluate a 5 A's development tool in hope of filling the gap regarding weight loss counselling. The 5 A's tool development consisted of a collaborative team effort and occurred through a practice/implementation-oriented, process. During this process, 12 tools were developed and evaluated. Key findings from the study were the need for: tools that were adaptive, tools to facilitate interdisciplinary practice, tools to help patients understand realistic expectations for weight loss and shared decision-making tools for goal setting and relapse prevention.</p> | <p>Level 2</p> |
| <p>Schauer, G.L., Woodruff, R. C., Hotz, J., & Kegler, M. C. (2014). Provider perspectives: A qualitative inquiry about weight counseling practices in community health centers. <i>Patient Education and Counseling</i> 97, 82–87. doi:10.1016/j. pec.2014. 05.026</p> | <p>Qualitative (semi-structured interviews)</p> | <p>Interviews were completed for 31 health care providers about how they discuss weight and a treatment regimen. The providers indicated they discuss weight issues with established patients, with patients who have conditions related to being overweight, and people who have weight changes since a previous visit. The providers educate patients about nutrition experientially. The education consisted of brochures, pre-existing weight programs and online resources. Recommendations for future education are to offer evidence-based practice approaches for weight counselling.</p> | <p>Level 3</p> |
| <p>Schlair, S., Moore, S., McMacken, M., & Jay, M. (2012). How to Deliver High-Quality Obesity Counseling in Primary Care Using the 5 A's Framework. <i>Journal of Clinical Outcomes and Management (JCOM)</i>, 19(5). Retrieved from, https://www .researchgate.net/ publication/233844370_How_to _deliver_high_quality_obesity_c ounseling_using_the_5As_frame work.</p> | <p>Review of literature</p> | <p>This study was completed to review content of the 5 A's of obesity counseling for providers and develop strategies for working in a typical 20-minute visit. The 5 A's (Assess, Advise, Agree, Assist, Arrange) is an evidence-based, behavior-change counseling framework endorsed by the Centers for Medicare and Medicaid Services and the United States Preventive Services Task Force. The 5 A's framework has made a positive impact for smoking cessation and should be considered (with adaptation) for weight loss.</p> | <p>Level 1</p> |

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|---|---------------------------------------|--|----------------|
| <p>Swift, J. A., Choi, E., Puhl, R. M., & Glazebrook, C. (2012). Talking about obesity with clients: Preferred terms and communication styles of UK pre-registration dietitians, doctors, and nurses. <i>Patient Education and Counseling</i> 91, 186–191 Retrieved from http://ac.els-cdn.com/S0738399112005216/1-s2.0-S0738399112005216-main.pdf?_tid=48bf9672-20e5-11e7-911e-00000aacb360&acdnat=1492155659_8923c08bae69d53af9fd4f00ff94fdb6.</p> | <p>Correlational Study Design</p> | <p>A study was conducted by means of a survey. The participants were ($N = 1036$) dietitians, doctors and nurses. The variables were about patient demographics, preferred terms, and comfort initiating discussion about weight issues of patients. Fifty-eight of the providers felt confident and 95% of reported training would be beneficial when discussing weight issues with the patients.</p> | <p>Level 3</p> |
| <p>Werrija, M. Q., Anita Jansen, A., Mulkens, S., Elgersma, H. J., Amenta, A. & Hospers H. J., (2009). Adding cognitive therapy to dietetic treatment is associated with less relapse in obesity. <i>Journal of psychosomatic research</i> 67, 315–324. Retrieved from http://www.jpsychores.com/article/S0022-3999(09)00002-6/abstract?cc=y=a.</p> | <p>Event Partitioning Design</p> | <p>A study was conducted of 204 overweight and obese participants to determine if the addition of cognitive therapy to a standard dietetic treatment plan for obesity would prevent relapse? Even though both modalities were successful, the cognitive dietetic treatment was significantly superior to the exercise and dietetic treatment especially in the maintenance phase.</p> | <p>Level 3</p> |
| <p>Wing, R.R., Lang, W., Wadden, T. A., Safford, M., Knowler, W. C., Bertoni, A.G., ... Wagenknecht, L. (2011). Benefits of modest weight loss in improving cardiovascular risk factors in overweight and obese individuals with type 2 diabetes. <i>Diabetes Care</i>, 34. Retrieved from doi:10.2337/dc10-2415.</p> | <p>Predictive Observational study</p> | <p>This observational study was conducted to substantiate the recommendation that overweight and obese individuals should lose 5–10% of their body weight to improve their risk of cardiovascular disease (CVD). The results were significant of weight loss and improved health.</p> | <p>Level 3</p> |
| <p>Wood, G. (2005). Health literacy in a rural clinic. <i>Journal of Rural Nursing and Health Care</i>, 5(1). Retrieved from http://rnojournal.binghamton.edu/index.php/RNO/article/view/187.</p> | <p>Descriptive study</p> | <p>The assessment of health literacy of patients who visit rural health clinics was examined. Trained nursing students used the Rapid Estimate of Adult Literacy in Medicine (REALM) test to collect data from 57 participants. The findings indicated 50% of the sample could read at a high school level while six participants read at or below the sixth-grade level. Therefore, literacy barriers exist of patients that seek care from rural health clinics.</p> | <p>Level 3</p> |

| | | | |
|---|---|--|----------------|
| <p>Woodruff, R. C., Schauer, G. L., Addison, A. R., Gehlot, A., & Kegler, M. C. (2016). Barriers to weight loss among community health center patients: qualitative insights from primary care providers. <i>BMC Obesity</i>. Retrieved from https://bmcobes.biomedcentral.com/articles/10.1186/s40608-016-0123-3.</p> | <p>Semi-structured study conducted by interviews.</p> | <p>A semi-structured in-depth study was conducted by interviews to identify weight related barriers and interventions of thirty physicians, physician assistants, and nurse practitioners. The providers perceived barriers exist on different levels (individual, interpersonal and community) that affect weight loss. The providers believe the existing barriers may be the reason for the lack of provisions of weight counselling.</p> | <p>Level 3</p> |
| <p>Xiang X., & An, R. (2014). Obesity and onset of depression among U.S. middle-aged and older adults. <i>Journal of Psychosomatic Research</i>. Retrieved from https://doi.org/10.1016/j.jpsychores.2014.12.008.</p> | <p>A Longitudinal health and retirement study</p> | <p>A health and retirement study was conducted from 1994 to 2010 of 6514 community dwelling adults to assess the relationship between obesity and depression. The results indicated when compared with people of a normal weight range to people who are overweight and obese there was significant probability of depressive symptoms.</p> | <p>Level 3</p> |

Appendix B: In-service Flyer

Appendix B: In-service Flyer



Join Mrs. Kathy L. Wilson

For an Educational In-service

Topic:

Caring for Obese Patients: Obesity

Counseling Using the 5A's Framework

Date: TBD (dependent on proposal)

Time: TBD



Appendix C: Timeline for Obesity Counseling Using the 5 As Framework

September 25, 2017, contact the administrator at the rural health clinic to schedule a date for the educational in-service.

September 26, 2017, print and post flyers at the rural health clinic about the educational in-service.

September 1-25, 2017, develop a PowerPoint presentation for the educational in-service.

September 27, 2017, make copies of handouts and evaluation.

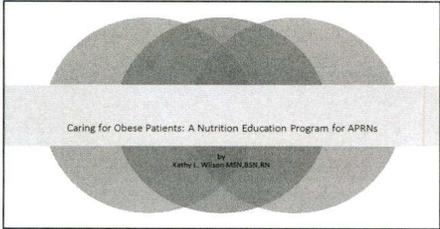
September 28, 2017, present the educational information.

September 28, 2017 Provide and collect the audience evaluations.

Appendix D: Caring for Obese Patients: A Nutrition Education Program for APRNs

Presentation

9/26/2017



Caring for Obese Patients: A Nutrition Education Program for APRNs

by
Kathy L. Wilson MSN, RN, BC

The obesity Epidemic

- An estimated 67 million adults are identified as overweight or obese (CDC, 2013).
- In the U.S., 78.6 million of the adult population is obese (Flegal, Carroll, Kit, & Flegal, 2014).
- Missouri is ranked as the 16th highest state with the obese adult in 2004. (Agresti, Carroll, Kit, & Flegal, 2014).
- The local county's community health analysis report (2012) indicated an increase in the obese population reporting 25.39% are overweight, and 26.5% are obese adults. (C.G. County Public Health Center, 2012).
- One rural health clinic collected data over a two week time period and determined a total of the overweight patients was 66% and 45% were obese.



Overview

Obesity is a major U.S. public health epidemic. One county in lower mid-west region of the United States is concerned with the increasing obese population and making it a priority to promote measures that improve health in the community.

An identified nursing practice gap is the lack of obesity counseling with these patients.

The practice-focused question is: Will an education program for APRNs on using the SA's Framework for Obesity Counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

The purpose of this doctoral quality improvement project has potential to address the current nursing practice gap and impact social change by improving health care education. Knowledge adult learning theory the SA's Framework for obesity counseling will be used to develop this education project.

Gap in practice

Patients are not taught about weight loss.

Providers do not understand how to integrate weight loss discussions into office visit.

Objective: By the end of the presentation the audience will:

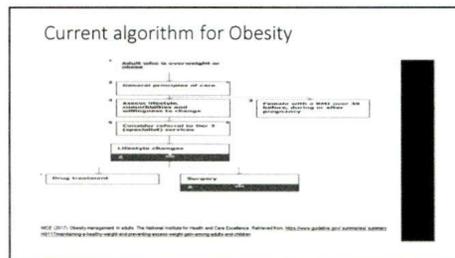
| | |
|------|---|
| 1.01 | Have a better understanding of internal communication with the overweight/obese population. |
| 1.02 | Be able to apply motivational interviewing when using the 7x of assessment. |
| 1.03 | Understand the nature of the obese population in the community and the importance of assessing the provider with the overweight/obese patients. |
| 1.04 | Be able to assess the patient's readiness to change regarding nutrition. |
| 1.05 | Have the knowledge to counsel, negotiate and provide patient counseling on the subject that resulted in the gap. |
| 1.06 | Identify and appropriate questions about the daily nutrition habits of a person to promote change. |
| 1.07 | Have the ability to provide resources for counseling to lose weight. |
| 1.08 | Have the knowledge to help assess if weight loss might be a region indicator for affecting on their own objectives. |
| 1.09 | Have the confidence to counsel those not interested in losing weight. |

Question

- Will an education program to APRNs on using the SA's Framework for Obesity Counseling improve their knowledge and skill in counseling their overweight and obese patients in a rural primary care clinic?

Purpose

- To educate the APRNs in a rural clinic on the use of the 5A's Framework for obesity counseling.



5 A's Assessment Technique for Behavioral Change

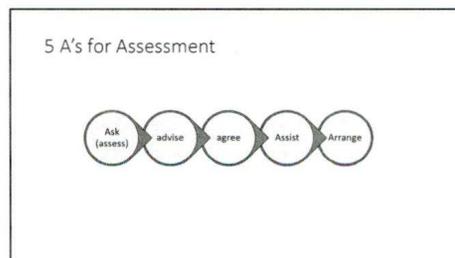
The 5 A' approach is an evidence-based, behavior-change counseling framework endorsed by the Centers for Medicare and Medicaid Services and the United States Preventive Services Task Force that is emerging as a common method providers use when caring for patients.

5 A's Approach

Source: Finkelstein, David, David, Shuman, Barbara, Lina, Salari, Corbin, Behrens, Greg, Harrell, Robert, Stewart & Alexander, 2016 & Schlar Moore, McMacken, Jay, 2012, p. 221.

FOCUS

- The 5 A's framework will provide a platform for the provider to use to "assess risk and readiness to change, advise specific behavior changes, agree on specific goals in a collaborative manner, assist via addressing barriers (motivational interviewing), and arrange to follow-up or refer the patient for further treatment", (Schlar Moore, McMacken, Jay, 2012, p. 221).



9/26/2017

5 A's

The APN will establish rapport to discuss and provide empathy about the patient health related issues.

The APN will ask the patient if they are thinking about pursuing a change and assist organization.

The APN will ask the patient if they have a thought regarding their weight loss. The APN will develop strategies for assisting the patient to establish their goals for success.

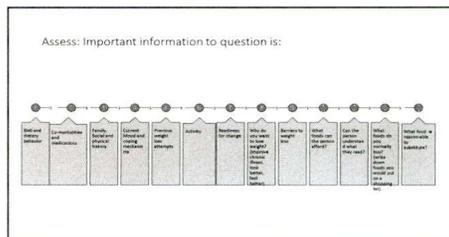
The APN will assess readiness for change by asking the patient to rate their readiness for change on a scale of 1-10, with 10 being high.

In collaboration with the APN will engage with the patient to discuss the focus of the weight loss plan by asking them what they want to change. Do not make nutritional changes or one time to assist establishing the plan.

Once the patient reports the APN will identify ambivalence and "roll with resistance" to promote support and encouragement. Encourage and "roll with resistance" that will "keep weight" their own personal motivation that will lead to long term success.

The APN will assist with motivational statements by offering the focus. For example, when the patient identifies ambivalence regarding the goal to identify possible.

The APN will use reflective by reviewing the patient of their goal to handle resistance (Barnes, 2006).



Advise

Advise the patient of the consequences of not changing their behavior.

The APN will provide the patient with the following information:

- Explain the consequences of not changing their behavior.
- Explain the consequences of changing their behavior.
- Explain the consequences of not changing their behavior.
- Explain the consequences of changing their behavior.

Agree

1. Establish nutritional goals based on the patient's past experiences.
2. The APN should determine if the patient's goals are realistic. Make sure the goals are realistic, measurable, achievable, and specific.
3. The APN will clearly define on the patient's behavior change plan. The APN will give the patient information based on the goals.
4. The APN and patient will agree on a follow-up appointment date to evaluate the plan.

For example, a goal may be: The patient will lose 2 pounds per week for a total of 8 pounds by one month from today.

Assist

From previous steps using motivational interviewing the APN will help the patient articulate their reason for wanting to lose weight. Once the patient self-identifies their reason for improvement they can identify and address barriers that may impede their goal.

The APN will empathetically assist the patient in the following tasks:

| | |
|--|--|
| Identify a supporting team. | Identify a supporting team. |
| Address barriers to change. | Address barriers to change. |
| Identify the patient's ability to support success. | Identify the patient's ability to support success. |
| Discuss support services such as group therapy, exercise group or website. | Discuss support services such as group therapy, exercise group or website. |
| Provide motivation. | Provide motivation. |
| Refer to services, support or department. | Refer to services, support or department. |

Arrange

By understanding the reasons for change, goals and barriers the patient and APN can collaborate on measures that promote positive outcomes. The plan will be re-evaluated during office visits to determine if they need revised or if a referral is appropriate.

The types of measures that fall in the "arrange" category are:

- Arrange any plan.
- Arrange any plan.
- Refer to the patient's support system.

5 A's of Obesity Management

<https://www.youtube.com/watch?v=CDjnYTKiaY>

Motivational Interviewing

"a therapeutic style intended to help clinicians work with patients to address the patient's fluctuation between opposing behaviors and thoughts."

Source: Miller and Rollnick, *Motivational Interviewing* 1991.



Motivational Interviewing

Barnes and Ivizaj (2014, p.304) wrote, "Motivational interviewing (MI) is a client-centered method of intervention focused on enhancing intrinsic motivation and behavior change".

It is a way to open the channel of communication and help patients identify and understand the need for change.

By asking open-ended questions, MI promotes engagement between the obese patient and the provider that leads to an individualized realistic plan (Asian Oceanian Association for the Study of Obesity, 2015).

Principles of Motivational Interviewing

| | | | | |
|-----------------------------|---------------------------|---------------------------|----------------------------|-----------------------------|
| 01 Expression of empathy | 02 Develop discrepancy | 03 Avoid argumentation | 04 Roll with resistance | 05 Support self-efficacy |
|-----------------------------|---------------------------|---------------------------|----------------------------|-----------------------------|

Kumar, Srivastava, Srivastava, Kumar, & Gupta, 2016.

Eight Steps of Motivational Interviewing

| | | | | | | | |
|--------------|--------------|--------------------------|---------------------------|-----------------------------|--------------------------------------|------------|---------------|
| 01 Engage | 02 Assess | 03 Elicit change talk | 04 Develop discrepancy | 05 Support self-efficacy | 06 Elicit and support change talk | 07 Plan | 08 Achieve |
|--------------|--------------|--------------------------|---------------------------|-----------------------------|--------------------------------------|------------|---------------|

Bundy, 2004, Miller & Rollnick, 1991.

MOTIVATIONAL INTERVIEWING

<https://www.youtube.com/watch?v=Egb2mHhrUTM>

Appendix E: Skills and Confidence for Obesity Education Counselling Tool

Presentation Evaluation Form

Presenter Name: Kathy L. Wilson

Date _____

| Instructions: Please rate your obesity counseling skills and confidence by circling one of the choices for each. Obesity counseling skills values range from excellent, good or, poor. | Evaluation |
|---|---|
| Presentation: | |
| 1. Presentation flowed logically and was clear. | Excellent Good Poor |
| 2. Presenter was knowledgeable about subject matter. | Excellent Good Poor |
| 3. Presenter able to respond to questions with confidence and knowledge. | Excellent Good Poor |
| Objective: By the end of the presentation the audience will: | |
| 4. Have a better understanding of improving communication with the overweight/obese population. | Excellent Good Poor |
| 5. Be able to apply motivational interviewing when using the 5 A's of assessment | Excellent Good Poor |
| 6. Understand the nature of the obese population in the community and the importance of promoting the discussion with the overweight/ obese patients | Excellent Good Poor |
| Confidence & Skill: By the end of the presentation the audience will: | |
| 7. Be able to assess the patient's readiness to change regarding nutrition | Very Confident Confident Not very confident |
| 8. Have the knowledge to promote engagement and provide patient counseling so the patient feels invested in the plan. | Very Confident Confident Not very confident |
| 9. Skillfully ask appropriate questions about the daily nutritional habits of a person to promote change | Very Confident Confident Not very confident |

| | |
|---|---|
| 10. Could provide motivation for those trying to lose weight. | Very Confident Confident Not very confident |
| 11. Gain the knowledge to help people struggling with weight loss regain motivation by reflecting on their own objectives | Very Confident Confident Not very confident |
| 12. Have the confidence to counsel those not interested in losing weight | Very Confident Confident Not very confident |

Cont.

Comments _____:

Adapted template from, <https://www.poptemplate.com/download/presentation-evaluation-form-1.html>
Downloaded from <http://www.tidyforms.com>

Appendix F: Completed Evaluation Forms

Presentation Evaluation Form

Presenter Name: Kathy L. Wilson Date: 9-28-2017

Directions: Please rate your ability regarding skills and confidence by checking one of the options in each column concerning skills versus target level achieved. Good or poor.

| Expectation: | Evaluation |
|--|--|
| 1. Presentation flowed logically and was clear | Very Confident Confident Good Fair Poor |
| 2. Presenter was knowledgeable about subject matter | Very Confident Confident Good Fair Poor |
| 3. Presenter able to respond to questions with confidence and knowledge | Very Confident Confident Good Fair Poor |
| Objectives: By the end of the presentation the audience will | |
| 4. Have a better understanding of recognizing communication with the overweight/obese population | Very Confident Confident Good Fair Poor |
| 5. Be able to apply motivational interviewing when using the 5 A's of assessment | Very Confident Confident Good Fair Poor |
| 6. Understand the status of the obese population in the community and the importance of providing the discussion with the overweight/obese patient | Very Confident Confident Good Fair Poor |
| Confidence & Skills: By the end of the presentation the audience will | |
| 7. Be able to assess the patient's readiness to change regarding nutrition | Very Confident Confident Good Fair Poor |
| 8. Have the knowledge to promote engagement and provide patient counseling to the patient based assessed in the plan | Very Confident Confident Good Fair Poor |
| 9. Skillfully ask appropriate questions about the daily nutritional habits of a patient to promote change | Very Confident Confident Good Fair Poor |
| 10. Have the ability to provide motivation for those trying to lose weight | Very Confident Confident Good Fair Poor |
| 11. Have the knowledge to help people struggling with weight loss agree to treatment by reflecting on their own objectives | Very Confident Confident Good Fair Poor |
| 12. Have the confidence to correct those not interested in losing weight | Very Confident Confident Good Fair Poor |

Cont.

Overall the presentation was excellent. My ability to gain confidence will take practice at the clinic. It was nothing to do with any lack in the presentation.

EVALUATION FORM

Presenter Name: Kathy L. Wilson Date 9/28/17

Instructions: Please rate your obesity counseling skills and confidence by circling one of the choices for each. Obesity counseling skills values range from excellent, good or, poor

| | Evaluation |
|---|--|
| Presentation: | |
| 1. Presentation flowed logically and was clear. | <u>Excellent</u> Good Poor |
| 2. Presenter was knowledgeable about subject matter. | <u>Excellent</u> Good Poor |
| 3. Presenter able to respond to questions with confidence and knowledge. | <u>Excellent</u> Good Poor |
| Objective: By the end of the presentation the audience will | |
| 4. Have a better understanding of improving communication with the overweight/obese population. | <u>Excellent</u> Good Poor |
| 5. Be able to apply motivational interviewing when using the 5 A's of assessment. | <u>Excellent</u> Good Poor |
| 6. Understand the nature of the obese population in the community and the importance of promoting the discussion with the overweight/ obese patients. | <u>Excellent</u> Good Poor |
| Confidence & Skill: By the end of the presentation the audience will | |
| 7. Be able to assess the patient's readiness to change regarding nutrition. | <u>Very Confident</u> Confident Not very confident |
| 8. Have the knowledge to promote engagement and provide patient counseling so the patient feels invested in the plan. | <u>Very Confident</u> Confident Not very confident |
| 9. Skillfully ask appropriate questions about the daily nutritional habits of a person to promote change. | <u>Very Confident</u> Confident Not very confident |
| 10. Have the ability to provide motivation for those trying to lose weight. | <u>Very Confident</u> Confident Not very confident |
| 11. Give the knowledge to help people struggling with weight loss regain motivation by reflecting on their own objectives. | <u>Very Confident</u> Confident Not very confident |
| 12. Have the confidence to counsel those not interested in losing weight. | <u>Very Confident</u> Confident Not very confident |

Cont.

Comments Very helpful presentation.