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Walden University

College of Health Sciences

This is to certify that the doctoral study by

Karen Baumann

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Walden University 2016

Abstract

Needs Assessment for a Lifestyle Intervention Weight Loss Program for Hospital

Employees

by

Karen Baumann

MSN, Grand Canyon University, 2012

BSN, Grand Canyon University, 2008

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

May 2017

Abstract

The rate of obesity is increasing in the United States. In Florida, almost 60% of the population will be obese by 2030. This increase is expected to contribute to millions of cases of preventable chronic diseases costing the state an estimated \$34 billion dollars. Employer-sponsored health programs can positively influence employees' lifestyle choices and support weight loss programs to reduce health-related costs to the employee and the employer. Guided by the transtheoretical model, the purpose of the project was to conduct an employee assessment to determine the need for, interest in, and readiness for a lifestyle intervention weight loss program. One-hundred sixteen employees from a participant pool of 1,500 employees of a community hospital completed an online survey by providing information on age, weight, gender, body mass index, and exercise patterns. They also answered the 36-item University of Rhode Island Change Assessment Scale to determine readiness for participating in the workplace-based Group Lifestyle Balance program. Data were summarized using descriptive statistics; 52% of respondents were between 26 and 55 years of age and 44% of respondents were obese. Scores on the Change Assessment Scale revealed that 46.4% (n = 54) of the respondents were thinking about making a lifestyle change within the next 6 months. The findings indicated that many hospital employees were in the contemplation stage of readiness for change and they were receptive to additional information about the weight loss program. The needs assessment was the first step toward establishing community-level social change, starting with hospital employees, to decrease obesity and improve population health.

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Dedication

I would like to dedicate this work to my husband, Ron Baumann. You have been right there for me, even when I did not think I could keep going, you whispered to me that I could. I love you!

To my parents, who taught me about determination, to believe in myself even in the darkest of hours, "you cannot see where you are going if you have tears in your eyes."

I miss you both very much.

My daughter, Emily, thank you for all your help with editing and support, you warm my heart.

To Mariellen, who without her friendship I would have no direction.

My angel, Dr. Carla Degges, DNP, you were not supposed to leave me so soon, but I know God had other plans for you. You will forever be in my heart.

Acknowledgments

I would like to acknowledge Dr. Sue Ellen Bell for helping me pull this together and my committee, Dr. Eileen Fowles and Dr. Anna Valdez, for your direction. I would also like to thank Rosemary Luquire, PhD, RN, FAAN, NEA-BC, Senior Vice-President Corporate Chief Nursing Officer of Baylor, Scott, and White, for encouraging her nurses to set high expectations and to exceed them.

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Section 1: Nature of the Project

Introduction

The rate of obesity and people who are overweight in the United States population is increasing (Centers for Disease Control and Prevention [CDC], 2014a). To address the obesity epidemic, in this Doctor of Nursing Practice (DNP) project I looked at obesity at the local community hospital level. Healthiest Weight Florida (2015) reported that in 2013, 36% of Floridians are at healthy weight; by 2030, almost 60% of the population will be obese. This increase is expected to contribute to millions of cases of preventable chronic diseases costing Florida an estimated \$34 billion (Healthiest Weight Florida, 2015). Improving dietary intake and increasing exercise can reduce the risk of developing serious health conditions such as diabetes, cardiovascular disease, and certain cancers (Centers for Disease Control and Prevention [CDC], 2014a) A suggested course of action would be to start with employers to help their employees identify and create a positive impact on health, such as improved energy, sleep, self-esteem, psychological health, and decreased health care costs (Centers for Disease Control and Prevention [CDCa], 2014; Healthiest Weight Florida, 2015).

At the time of the study, 55.33% of the employees of the local community hospital study site had a body mass index (BMI) greater than 30, which is a measure of body fat based on height and weight defined as obese by the National Institutes of Health (NIH; 2016). The state of Florida's obesity rate is 62.8% (Health Council of Southeast Florida, 2015). Obesity is a chronic disease that leads to Type 2 diabetes, cardiovascular disease, and metabolic syndrome (Centers for Disease Control and Prevention [CDCa],

2014). Obesity coexists with body image issues, depression, and lack of quality of life (NIH, 2016). The project, when implemented, will involve hospital staff in a program to decrease weight and provide methods for health self-efficacy. The project implications for positive social change include increased knowledge to adapt effective strategies that contribute to weight reduction and personal success in weight loss maintenance that, in turn, can inform the education provided to patients on the topic. Healthcare professionals are viewed as role models, and therefore, nurses need to know how to take better care of their own health. An employer-based weight loss program can enhance nurses' image as health role models for the community.

Problem Statement

The problem that I addressed in this project was the number of overweight and obese staff members at a community hospital in Florida. The setting for this project was a not-for-profit community hospital with 401 licensed beds and 1,500 employees. During my practicum experience, I conducted a walking observational survey of nursing at varying times and noted that many employees appeared to be overweight to obese. This led me to have a conversation with the employee health nurse who conducts an annual health screening of the employees, and they reported that the BMI information had not been collected. After our conversation, the employee health nurse started tracking BMIs on the remaining 830 employees who came in for their health screening. The BMIs were collected for her information only. After tracking the BMI of employees, she shared that there was a high rate of obesity in this employee group.

The community in which the hospital serves comprises 65% of Palm Beach County, which has a total population of 1,339,221 (Health Council of Southeast Florida, 2015). Palm Beach County has the highest per capita income, due to the number of retired millionaires and billionaires that have located here from mostly the East Coast (Health Council of Southeast Florida, 2015). Over one-fifth (21.9%) of the residents are 65 years are older, over three-quarters (75.8%) of the population are Caucasian, and 19.5% of the residents identify as Hispanic (Health Council of Southeast Florida, 2015). Approximately 30.0% of the residents speak a language other than English, and over 14.5% of the population lives at or below the poverty level with household incomes of less than \$32,858 which is \$6,622.00 greater than the state mean (Health Council of Southeast Florida, 2015). The rate of obesity among adults in Palm Beach County is 60.1% (Health Council of Southeast Florida, 2015). Nearly 1 in 4 high school students (24.8%) were overweight or obese in 2013, 30.5% of whom were African American (non-Hispanic) and 28.0% of whom were Hispanic (Health Council of Southeast Florida, 2015).

Purpose

The purpose of this project was to conduct a needs assessment of employee health status (gender, age, BMI, exercise patterns, and interest in a weight loss program) and to develop an implementation and evaluation plan for an employee weight loss program based on the adaptation of the University of Pittsburgh and the NIH's Diabetes Prevention Program (DPP), which is called Group Lifestyle Balance (GLB; University of Pittsburgh, 2011). The lifestyle intervention program will be used to help employees

make incremental lifestyle changes aimed at weight reduction and subsequent weight loss maintenance. I conducted the project to answer the questions. What is the rate of obesity and overweight among employees at the community hospital? What are the current dietary and exercise patterns of the employees? What are the best practices for developing a program to initiate and sustain weight loss among hospital employees?

DNP-prepared nurses need to be able to explore, define, quantify, engage, and implement processes to improve the health of the population they serve. This project was a developmental and planning project and aligned with the American Association of Colleges of Nursing (AACN) Essentials for Doctor of Nursing Practice Education (2006). The essentials that were addressed in this project were Essential 3: Clinical scholarship and evidence-based practice and Essential 7: Clinical prevention and population health for improving the nation's health. As described in Zaccagnini and Waud White (2011), Essential 3 is defined as "activities that move the profession of nursing, are creative, can be documented, can be elaborated upon, and can be peer-reviewed through various methods" p. 63).

Essential 7 addresses the issue of clinical prevention and population health for improving the nation's health and population health for improving the nation's health.

Nash, Reifsnyder, Fabius, and Pracilio (2011) defined population health as a "cohesive, integrated, and comprehensive approach to health care that considers the distribution of health outcomes within a population" (p. 4). Population health programs will be evolving as health care management groups continue to develop and influence the targeted population.

I designed this project to promote an environment of wellness and offer a lifestyle intervention program to prevent or delay diabetes or other comorbid conditions. I used the GLB program that is a "comprehensive lifestyle behavior change program directly adapted from the successful lifestyle intervention used in the National Institutes of Health Funded Diabetes Prevention Program (DPP)" (University of Pittsburgh, 2011, para. 1), The difference between the DPP and the GLB is that the DPP is an individual-based intervention and the GLB is a group-based intervention with a behavioral focus. This program has shown to be effective in lifestyle changes and to reduce health factors, such as diabetes and cardiovascular disease (University of Pittsburgh, 2011, para. 1).

Frameworks for the Project

The theory upon which the project was based was the transtheoretical model (TTM), described as the stages of change model (Prochaska et al., 2008). The TTM, developed by Prochaska and DiClemente in the 1970s, has six stages: precontemplation, contemplation, preparation, action, maintenance, and termination (Prochaska et al., 2008). These differing stages can occur at any time and when the stage is identified, the provider can help guide the participant with interventions that may be most effective (Prochaska et al., 2008). The TTM has been used in smoking cessation programs; alcohol, substance abuse, and eating behavior treatment programs; as well as stress, depression, and obesity reduction programs (Nash et al., 2011).

Nature of the Doctoral Project

The methods I used to execute this project were necessary to determine how evidence-based programs could be adapted for potential implementation at the

community hospital and to ascertain the employees' interest in and readiness for a hospital-based weight loss program. First, I conducted a needs assessment of employee health status. Demographic data (age, gender, height, weight, BMI, and interest in a weight loss program) were collected from employees using SurveyMonkey software delivered through employee e-mail. The readiness to change data were collected using The University of Rhode Island Change Assessment (URICA) Scale. The hospital requested a communication plan that was required to include a 3-year financial plan. The program communication plan will go to the vice-president of strategic planning. If the financial plan is approved by the vice president of strategic planning, the plan will be placed on the executive council of the hospital's calendar for a presentation and implementation approval for a pilot project after I have completed the DNP project and graduated from the program.

The gap-in-practice for this population was the high obesity rate in health care workers employed by the hospital. For health care workers to care for and educate patients, they must care for and educate themselves. The need for self-care related to obesity is necessary if nurses are to advocate for multiple comorbidity resolutions that their patients may have related to obesity. The employees are requesting a new strategy to help with initial weight loss and tools to help them have long-term results. The employee health nurse has been receiving inquires and submitting them to the administration. I was approached by administration as the certified bariatric nurse to develop or find a program that would fit within the culture of the hospital.

The GLB program can be planned and implemented to promote wellness in the workplace, and if successful, may be replicated for the surrounding community and drive sustainable change for a healthier lifestyle in the county. The evidence I used to support the project was (a) the employees' age, gender, BMI, exercise level, and if there was interest in an employee weight loss program; (b) the review of the literature related to effective employee-focused weight loss programs; and (c) team input into the planning and implementing of the program at the project site. The use of this information will help determine the actual needs of the community hospital.

Definitions

Body mass index: A measure of body fat based on height and weight that applies to men and women (NIH, 2016).

Communication plan: A required plan by the community hospital that creates a consistent approach to the development and approval of new clinical and non-clinical programs. This plan promotes a cohesive proposal and implementation (Health Council of Southeast Florida, 2015).

Community Health Needs Assessment: A systematic method of identifying unmet health care and human service needs of a population and identifying possible interventions to meet those needs (Health Council of Southeast Florida, 2015).

Diabetes Prevention Plan (DPP): Lifestyle intervention conducted at 27 health centers in the United States and funded by the NIH. Participants were at risk for Type 2 diabetes (NIH, 2016).

Evidence-based practice: The linking of current research findings with patients, conditions, values, and circumstances (Zaccagnini & Waud White, 2011).

Financial plan: A financial projection of how a proposed project will look if the underlying assumptions hold true (www.WebFinance.com, 2017).

Group Lifestyle Balance (GLB): A program based on the DPP that used lifestyle interventions. This program uses a group structure rather than the DPP individual participant structure (University of Pittsburgh, 2011).

Lifestyle intervention: Strategies that include a combination of goal setting, self-monitoring with feedback, stimulus control, and relapse prevention/problem solving (Wadden, Butryn, & Wilson, 2007).

Plan, do, check, act (PDCA) cycle: "A time tested framework for generating and testing ideas for improvement," when a process is not working as predicted, the team will decide to do a rapid review and make changes as needed for a project (Nash et al., 2011, p. 184)

Population health: A cohesive, integrated, and comprehensive approach to health care within a population (Nash et al., 2011).

Transtheoretical model (stages of change): A framework for using stages to integrate processes and principles of change (Nash et al., 2011).

World Health Organization (WHO): The WHO is a specialized agency of the United Nations that is concerned with international public health. It was established on April 7th, 1948 and is headquartered in Geneva, Switzerland (WHO, 2014).

Assumptions

I took the following assumptions and limitations into consideration while developing the program plan and analyzing the effectiveness of the employee weight loss program. By implementing the GLB participants will

- Understand that the program is based on participant self-management.
- Understand that expectations will be set about weight goals, physical activity goals, and caloric goals.
- Understand that engaging in goal setting and reaching and maintaining the goals is what will reduce the risk for or prevent comorbid conditions.

Limitations

I identified a number of limitations to this project. One limitation was that the hospital leadership may decide not to implement the program. Another limitation was that the leadership may not be able to engage all directors and mid-level managers to understand the importance of this program. This lack of engagement could lead to the program not reaching all employees. The final limitation was that the participation of the employees may be low due to lack of perceived interest, need, or time.

Significance

The significance of this project was to bring awareness of the increased obesity rate among the employees of a community hospital and offer a weight loss program using a lifestyle change program. The healthcare workers can self-identify and enroll in the program. The expectation after implementation is that self-efficacy will result in an

improvement in overall employee health, a decrease in employee BMI, and the ability to maintain weight loss by using the new learned behaviors to increase quality of life.

Implications of Social Change in Practice

This project will provide the participants with new knowledge and skills that they can use to become involved in transferring this type of program to the local community. This project will be the first step toward community-level positive social change. The implications of social change are several. The AACN (2006) established several essentials for practice: clinical scholarship, evidence-based practice, and intraprofessional collaboration for clinical prevention and population health. These essentials, with a current focus on employee health and wellness, will bring about social change to improve the long-term health of the community. To improve health outcomes, the collaboration among all patient care sources (providers, patients, families, and community partners) is necessary. Action is needed to take the best evidence and translate it into the workplace, for the population served (AACN, 2006).

Summary

As obesity is on the rise nationally and is a chronic disease that affects 1 in 3 adults (CDC, 2016), in this project I adapted a lifestyle intervention incorporating behavioral modification to be offered to the employees of a community hospital to help with weight loss and comorbidity prevention. The current average BMI of the employee sample is 65.37%, which exceeds the Florida state obesity rate of 62.8% (Healthiest Weight Florida. (2015). This DNP project will help support awareness that obesity is a chronic disease and create positive social change for the hospital and community, moving

toward population health advocacy. Moving forward, the background and context with a literature review will be discussed in the next section. The review will show that there are studies that discuss the opportunities of supporting an employee weight loss program, as well as others reflect that it does not make a difference to the employees to support a weight loss program if supported by an employer.

Section 2: Background and Context

Introduction

The rate of obesity is increasing in the United States (Centers for Disease Control and Prevention, 2014). To address the national obesity epidemic, with this DNP project I examined obesity at a local level, in a community hospital in south Florida. At the time of the study, the current obesity rate in Florida was 26.2% (Healthiest Weight Florida, 2015). By 2030, almost 60% of the population in the state will be obese Healthiest Weight Florida, 2015). This increase is expected to contribute to millions of cases of preventable chronic diseases costing Florida an estimated \$34 billion dollars Healthiest Weight Florida, 2015). Improving dietary intake and increasing exercise can reduce the risk of developing serious health conditions such as diabetes, cardiovascular disease, and certain cancers (Centers for Disease Control and Prevention [CDC], 2014).

Section 2 will include a literature review of scholarly and peer-reviewed articles and filtering down to specific articles that speak specifically to this study. This section will also discuss the concepts, models, and theories to support the project. The local context will also be explored to see if any of the next steps provided by the various studies may be used to inform this community project.

Literature Review

The literature review is a synthesis of the most current available literature on a topic. The purpose of a literature review is to present an overview of the important literature and research related to a topic that puts a research problem in context (Polit & Beck, 2008). According to Hopp and Rittenmeyer (2012), literature reviews are directed

by a research question and help to retrieve and analyze the best information to answer the question.

The use of scholarly articles and peer-reviewed clinical practice guidelines helped to support the rationale for my project and can be found in multiple databases, such as MEDLINE, which is the National Library of Medicine's database and can be accessed through subscription or through academic institutions. The Cumulative Index of Nursing and Allied Health Literature (CINAHL), contains over 2 million abstracts from 3,000 English-language journals and full-text journal articles from over 600 journals published since 1981 (CITE). I searched both MEDLINE and CINAHL, and the databases produced evidence-based practice guidelines and original articles.

I found evidence to support the project from current (2010 to 2016) original peerreviewed articles, randomized-controlled trials (RCTs), and secondary sources that
included evidence from multiple data sources in the CINAHL, ProQuest, and MEDLINE
databases. The keyword search terms that I used in the literature search were weight loss,
hospital workers, behavioral modification, obesity, implementation, obesity prevention,
stakeholders, lifestyle modification, employee workplace, wellness programs, lifestyle
intervention, and combinations of these terms. The keyword search terms for this project
was identified in various other studies reviewed and used in multiple key phrases.

In the literature review, I focused on current original RCTs, systematic reviews, translational studies, experimental studies, clinical practice guidelines, and process models. Using the keyword search terms individually and in different combinations, my search yielded 935 potentially relevant articles. After narrowing the focus to a more

defined criterion, 34 articles showed promise to serve as supportive evidence for this project. After my review of these 34 articles, I found that 12 articles had the key concepts and elements to support directed employee/employer weight loss programs.

When looking at the evidence levels for any research, the levels (in descending order) according to Polit and Beck (2008) are the systematic reviews, then the RCTs, cohort studies, case-control studies, case series, case reports, and editorials and expert opinion. My inclusion of systematic reviews of RCTs provided strong evidence in support of this project. The other studies referenced provide evidence but to a lesser degree than the systematic reviews and RCTs.

Specific Literature

The CDC (2014) supported that the work setting is an invaluable contributor in the realization of employees' health improvement. Employees spend one-third of their day at work, 5 to 6 days a week. If employers institute a health and wellness program, the outcomes can be beneficial to the employees and employer. Examples of positive outcomes can be a healthier workforce, prevention of chronic disease states, and improved quality of life for the employees (CDC, 2014b). Benefits for the employers can include the lowering of direct costs, such as insurance premiums; decreased absenteeism; and increased productivity (CDC, 2014b). The workplace health and wellness program is a coordinated and comprehensive set of strategies to meet the health needs of all employees (CDC, 2014b).

Worksite wellness programs can include many different services; some employers offer discounted gym memberships, an on-site workout area, boot camp participation,

behavioral/lifestyle coaching, various campaigns such as 10,000 steps a day program, and a partnership with their insurance provider for disease management based on yearly biometric screenings, or employers may not offer any type of wellness program (Kramer et al., 2015). Based on a worksite weight management program literature review, Ausburn, LaCoursiere, Crouter, and McKay (2013) evaluated full-text articles published between 2005 and 2013 and concluded that the literature supported a combination of physical activity, education, and dietary measures to maintain or reduce weight within an employer-driven employee health intervention.

A RCT (Sondergaard et al., 2014) compared two groups, one with individual counseling and the other using a group-based counseling method. The participants had a BMI of 25 to 30, which reflected a moderately overweight status. Both groups had consistent meetings that spanned 12 months, five sessions the first 3 months and a follow-up meeting at both 6 and 12 months. Each group in the trial received counseling based on a behavioral change approach with emphasis on self-awareness, goal-setting, and identification of facilitators and barriers to overcome. The authors concluded that with 120 participants divided between the two groups, there was no statistically significance difference except at 3 months, when significant differences in BMI, fat percentage, waist circumference, and fitness rating were found. The result of the RCT for the employer was that providing a worksite health and wellness program can prevent weight gain, but only while the participants continue to be engaged in the planned sessions of the program. The study's findings indicated that maintenance of physical activity and weight stabilization are important considerations in program planning and

that one type of counseling over another does not seem superior (Sondergaard et al., 2014).

Conversely, in their review of three peer-reviewed original articles, Ostbye, Stroo, Eisenstein, and Dement (2016) described that two workplace management programs to achieve weight loss did not impact health care costs for the employer. The authors concluded that group support sessions and more frequent in person contacts may be needed, which could improve the cost-benefit ratio of such programs. Strickland et al. (2015) described that the modification of the physical and social work environment to include participatory and integrated health and safety may improve eating and physical behavior. The authors showed that pursing an approach to engage workers in health improvement takes leadership ownership. The employees in the study felt they were unsuccessful due to their irregular schedules, physical job demands, and food options at work. Motivation, time, money and conflicting responsibilities were contributors to poor eating and exercise in this group-based intervention study (Strickland et al., 2015).

In an additional original article, Sorensen et al. (2016) used a proof of concept pilot to validate if an interventional program, "Be Well, Work Well," that was developed at the Harvard T.H. Chan School of Public Health (n.d.) would be an appropriate intervention in a hospital setting. The "Be Well, Work Well" program assessed "the feasibility of an integrated intervention to protect and promote health to reduce musculoskeletal disorders and improve health behaviors among healthcare workers" (Harvard T.H. Chan School of Public Health, n.d., para. 1). The purpose of the pilot was to determine if the physical activity and dietary behaviors of the employees were shaped

by the conditions of their work. The intervention took place at a large academic hospital on three nursing units where the nurse managers were recruited to have their units participate. The intent was to improve health-related behaviors to include physical activity, sleep, and dietary patterns. The theme that was introduced to each participating unit was "taking care of yourself to better care for your patients." (Harvard T.H. Chan School of Public Health, n.d., para. 1). To spark enthusiasm for this project, the team had several kick-off activities such as: healthy eating question and answer sessions, patient handling training, and a pedometer challenge to engage in friendly competition between the units, as well as goal setting and health coaching for all participants (Harvard T.H. Chan School of Public Health, n.d., para. 1).

Throughout the study, the research team noted a familiar tone from the nurse managers: The feeling of the lack of support by the leadership of the hospital, which in turn questioned the actual support that the researchers had engaged prior to the start of the project. The researchers noted that there was no visible interaction with leadership on the units throughout the study. The project team identified challenges to implementation of any intervention based on program time constraints, physical demands, and psychological strains of patient care. The team also identified that if an integrated health promotion intervention is to be delivered to any workplace environment, there is a need for system-wide initiatives and support to help with the culture change to support the workers (Sorensen et al., 2016).

The issue of developing an employee weight loss program has been taken on by many large corporations that have incorporated weight loss in their employee wellness

programs. In a retrospective study completed by Fink et al. (2016), the authors wanted to identify demographical differences that exist with employees engaging or not engaging in a workplace weight management activity. Overall, the researchers determined that given a choice of five different weight loss programs: (a) self-directed 5% total body weight loss, (b) Healthy Solutions at home, (c) Weight Watchers group meetings, (d) Weight Watchers online, or (5) Employee Assistance Program-directed healthy weight coaching being offered at a large integrated health system; Caucasian females, 50 years or older, and non-nursing staff participated at the highest levels in one of the five offered programs (Fink et al., 2016).

When researching for a program that could be implemented, I decided to use an evidence-based program that could be adapted for the hospital setting and to expect successful outcomes. The program was the Diabetes Prevention Program (DPP) that works with adults referred by their primary physician, with a pre-diabetic diagnosis. This program was conducted at 27 health centers throughout the United States and 3,000 adults took part in this study (University of Pittsburgh, 2011). The DPP worked with individuals over a period of 24 sessions, weekly for 8 weeks and every other week for 16 weeks (University of Pittsburgh, 2011. In continuing my research, I noted a program that was developed from the DPP by the core research group located at the University of Pittsburgh, Pennsylvania that helped with the development of the DPP (University of Pittsburgh, 2011). Over time, this group made a few modifications to the initial DPP program. The researchers wanted this program to be a group participation model to help reinforce the behavioral lifestyle management program. They determined that the

accountability to others within a group could be a potential success motivator for all participants. The new model that the core researchers developed was implemented as the GLB. The team developed a manual of operations, participant handouts, and a DVD, as well as a facilitator training class twice a year (University of Pittsburgh, 2011).

Schrorer et al. (2013) examined how favorable outcomes can occur in behavior influenced by the worksite intervention that employ or add a combination of environmental modifications, such as adding a gym, giving pedometers, and offering contests. Fernandez et al. (2015) found that one strategy that was successful is to work with the cafeteria to add healthy options to their menu. The team also found that offering multiple components to the employees may be a better option than offering just one component. They included groups that met weekly and the leaders each week offered incremental lifestyle change information. The worksite also gave discounts to area workout centers and incentivized the employees' yearly health insurance premium.

Kramer et al. (2012) supported and substantiated the effectiveness of the GLB established by the University of Pittsburgh (2012–2015). The GLB program was designed from the seminal DPP in the 1990s by adding focus group weekly meetings, which are referred to as the core-meetings and then adding classes post-core, for a total of 22 sessions (Kramer et al. 2012). This program is a 1–year program that has been translated to many employers of differing sizes with outcomes that reflect weight loss, behavioral modification, and incremental lifestyle changes using of the TTM behavior change model (Kramer et al. 2012).

Concepts, Models, and Theories

My rationale for the use of the concepts, models, and theories was to inform the project. The project was guided by relevant theoretical literature including the TTM, which includes 10 processes of change and the use of self-efficacy to explain the behaviors of the participants (Prochaska et al., 2008). To manage the development and subsequent progress when planning the implementation and evaluation of the project, I used the PDCA cycle as a guide to correct deficiencies and move to improved processes when identified.

Transtheoretical Model

The use of TTM focuses on helping individuals identify when their behaviors need to be changed to improve their health. Bringing incremental intentional changes over the long-term can be successful when given the tools (Prochaska et al., 2008). Six stages of change and 10 processes of change have been identified with strategies to help people make and maintain change (Prochaska et al., 2008). The TTM model is a continuous cycle; when participants are in the different stages of change, intervention strategies are directed at that stage to move the participant to the next stage (Prochaska et al., 2008). Participants may not be ready to move to the next stage or they may regress to earlier stages. It is the role of the interventionist to use motivational interviewing to understand and help the participant move to the next stage when warranted (Booth, 2015). The participant must be ready to change to make lasting behavioral changes with lifestyle interventions.

Stages of Change

Pre–contemplation is the stage when the participant is not ready to make changes or act within the next 6 months. Many times, people at this stage do not understand that their behavior could be an issue if continued. When in this stage, there is an unawareness or underestimate of the pros of moving forward only to place an emphasis on the cons of change (Prochaska et al., 2008).

Contemplation is the stage when people are often aware that there needs to be a change in their behavior and plan (within the next 6 months) to implement healthy options for their life. Even within this stage, people are still not quite committed to moving forward. People looking to change at this time may have been researching for a long period of time and then decide to make the change and seeking opportunities to do so (Prochaska et al., 2008).

Preparation, also described as determination, is the stage when people are ready to act within the next 30 days. On their own, they are implementing small incremental lifestyle changes, can see that their actions are being successful, and are ready to move forward. These actions can be described as actually signing up for a program, or seeking help from community resources (Prochaska et al., 2008).

Action is the stage when people are ready and have already embraced the interventions within the last 6 months that lead to healthier behaviors. They want to change their lives by modifying current behaviors or attaining new behaviors. Many have sought out treatment programs, weight loss surgery, counseling and are having results to this stage (Prochaska et al., 2008).

Maintenance is the stage when sustainability of the behavior change has been ingrained into everyday life and people intend to maintain the behavior change. This is the stage where work is done to prevent relapse to previous behaviors. (Prochaska et al., 2008). This is also where when the person does not follow through there is a sense of need for intrinsic accountability and follow through.

The last stage is the stage of termination. This stage is when the person has no desire to continue unhealthy behaviors. Prochaska (2008) stated that this stage is rarely reached and most people stay in the maintenance stage. The addition of the 10 processes of change within the stages of change is useful in explaining changes in cognition, emotion, and behavior (Prochaska et al., 2008).

Ten Processes of Change

The 10 processes (pros and cons) of change can be divided into three groups: cognitive, affective, and evaluative processes (Nash et al., 2011).

According to Nash et al. (2011), the 10 processes are:

- Conscious raising this involves increased awareness about healthy behaviors.
- 2. Dramatic relief emotional awareness of pros or cons about the health behavior.
- 3. Self-Evaluation the person appraises himself and whether the healthy behavior is a part of who he wants to be.
- 4. Environmental reevaluation there is identification of how unhealthy behaviors affect others.

- 5. Social liberation opportunities for society to show support of the lifestyle and behavior changes.
- 6. Self-Liberation the commitment to change since the change is possible to be achieved for healthier outcomes.
- 7. Helping relationships the supportive relationships necessary to help encourage the change.
- 8. Counter-Conditioning the mindset to substitute healthy behaviors from the unhealthy behaviors and thoughts.
- 9. Reinforcement management the reinforcement of the new behavior change.
- 10. Stimulus control maintaining the environment to have reminders and cues that support the behavior changes.

Prochaska and DiClemente (1983) studied the stages and processes of self-change with smokers. The authors discussed which processes were more beneficial to use when a person was in a specific stage of change. This information indicated that the stages of change and processes of change can be viewed as inter-relational concepts. As an example, if a person is in a contemplation stage of change, then conscious raising which involves increased awareness about healthy behaviors. During this period, response may result from feedback and education.

When a person is identified in the action phase, meaning that they are ready and have embraced the interventions within the last 6 months, they want to change and modify current behaviors. For this stage, the process of stimulus control can be used to maintain the environment to have reminders and cues that support the behavior changes.

Additionally, within the action phase, a self-liberation process can occur in which the person sees opportunities for society to show support of the new lifestyle.

To summarize, Prochaska and DiClemente (1983) concluded that self-changers:

1. use the fewest processes of change during pre—contemplation; 2. emphasize conscious raising during the contemplation stage; emphasize self-liberation, a helping relationship, and reinforcement management during the action stage; and 3. use counterconditioning and stimulus control in both the action and maintenance stages (Prochaska and DiClemente, 1983). The additional construct that is used within the TTM model is taken from Bandura's self-efficacy theory. This theory posited that people with self-efficacy have the situational confidence to maintain their healthy behavior change and not to relapse to their previous unhealthy behaviors (Bandura, 1982).

Hagobian and Phelan (2012) identified studies that included behavioral treatment, such as self-efficacy interventions to support weight loss and maintenance. Initial weight loss goals were achieved with a very small relapse group in programs that continued from 1 year to 4 years. Outcomes of this nature are evidence that these programs can have success, which will help with the planning for and implementation of this DNP project.

The concepts of these theories that are applied are the phases of transitions that people go through to determine their readiness to make a change. The transitions are fluid and people can go back and forth between them until they decide they are ready to make a change. It is very important to note that the client will need guidance to understand where they are in the change process. There are different techniques that can be offered to the client to help understand the transition from pre–contemplation to the action phase.

When developing a program, there needs to be checks and balances. This project implementation used the Plan–Do–Check–Act cycle to help with the development and implementation of the project. Not everything went smoothly; when a roadblock occurred, the team used this model. When the roadblock occurred, we followed the PDCA cycle to immediately identify the issue, isolate and make correction to the process.

Plan-Do-Check-Act to Facilitate Planning

The Plan–Do–Check–Act (PDCA) cycle to facilitate planning was originally designed by Walter Shewhart in the 1920s as the Plan, Do, See model. In the late 1960s, E. Edward Deming, who was the originator of the Total Quality Management (TQM) revolution modified the Shewhart model. Deming worked on the premise that whether you use the cycle for an improvement project or a new project, the cycle will reflect a defect in a process that needs to be changed and then improvement can occur.

In the Plan–Do–Check–Act (PDCA) model, the P is described as a plan for quality improvement. It is used to incorporate changes on a small scale. D involves asking the question of whether there are there tasks required to implement this plan on a small scale. C is the need to check after the change for implementation problems or process issues, and A is the need to adopt, refine, or abandon the change. The cycle is repeated until quality improvement can be achieved or the change project is abandoned (Ballard, Fleming, Allison, Convery, & Luquire, 2014)

The TTM model concepts and processes used to gauge the readiness of the participants in the medical weight loss program. Understanding what stages the participants are in can help identify the needs of the participants. In working with a

variety of patients seeking weight loss surgery, it is very evident that a percentage patients are ready for the next steps to change having moved through the precontemplation phase. Other patients will be in pre-contemplation phase with no significant knowledge of the surgical procedure.

The PDCA cycle used to guide the problem-solving activities that identify program planning deficiencies. The team will ask for feedback and use this information to determine next steps to improve the process Participant feedback can be helpful to identify process issues. PDCA will allow the team to identify problems, analyze the issues, determine the factors of impedance, implement potential solutions, and evaluate the outcomes throughout the planning and implementation of the pilot program. The resulting standardization of the process will improve the outcomes of the program. The PDCA cycle will continue to be used to create a state of continual improvement.

Relevance to Nursing Practice

Nurses can engage in many areas of healthcare. This DNP project can help inform nurses how they can influence behavior to decrease obesity in the hospital and the community. Nurses are in the position to be agents of change who bring a focus on decreasing obesity to the hospital, as well as the community. Nurses can effect change from the bedside, the boardroom, and in legislative and public policy groups. Budd and Widner (2015) discussed that nurses are the largest group of health care professionals in the country. Nursing professionals can be the change agents who inspire colleagues, families, neighbors, and the broader community to take initiative through consistent messaging regarding the devastating effects of obesity.

Addressing the gap of knowledge related to the disease of obesity will aid hospital nurses in addressing personal challenges with weight and will increase their knowledge to educate patients, coworkers, and families. Nurses have an opportunity to help their patients prevent some chronic diseases for which they are at risk (White & Dudley-Brown, 2012). It is important to note that knowledge will empower the nurse while guiding themselves by using relatable stories to engage in change.

Local Background and Context

The local background and content that guided the DNP project will be using the community assessment plan that was prepared for the community hospital in 2015. The needs assessment provided the hospital with the health needs of the community (Health Council of Southeast Florida, 2015). The community health needs assessment provided the opportunity to assess the population's health status, and highlight areas of unmet need, present the community's perspectives on health issues, provide suggestions for possible interventions, and highlight recommendations that policymakers might consider when setting new policy goals and objectives for health improvement activities (Health Council of Southeast Florida, 2015).

Through focus groups, key health issues were reviewed and the focus groups were asked to develop opportunities for the community hospital. The focus groups identified that education, provided with compassion, understanding of the community being served, and engagement with community-based organizations increased hospital visibility in communities (Health Council of Southeast Florida, 2015). According to the Health Community Health Needs Assessment 2015 for the community hospital, Palm

Beach County had 12 top key health issues, with the top two being obesity and diabetes. The obesity rate obtained by self-report was 60.1% in 2013, up from 56.9% in 2002. It is likely the self-reported obesity is an underestimation of the true percentage of the population who are overweight and obese in Palm Beach County, Florida.

A second disease identified in the community is diabetes, which was a national health care issue that soars with increased obesity rates. In 1993 in Palm Beach County, there were a reported 14,199 persons with diabetes as compared to 33,959 persons in 2013. The American Diabetes Association (ADA) released new research on March 6, 2013, estimating the total costs of diagnosed diabetes had risen to \$245 billion from \$174 billion when the cost was last examined (American Diabetes Association, 2013). The community hospital has committed to use the community data to create new plans for addressing the unmet needs of the community and strengthen programs already addressing key health issues in the community. The information suggested to the community hospital administrators that there was a need to start incorporating a wellness model by integrating health promotion and chronic disease prevention and management in the context of social determinants of health (Nash et al., 2011).

Role of the DNP Student

At my current hospital employer, I decided to open the conversation regarding an employee weight loss management program. I was told that the executive leadership would be open to a program such as this. I followed their project development plan, based on this DNP project. I have received notification that upon my completion of my DNP project and conferral, I will be able to move the program forward.

Our hospital's insurance plan does not cover any medical weight loss or weight loss surgery. Recognizing high BMIs suggesting obese to supra-morbidly obese persons among the hospital's employees, the employee health nurse commented to me that I need to consider the BMIs that she had collected and possibly devise an interventional plan, hence this project. Using the BMI information is one of the several tools to demonstrate the need for an employer– based program.

Summary

Obesity is at epidemic proportions that is overwhelming our healthcare system with the disease of obesity and development of chronic diseases. The CDC (2016) reported that 35.1% of Americans were obese in 2012, and 69% were overweight or obese. Healthiest Weight Florida (2015) reported that 36% of Floridians are at an unhealthy weight. The purpose of this DNP project was to plan the implementation and evaluation of an evidence-based program translated to address the needs of employees of a local community hospital in which 800 employees were identified of having a BMI greater than the state of Florida obesity rate. The articles that were used as evidence to support this translational project demonstrated that workplace health promotion can be successful if the worksite leadership supports, plans, and allows for all circumstances to allow the employees to participate and be successful. Many of the sample sizes were the approximate size of the employee group of my current employer.

Concepts, models, and theories were explored to drive best-practice and implementation of the DNP project. The transtheoretical model, incorporating Bandura's concept of self-efficacy, informed this project. The relevance to nursing practice revealed

that this project can help inform and educate the bedside nurses on the obesity epidemic, how their assessment skills can help identify the needs of their patients, and how they can help plan patients care when transitioning back to the community. The nurse is a role model in healthcare; it is the hope that with the education they receive they may review their own health and, if needed, apply small incremental lifestyle and behavior changes.

This project will also be used to inform the executive leaders of the community hospital of the current obesity status of many employees. This finding will influence the approval to implement an effective employee weight loss program using lifestyle intervention with behavior changes with the use of the population health model and TTM.

Section 3, will move to the data collection phase of the project. Information on how the information and the data was collected to determine the need for an employer—based weight loss program. Within this section, it will show the barriers to implementation. Section 3 will also illuminate the next steps into an implementation phase of the project.

Section 3: Collection and Analysis of Evidence

Introduction

To address the national obesity epidemic, in this DNP project I examined obesity at a local level, in a community hospital in south Florida. The workplace is an environment where an employer-based medical weight loss program can be implemented. This project plan is an implementation and evaluation of a program offered to the employees of a local community hospital. At the time of this study, this hospital did not have a wellness program of this nature. This weight loss program will be translated from the University of Pittsburgh's GLB program that uses a group intervention with incremental lifestyle changes in behavior and physical activity (University of Pittsburgh, 2014).

This project stemmed from information received by the employee health nurse of the community hospital as she started to collect the BMIs of the hospital employees. This information was not collected for any specific purpose except that she felt a need to collect these data for future reference. The hospital employs approximately 1,500 staff members; of these, the employee health nurse collected over 830 BMIs. In passing conversation, the employee health nurse asked if I was planning on introducing a medical weight loss program for employees. I told her I was thinking about it, she then explained to me of her collection of the BMIs and her concerns for employees' weight.

This project allowed a population to be reached to create an environment of awareness, engagement, and sustainability (Fink, Smith, Singh, Ihrke, & Cisler, 2016). The project is a developmental project based on an employee needs assessment and the

literature to be implemented after I complete my DNP degree. The hospital executives must approve the pilot program implementation. I obtained approval from the Institutional Review Board of Walden University and the hospital before beginning the project needs assessment. The project needs assessment data were collected through the participants' online completion of a short questionnaire on age, gender, exercise, BMI, and interest in a weight loss program at work. Each year employee's select a health insurance plan. Upon registering for the plan, health screens are completed by the employee health nurse. The employee health nurse collected the BMIs and offered the link to all employees, and the questionnaires were sent out to the employees via a third party online survey company. Results of the analysis were part of the supporting evidence that I will present to the executive leadership team to justify a pilot test of the project implementation plan.

Practice-Focused Questions

The practice-based questions for this project were:

- 1. What is the rate of obesity and overweight among employees at the community hospital determined by the BMI?
- 2. What are the current age, gender, and exercise patterns of the employees?
- 3. What are the best practices for developing a program to initiate and sustain weight loss among hospital employees?

Sources of Evidence

The evidence that used to drive my project was the evidence-based, comprehensive lifestyle behavior change program, the GLB, which was directly adapted

and slightly modified from the CDC and NIH-supported DPP. The University of Pittsburgh (2011) was represented by having expert individuals be part of the core resource group for the DPP project. The DPP project was highly successful in the 27 health centers where it was conducted and had more than 3,000 adults participating nationally (Venditti, E., & Kramer, M., 2013); the participants were at high risk for Type 2 diabetes. The DPP lifestyle intervention was developed and authored by the Lifestyle Resource Core, working in close collaboration with the DPP Lifestyle Advisory Group and other members of the DPP Interventions subcommittee. The Lifestyle Resource Core group is now located at the University of Pittsburgh (Venditti, E., & Kramer, M., 2013). Additional information that came from the DPP groups pushed the Lifestyle Resource Core group (The Core) to make modifications to the DPP curriculum to create the GLB program (Venditti, E., & Kramer, M., 2013). The Core changed the DPP individual interaction to a group-based program, which became economical and added a group support component (Venditti, E., & Kramer, M., 2013). Additionally, the GLB program has incorporated a broader behavioral focus on meal planning instead of the food pyramid used in the DPP program and more focus on self-awareness, motivation to increase movement, and physical activity of 150 minutes a week (University of Pittsburgh, 2011).

I also used an assessment tool in this project, the URICA. As described by Ceccarina et al. (2015), URICA is the most widely studied measurement of readiness for change designed for an adult target population. The assessment was developed by Prochaska and Di Clemente in 1982 and initially used for substance-addiction

rehabilitation readiness; it also has been used for assessing smoking cessation and alcohol addiction readiness for change (Prochaska et al., 2008). Most recently, the URICA has been used in assessment of problem behaviors such as obesity and weight management (Prochaska et al., 2008). The TTM, as previously discussed, offers a theoretical framework for a progression of behavior change in individuals. The framework allows a person to move back and forth through the different stages of change (Prochaska et al., 2008). Knowing what stage the individual is in helps the health care professional to individualize interventions to support success.

The URICA assessment tool is a 32-item self-report tool that measures four stages of motivation to change: precontemplation, contemplation, action, and maintenance (Ceccarini et al., 2015, p. 3). The responses to the items are presented on a 5-point Likert scale that ranges from 1 (strong disagreement) to 5 (strong agreement). There are eight subscales that are combined by summing the scores in the four stages that measure the motivation to change (Ceccarini et al., 2015, p. 3). The total score is used to determine the readiness to change and the appropriate intervention(s) for the individual based on the identified stage (Ceccarini et al., 2015, p. 3). The URICA assessment has an "internal consistency with coefficient alphas ranging from 0.79 to 0.89 across the four subscales. Good reliability, construct validity, and psychometric properties of the URICA have been established for a range of behavioral conditions" (Ceccarini et al., 2015, p. 3). The construct validity of the URICA has been supported through factor and cluster analyses demonstrating that the Stages of Change (SOC) are associated with different behavioral profiles (McConnaughy et al, 1989).

Prochaska et al. (2008) tested the reliability of the tool in a study of 184 hospital staff members engaged in a 10-week treatment program for weight control. Their study assessed two client variables: processes of change and the stages of change. The study involved two hospitals similar in size as the intervention sites. The participants from the hospitals were randomly assigned to one of four groups, which were stratified by the percentage overweight. The participants of Hospital 1 followed a structured behavioral treatment protocol. The participants of Hospital 2 followed the same structured behavioral treatment protocol and addition of a competition with a monetary prize at the end of the treatment. Each participant contributed \$15 to fund the prize. The participants attended 10 sessions that covered information about goal setting, physical activity, social support, and behavior change. At Weeks 1, 5, and 10, two assessments were completed by the participants, one of which was the URICA. Univariate ANOVAs and Neumann-Keuls indicated that the contemplation scores decreased significantly (p < .05) between Weeks 1 and 5 and the difference was maintained at Week 10. The second instrument measured processes of change. Four processes of change measures (counterconditioning, stimulus control, social liberation, and interpersonal systems control) increased from Week 1 to Week 5 and were maintained at Week 10. As the investigators expected, selfefficacy scores increased from Week 1 (m = 5.2) to Week 5 (m = 6.5) of therapy. This significant increase (m = 6.5; F = 22.0; p < .001) was maintained at Week 10 of treatment (Prochaska et al., 2008). The conclusion of the authors was that when participants are moving through different stages of change, clinicians need to be aware of what change process is needed to help them progress to success.

In two separate studies using the URICA, the assessment had two different outcomes. Dixon et al. (2009) used the URICA assessment to determine if high levels of readiness to change (RTC) would be a critical element for long-term success of weight management programs, including surgical weight loss programs. At the end of a 2-year study, they could not determine that participants' RTC was reflected in weight loss, and the authors felt that caution should be used in determining if motivation is an indicator for success. The second study by Pietrabissa et al. (2016) ascertained whether RTC scores were predictive of how patients would perform in a nutritional rehabilitation program. The URICA was administered to 334 inpatients; strong correlation (r = 0.772) between the contemplation and action phases with the maintenance subscale were found to be critical to the long-term success of weight management. The authors recommended the URICA for both clinical and research purposes.

Summary

Obesity is an epidemic and employers are seeing the cost of health benefits rise.

Many employers have had the ability to decrease their health care costs and insurance premiums by introducing employee wellness programs and incentivizing the employees to participate (Saint Mary's Regional Healthcare System Website, 2015). This issue is not just a localized issue; it is a public health problem, where employers need to be at the forefront to help curb the rising costs.

I aligned the DNP project with the current practice of identifying ways to engage employees in a local community hospital to become involved in a lifestyle change program that includes small incremental lifestyle changes to include a 7% weight loss,

understanding emotional triggers, and engaging in 150 minutes of physical activity each week. Studies previously discussed support the probable success and evidence-based nature of the GLB program. To implement a program effectively into a worksite, several items need to be addressed such as the support of the executive leadership team, an assessment of the overall employee health, and ways to incorporate wellness programs in the project setting. The executive leadership team recognized the need for an employee program to address obesity and prevent the development of chronic diseases. The project team that consists of two unit directors and the employee health nurse will be involved in designing and conducting the employee assessment and the planning, implementation, and evaluation phases of the project using the PDCA method to identify issues in the program plan and to guide modifications as necessary. The deliverables I provided through the DNP project were the results and a discussion of the needs assessment and a program implementation plan. These deliverables can be used by the executive leadership to determine whether to support the pilot program in the organization.

Section 4 deliverables will discuss the findings, sources of evidence, data collection procedure, findings and implications. The section additionally reflects how a project can turn from a well thought out project to a point where directives by the leadership team changes the process and future of the project. The adoption of the project may take place in the future.

Section 4: Findings and Recommendations

Introduction

This section will identify findings of the survey and with these results, recommendations will be discussed. To address the obesity epidemic, the DNP project I assessed the need for and interest in a medical weight loss program for employees in a community hospital setting. The weight loss program, if implemented, could involve hospital staff in a program to decrease weight and provide methods for health self-efficacy.

Sources of Evidence

I found evidence used for the project from two sources--the current literature and the results of an employee needs assessment. The evidence from the literature was comprised of current (2010 to 2016), original peer-reviewed articles, RCTs, and secondary sources that included evidence from the databases of CINAHL, ProQuest, and MEDLINE. The keyword terms I used in the literature search and the criteria for article inclusion and exclusion were presented in Section 2 of the project.

The analytic strategy I used to determine the current stage (motivation) and readiness to change of the employees in relation to the introduction of an employee weight loss program was the use of the URICA. Participant responses were scored according to developer guidelines and then categorized according to the appropriate stage of change. The use of an online survey tool: SurveyMonkey, enabled the use of their data analyzer.

Data Collection Procedure

I received permission from the Walden University Institutional Review Board (IRB) for the needs assessment with the following approval number 12-13-16-0329630. Permission was given for use of the URICA assessment tool for this project by Dr. Prochaska at the University of Rhode Island (see Appendix A). Following IRB approval, I took the following actions:

- 1. An e-mail *blast* was sent out to all hospital employees by human resources.
- 2. The e-mail included a link to a third-party survey company, SurveyMonkey.
- 3. A consent letter preceded the survey; the survey was the URICA tool previously described. When the potential participant received the e-mail, and clicked on the survey, they could read the consent letter. If participants consented, they continued and completed the survey. If the participants did not want to participate, they did not continue with the survey and closed the e-mail.
- 4. The data were aggregated by the SurveyMonkey software and were analyzed with the program's reporting tools.

Findings and Implications

The potential participant pool was 1,500 employees at the hospital, in which all employees had the opportunity to respond to the e-mail survey. I sent the survey out to the hospital employees with the collection time for responses being a 2-week period during the late fall of 2016. The survey generated 133 responses out of 1,500 possible responses. After reviewing the responses, 17 surveys were disqualified because the

survey had been started and not completed. The total number of responses used to calculate the findings was 116.

I collected the demographic data (Table 2) of gender, age, height, weight, BMI, and level of exercise. Of the 116 respondents, 76 (65.52%) were women and 40 were men (34.48%). The ages of the female respondents were: ages 18 to 25 (n = 10), 26 to 55 (n = 43), 56 to 65 (n = 16), and > 65 (n = 7). The ages of the male respondents were: ages 18 to 25 (n = 2), 26 to 55 (n = 17), 56 to 65 (n = 12), and > 65 (n = 9).

Table 1

Demographic Data

Female	76	Survey	Male	40	Survey
Ages	18–25	10	18–25		2
	26–55	43	26–55		17
	56–65	16	56–65		12
	> 65	7	> 65		9
BMI	30–35	23	BMI	30–35	15
Ages	18–25	3	DMII	18–25	13
Ages	26–55	12		26–55	
	56–65	7		56–65	3
	> 65	1		> 65	8 3 3
BMI	35–40	5	BMI	36-40	1
Ages	18–25	1		18-25	0
C	26–55	3		26-55	0
	56–65	0		56-65	1
	> 65	1		> 65	0
DMI	. 40		DMI	. 40	1
BMI	> 40	6	BMI	> 40	1
Ages	18–25	0		18–25	0
	26–55	5		26–55	0
	56–65	1		56–65	1
	> 65	0		> 65	0

When looking at the level of reported exercise, however, 24 (20.69%) of respondent's male and female reported they got "about the right amount" of exercise, 20 (17.24%) reported "slightly too little," 33 (28.45%) reported "somewhat too little," and 39 (33.62%) reported "much too little" exercise. These results might suggest that an employee gym or access to a fitness center may be appropriate. Using the URICA assessment in this DNP project allowed me to ascertain where the employees were in deciding to make a change regarding a proposed weight loss program. The different stages revealed that the group average for pre—contemplation the group average was 9.3, contemplation stage group average was 11, the action group average was 12.6; there were no participants in the maintenance stage. The results of the survey (Table 2) reflected that 46.4% of the 116 respondents were thinking about making a change in their lives within the next 6 months (contemplation stage), and they wanted additional information about the weight loss program being proposed.

The issue of developing an employee weight loss program has been taken on by many large corporations that have incorporated weight loss in their employee wellness programs. To be able to answer the question of the best practices necessary for program development, the results of the literature review should be kept in mind to help align communication to the participants who do not identify with these demographics; particularly important may be the high nonparticipation rates of nursing staff in previous programs at hospitals.

I identified multiple implications that the project findings have for positive social change. Most hospitals are an anchor in their community. When hospitals do not have healthy health care professionals to care for patients, the community will receive less than the optimal care that the hospital advertises. The lack of a healthy work force could create an undesired impression within the community, which has implications for patient satisfaction and reimbursement as well as overall community health. For example, if an overweight nurse is educating a patient on diet and exercise, the patient may feel that there may be a "double—standard" when being educated by an overweight nurse. This patient then may go out into the community, talk about his time in the hospital, the perception of the hospital care could be hindered.

The long-term implication of not having an employee-based weight loss program could be that obesity could lead to costly diseases, such as Type 2 diabetes, hypertension, high cholesterol, heart disease, sleep apnea, difficulty breathing, joint pain, and joint replacements. When these health issues arise, the hospital covers the care for the ill employees, but at an increased cost for both the organization and the employees. Money for programs, such as weight-loss programs with long-term gains, is difficult to justify in an environment of short-term financial concerns.

Table 2

URICA Survey Results

			Contemplation			Action			Maintenance		,
Pre-Contemplation (PC)	Score	Results	(CO)	Score	Results	(A)	Score	Results	(M)	Score	Results
Questions			Questions			Questions			Questions		
1	2	2 49.10%	2	4	47.40%	3	4	52.60%	6	, 4	33.60%
5	2	2 41.40%	8	4	56.90%	7	4	49.10%	16	. 4	33.60%
11	2	2 45.70%	12	4	42.20%	10	4	52.60%	18	. 4	49.10%
13	2	2 54.30%	15	4	54.30%	14	4	34.50%	22	. 4	50.00%
23	2	2 41.40%	19	4	43.10%	17	4	59.50%	27	4	54.30%
26	2	2 44.80%	21	4	44.80%	25	4	49.10%	28	, 4	37.90%
29	2	2 42.20%	24	4	47.40%	30	4	40.50%	32	2 4	50.00%
Total	14	45.56%		28	48.01%		28	48.27%		28	44.07%
		2		/7	4		/7	4		/7	4

Project Implementation

Before developing a medical weight loss program, by the project site, the workplace must be assessed to identify the correct picture of the issue of elevated BMIs. Acknowledging the high incidence of BMIs was the leading factor that led to my exploration of the question of what could be done by the employer to help decrease the BMI of at-risk employees. The creation of an assessment team will be the initial step. The assessment team will include members of the affected population, the executive board, human resources personnel, the employee health nurse, and the medical director. The team will develop a plan for what information should be collected to best support the program's planning, implementation, acceptance, and sustainability (Hodges & Videto, 2011).

After the team completes the assessment phase, the same team will work together to help develop the plan for implementation that will involve developing a mission statement, program goals, objectives, and a model or theory upon which to base the program. The team will establish a budget for the program implementation and estimate the time needed to plan the project activities for the implementation. An evaluation plan will be needed to assess the steps that are implemented; often a PDCA cycle can be used to improve a defect noted in any area of assessment, planning, implementation, or evaluation. The PDCA will add the mechanism for quality assurance.

Finally, there will be a pilot-test prior to the implementation with a small group to identify any potential flaws. The pilot-test for this project may not be a true indicator for the effectiveness of this program because the GLP program core group has translated

their program to multiple sites across the United States, has the same core values as the DPP, and has sufficient data to support this as an evidence-based program (University of Pittsburgh, 2011). However, depending on the results of the pilot-test, the executive leadership will decide to continue the program or to terminate it.

Limitations

The limitations of the needs assessment were the number of respondents to the survey, which was not representative of the employee group. Several factors could have led to this result. The survey went out just prior to the Christmas and New Year holidays, and the impact of this timing could have been fewer staff in the hospital. Employees may have felt too busy due to low staffing to participate. Additionally, when the employees were reviewing their e-mail, they simply may have not wanted to participate, possibly due to the lack of communication about the program prior to the e-mail invitation.

The principal limitation to this project was the lack of importance that the hospital executives placed on this project. Half way through this project, the executives stated in a leadership meeting with me that the assessment may continue but because of the higher level of issues being placed on the hospital, this project would not be supported. The executives did allow the e-mail invitation to go to the employees, but I was not given much opportunity to communicate to staff regarding the project. The thought behind this according to the executives was that they did not want to give the employees the impression that the program was a potential new benefit, when there were no monies to support a new program.

Recommendations

If this project were to proceed at the project hospital, a planning committee or team would be put in place that included nurse(s) specialized in working with the obese population, a social worker, a diabetic educator, a physician to act as program champion, a leadership representative, and a marketing professional. The planning would lay out the next steps for implementing a pilot program of the GLB with 12 sessions for education and an additional six sessions for maintenance.

The hospital was not in a financial position to support a weight reduction program at the time of this project; therefore, the proposed recommendations for a solution to the obesity problem in the community is to approach clinics and individual providers with the information and education regarding obesity and the long-term implications of obesity as described by the CDC (2016). Change needs to occur at the provider level to benefit the population. Engagement of the health care workers in healthful lifestyle changes will extend to their patients by example and through the education of weight loss management.

A higher insurance premium for employees with a BMI of 30 or above has been used as an incentive by some employers. This approach has been successfully used to reduce the number of employees who smoke (Baylor, Scott, and White Healthcare, 2011). When the smokers test negative for nicotine at the next enrollment period, the additional premium amount is waived. An employer in Russellville, Arkansas, has an employee benefit program that has an option for employees to earn incentives in the form of premium discounts for being tobacco-free and being involved in healthier wellness

activities to encourage healthy weight (Saint Mary's Regional Health System, 2015).

Perhaps when the project employer sees that there is an urgent need either by listening to the employees or reviewing the escalating costs of health insurance premiums, hospital executives will reprioritize a program for employee weight loss. Employee participation in such a program would help to resolve current health issues and would be a preventive measure for obesity related comorbidities. The proposed weight loss program would be the GLB as developed by the University of Pittsburgh (see Appendix B). Any group may take the program (permission to use it is on the face sheet of the materials) and replicate it in their own environment. The GLB is based upon the TTM, with the use of the URICA to assess readiness for change.

Strengths of the Project

The strength of this project was that it gave a glimpse of how obesity is being viewed at a hospital where the employee BMI is high. It showed that the leadership of the hospital was being attentive, responsive, and willing to consider the project, but when competing issues such as the merger, leadership changes, and internal audits emerged, the executive team was not willing to sponsor the project. Because the leadership team removed their support, marketing could not send out communication to the employees regarding a survey and the reasons behind it. The sample of 116 responses was not a true representation of the employee base.

When reviewing results of the URICA assessment, the responses may reflect the true readiness for change of the respondents or could reflect the socially acceptable responses to the survey. The result indicating 46% are in the contemplation stage could

suggest that there are individuals looking to make a healthy change. A measure of social desirability of responses, such as the Marlowe-Crowne Social Desirability Scale, would be helpful in future research to determine the reliability of the answers for program planning. A final consideration is the time of the year. Employees may have been thinking about resolutions to seek healthier habits in the New Year. These resolutions might easily be abandoned after the holidays.

Future research using the TTM model can be implemented at weight loss surgery programs where the patients are usually in the action phase, when they are ready to make a change and are seeking a potential life-saving intervention. The URICA would help the bariatric team understand the readiness for change stage of the patient and how the presurvey interventions can be tailored to the individual patient. Additionally, the TTM model can be used for any free-standing clinic or within a community center where there is a need to establish a weight loss program.

Summary

By 2030, almost 60% of the population of Florida will be obese Healthiest Weight Florida, 2015 (). This increase is expected to contribute to millions of cases of preventable chronic diseases costing Florida an estimated \$34 billion (Healthiest Weight Florida, 2015). The state of Florida is the home of many older adults that reside in one state and live in Florida for a portion of each year, sometimes referred to as "snowbirds". The swell that occurs when they come into Florida, adds constraints to the local hospitals and clinics. This effect demands an increase in overall services that many of the localities

cannot keep up with. Most of these older adults have Medicare as an insurance provider, which can be a sub-optimal for payment reimbursement for providers.

The increase in obesity comes with higher insurance premiums (usually if a commercial payer) which is passed on to all employees of the employer group. The lack of primary care providers to treat obesity and the associated co-morbidities associated with obesity is a potential problem. It is unfortunate physicians are not well equipped with the knowledge of obesity to have the time to sit with their patients. Reimbursement for managing the co-morbid conditions is levied against the reimbursement for time spent on obesity management. Physicians and physician extenders can only refer the patients to nutritionists if the patient has a diagnosis of diabetes to be covered by insurance. The impact on social change will be an ongoing process for the field of medicine and insurance providers.

A suggested course of action would be to start with employers to help their employees identify and create a positive impact on health, such as improved energy, sleep, self-esteem, psychological health, and decreased health care costs (Centers for Disease Control and Prevention [CDCa], 2014; Healthiest Weight Florida, 2015). After completing the analysis of the needs assessment for this project, it was concluded that there should be more thought given into how to reach the remaining employee base to determine actual employee needs for a weight loss program. With the sample size of 116 out of a possible 1,500, this was not large enough to determine if there is an actual need for an employee weight loss program. Given the small sample size and the finding that 56% of the respondents have a BMI of less than 30, there may not be enough to support a

pressing need for a weight loss program at this community hospital. However, with 39 (33.62%) employees reporting "much too little" exercise, this could guide the hospital to address the need for an employee gym or benefits to join a gym.

Looking forward to Section 5: Dissemination Plan, I review the purpose, the proposal, and interest in an employee focused weight—loss program at a community hospital. Moving through the process, I have learned the process needed to navigate the intricacies of the hospital leadership system. I will include an analysis of self and how this project will help me in my future endeavors.

Section 5: Dissemination Plan

Introduction

The purpose of this project was to conduct a needs assessment of employee health status (gender, age, BMI, exercise patterns, and interest in a weight loss program) and to take the assessment findings to the executive board of the community hospital with a proposal to develop an implementation and evaluation plan for an employee weight loss program. The findings from the needs assessment will be given to the executive board upon completion of this DNP project and I will await their decision on next steps.

At this point of the project, I should be looking forward to having the opportunity to disseminate the results of the survey and offering next steps to a pilot program as previously mentioned. Due to the unforeseeable issues with the hospital executive leadership having to focus on the transition to a unforeseen changes for the hospital in the near future; the leadership team has asked not to move this project any further. I was told to return to place on the agenda in January, 2018.

Equipped with the knowledge derived from this project all is not wasted; this information can be disseminated to other health care facilities, such as weight-loss clinics, primary care physician offices, community health centers, and senior citizen centers, that also work to help the obese population to improve their health and decrease comorbidities.

Analysis of Self

I have enjoyed my experience leading into the final DNP project but am saddened that I will not be able to move forward with the project as planned. The urgency for the

project at the hospital is not an outstanding issue according to the executive board due to pressing financial concerns even though obesity was one of the top two concerns on the hospital's list for community-focused initiatives. Maybe because I have been trained in this area, I was overzealous to move this program forward and expected the results of this project to be like those described in the literature.

I have come to acknowledge the fact that research is vital to present day nursing and that the DNP nurse is truly needed to bring research to the bedside. Due to my studies, I have learned about nursing advocacy. The DNP program has taught me to advocate for my patients and to look at current legislation to see if there is a place where I can make a difference. I have been taught through this program that nurses can be an integral part of a team for the betterment of health care and to move the field to the next level. DNP students can be a voice in the accountable-care organizations that are working hard to care for patients within cost-effective constraints and short-term financial horizons. I believe that the DNP students can offer the "big picture" and not be narrowly focused on one agenda item. I believe we have a place on hospital boards and community center boards and that nurses have a distinct voice and vision to bring to health care delivery.

I have always wanted to make a difference in the lives of the patients I meet and for whom I care. I thought I would be in a leadership position, but now see that I can make a difference in the field, in the trenches side-by-side with the floor nurses, supervisors, managers and, most of all, the patients I care for daily. The patients are why I became a nurse and my doctoral degree enhances the value I bring to patient care.

Summary

Obesity is a disease and society must begin to address it. The comorbid conditions that result from obesity are being treated in every hospital every day. Obesity is being seen in elementary schools, colleges, and places of employment. In this project, I sought to bring information towards a solution to the obesity problem to a health care employer after noting the high BMIs of employees. As the rate of obesity continues to rise, DNP practitioners need to have a voice and can bring solutions to our communities. DNPs care for populations of patients within communities. My focus of care has shifted through the DNP program to the needs of not only individuals but also the needs of families and the community. The 46% of employees who are in the contemplation stage of readiness for change at the local hospital deserve an intervention as described within this DNP project.

The findings of my project have implications on positive social change and offer the knowledge and opportunity necessary for entities thinking of adding an employer-sponsored weight loss program to lead to work-force wellbeing. The approach may be more of a holistic method, beginning by knowing what stage the employees are in and then moving on to designing a culture of health improvement that will lead to success for each employee. Strategies can include environmental support by providing walking paths, walking groups, or health club benefits. An organization could also include the local community, using social media to broadcast different activities. The employer must have a high level of support from management and meaningful employee engagement for the long-term success of any health management program.

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Appendix A: Permission to Use URICA Assessment

From: James Prochaska [mailto: XXXXXXXX] Sent: Friday, October 28, 2016 11:48 AM

To: Baumann Karen

Subject: [EXTERNAL] RE: URICA

Dear Karen:

You certainly have my permission to use the URICA in your important study. Copies of all our measures are available for research purposes and can be downloaded, along with scoring information and relevant articles from our website: www.uri.edu/research/cprc.

Best of luck to you in your study.

James Prochaska

From: XXXXXXXX

Sent: Friday, October 28, 2016 11:45 AM

To: XXXXXXXX Subject: URICA Importance: High

Dear Dr. Prochaska,

I am currently a Doctor of Nursing Practice student from Walden University. My project that I wish to use URICA is to help determine the readiness of an individual to participate in an employee sponsored weight loss program. I would like to be able to send the survey out via an <u>online survey</u> with no format change. My IRB board identified that I would need written permission to do so from your office since they could only see it as a pencil-and-paper self-administered format. I would appreciate the consideration and I hope that your office will grant me this permission

My best, Karen Karen Baumann, MSN, RN, NE-BC

Appendix B: Table of Contents of the Group Lifestyle Balance Program

Session 1: Welcome to the Group Lifestyle Balance Program

Session 2: Be a Fat and Calorie Detective

Session 3: Healthy Eating

Session 4: Move Those Muscles

Session 5: Tip the Calorie Balance

Session 6: Take Charge of What's Around You

Session 7: Problem Solving

Session 8: Four Keys to Healthy Eating Out

Session 9: The Slippery Slope of Lifestyle Change

Session 10: Jump Start Your Activity Plan

Session 11: Make Social Cues Work for You

Session 12: Ways to Stay Motivated

Session 13: Preparing for Long-Term Self-Management

Session 14: More Volume, Fewer Calories

Session 15: Balance Your Thoughts

Session 16: Strengthen Your Exercise Program

Session 17: Mindful Eating

Session 18: Stress and Time Management

Session 19: Standing Up for Your Health

Session 20: Heart Health

Session 21: Stretching: The Truth about Flexibility

Session 22: Looking Back and Looking Forward