MEDI 8127 Report

Title: Obesity Management in Primary Care Medicine: A Review of Obesity Perception and Barriers to Weight Loss

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Abstract:
Background: This project addresses the obesity epidemic in America. According to the CDC, in 2018, the US obesity prevalence was 42.4%. Obesity is linked to many conditions including heart disease, stroke, type 2 diabetes, and certain types of cancer. Successfully treating obesity can decrease these leading causes of preventable and premature deaths. A proper understanding of the successes and failures of current obesity management in primary care medicine with the help of qualitative research through patient and provider interviews can elucidate the best practices to reduce the burden of disease in America.

Methods: A review of literature was conducted to assess the barriers to obesity management in primary care clinics using the chronic care model (CCM). Specific inclusion and exclusion criteria were used in gathering research papers published within the last 10 years from PubMed to find relevant literature using keywords including "perception of obesity" OR "barriers to obesity treatment." Literature review of qualitative research papers and the creation of specific topics to focus on within obesity medicine was inspired by an interview guide created by the Mindful Choices Weight Loss Management Clinic in the Department of Family Medicine in UT Health Science Center, San Antonio, Texas.

Results: The impact of the negative biases surrounding obesity in the health outcomes of obese individuals was compiled and discussed. Key findings from recent obesity literature include the positive association between a well-informed patient population and successful obesity management. Patient insight into their own disease as being a complex, chronic disease rather than a simple disease of "laziness" or "lack of will-power" had major implications in the success of treatment. Additionally, the existence of a medical provider obesity bias in addition to the failure to document patient's obesity in medical charts as a result of an under detection of overweight patients was found to have a negative association with obesity management in primary care clinics.

Conclusion: This study provided insight into the patient perception of obesity and how negative biases to obesity can create barriers to obesity management in primary care medicine. This research highlights the importance of continued research in this field and the great potential of understanding obesity through the lens of the Chronic Care Model of Disease.

Introduction:

This project addresses the obesity epidemic in America. According to the CDC, in 2018, the US obesity prevalence was 42.4%. Obesity is linked to many conditions including heart disease, stroke, type 2 diabetes, and certain types of cancer. Successfully treating obesity can decrease these leading causes of preventable and premature deaths. This project will contribute to clinical practice specifically in better informing primary care clinicians how to best support and treat obese patients by looking at the patient as more than just a sick person, but rather as a person with several other factors contributing to their health: economic status, education, neighborhood and built environment, social and community support—all of which will be illuminated during compiling and assessment of qualitative patient interviews into a literature review.

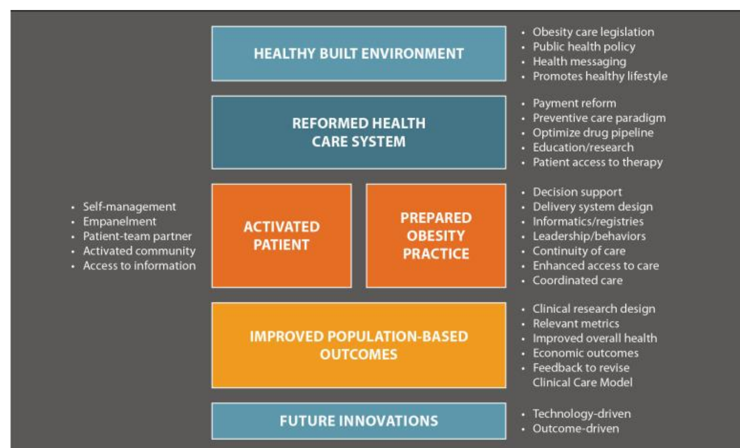

Figure 1 taken from the American Association of Clinical Endocrinologists Practice Guidelines for Medical Care of patients with obesity: Chronic Care Model for Obesity Managment
https://www.endocrinepractice.org/article/S1530-891X%2820%2939214-4/fulltext

Methods: A literature search was conducted using PubMed using search words and specific inclusion and exclusion criteria to answer questions inspired by interview questions present in the Mindful Clinic interview guide (see figure 2). Topics for the literature search were also pulled from the AACE Chronic Care model for Obesity Management. These questions included but were not limited to: What were some of the barriers/ facilitators you came across as you attempted to manage your weight? What can your primary care doctor do to help your weight management journey (resources, medications)? Had any previous primary care doctors discussed your weight in the past; how did that make you feel? How should doctors approach the topic of weight management to patients? What is your perspective about obesity? Do you feel that obesity is a disease? Articles to include in this review were chosen based on their relevance to the above questions and additional questions in figure 2.

Key words searched included “Perception of obesity” OR “Barriers to obesity treatment”

- Inclusion criteria:
    - scholarly journal, any geographical region, written in English, published in the last 10 years, data collection with either qualitative study, full text available

  - age of participants at least 18 years old, participants must be diagnosed as overweight as defined by the WHO as having a BMI over 25
  - study outcomes related to Mindful Clinic's interview guide questions focusing on understanding the patient's barriers to weight loss and obesity perception
- Exclusion criteria:
  - Studies published before 2012, quantitative studies

The literature search was guided by interview questions used by Dr. Saima Siddiqui in the Department of Family and Community Medicine in the University of Texas Health Science Center in San Antonio. Dr. Siddiqui et all conducted qualitative interviews to determine barriers to the implementation of the chronic care model of obesity prevention and management.

This research is ongoing and thus results discussed below are preliminary findings from the several relevant research publications that fulfilled the stated inclusion and exclusion criteria.

Discussion/Results:

In a cross-sectional survey conducted in Lithuania by Zelenyt et al, patients, nurses, physicians, and public health experts were surveyed regarding their attitudes towards obesity. Many participants failed to visually recognize obesity. The study showed a significant difficulty in estimating other's weights in all participants surveyed, however participants were performed well in estimating their own body weight. A majority of the participants correctly associated obesity as a risk factor for heart disease and diabetes but lacked knowledge regarding other associated diseases such as cancer, depression and asthma. This study is significant because it reveals that if healthcare professionals themselves have a misperception of obesity in their patients, then the first step of treating obesity—diagnosing and properly communicating the diagnosis to the patient is difficult in the early stages.

An observational study by Mawardi et al. surveyed patients in an academic internal medicine clinic and found that a significant barrier to the treatment of obesity is the lack of recognition by patients and the lack of documentation of by physicians. Patients in the clinic were surveyed on their perception of obesity. Researcher found that 59.9% of obese patients in the clinic perceived their weight as obese. About 33% of patients with a BMI in range of 30 to 34.9 perceived themselves as having obesity. 71% of patients with a BMI of 45, putting them in the morbidly obese category, perceived themselves as having obesity. Out of all these patients surveyed in the clinic, about 42% of obese patients had physician documentation of their obesity. Recognition of this disease, this quality improvement study suggests, is a crucial first step.

Hopkins et al. studied the effects of word choice in patient's perception of obesity. The researchers were interested in seeing whether specific weight-related terms, when used during obesity treatment initiation, effects the negative weight bias and internalization of feelings of negative emotions among patients. Study participants read various vignettes with the words "weight," "BMI," "obesity," or fat interchanged randomly. The researchers then looked at the participants reports of self- efficacy and beliefs about obesity, illness perception and interest in a weight loss program. The results showed that the use of the term "obesity" generated the greatest self-efficacy and perceived control over obesity while the use of the word "fat" resulted in the

least amount of perceived understanding of obesity. Thus, the language healthcare professionals use in weight management clinics is an important contributor to successful provider intervention.

A systematic review conducted by researchers E. Burgess et al. looked at the determinants of adherence to lifestyle modifications in adults with obesity. The researchers found that the primary barriers to overweight patient behavior modification included poor motivation, environmental and/or social pressures, and perceived lack of time, bodily limitations, negative emotion, socioeconomics, lack of disease insight and obesity understanding and lack of enjoyment of exercise. The strongest predictors of success in adherence to weight loss interventions include early weight loss success, lower BMI, better baseline mood, being a biological male and being an older age. These findings provide healthcare providers crucial insight in developing effective lifestyle intervention programs that keep in mind barriers to obesity management in primary care and treat obesity with the complexity and nuance it needs with future hopes to lower the burden of this chronic disease.

Discussion: Obesity is a complex multi-factorial disease that requires compassionate and thorough care to be effectively treated. The prevalent negative attitudes associating obese individuals with laziness, lack of will-power and discipline have clinical significance: the stigma and misunderstandings regarding obese people adversely effects these patient's physical and psychological outcomes. For example, an obese person's lack of confidence in their ability to lose weight can contribute to weight gain, which turns into a viscous cycle. Obesity stigma also increases risk for depression, suicidal ideation and low self-esteem. Behavioral modification to encourage weight loss cannot solely rely on motivation alone. A proper, realistic perception of a person's own weight, according to the data, can motivate people to lose weight.

Future considerations: Healthcare professionals need to be properly educated regarding the multiple factors that contribute to barriers to weight loss. Healthcare teams should be particularly tactful in their choice of language to reflect sensitivity to the patients' needs and vulnerability to further enhancement of feelings of shame and guilt. The healthcare clinic should be inclusive to obese patients: using armless chairs that are large enough to accommodate overweight individuals, extra-large gowns and medical equipment sizes to properly care for and dignify these patients.

Acknowledgments: Special thanks to Dr. Saima Siddiqui and the Department of Family Medicine at UT Health Science San Antonio for their guidance during my research.

See Figure 2 for an example interview guide of questions used by Dr. Saima Sidiqqui and her team in the Mindful Choices Clinic within the Department of Family & community Medicine University of Texas Health Science Center at San Antonio.

This interview guide was used as part of qualitative research that aimed to better understand the barriers to weight loss management specifically in the population the clinic serves which

includes a large number of patients who are diabetic, have metabolic syndrome, are overweight and have little insight into their medical conditions.

Semi-structured Interview Guide

Introduction:
As you know we want to know about your experiences/ perspectives on gaining weight/ obesity. I want to remind you that you have a right to not participate in this interview, or to skip question, or stop at any time. Are you ready to start? Do I have your permission to record this interview?

Patients

1. Let's walk through the story of your weight gain. Let's start when you were younger and walk through the milestones in your life, when did you first start to notice a change in your weight? How did the weight gain affect your life?
2. Let's talk about some of the methods you attempted, if any, to manage your weight. What were some of the methods you tried? How many times would you say you tried to manage your weight and failed?
3. What were some of the barriers/ facilitators you came across as you attempted to manage your weight? What were some of the costs you experienced as you attempted to lose weight (social, financial)? What are you currently doing to manage your weight, (if this is working, what are you doing differently than previous methods?)
4. If your doctor recommended a keto diet (low carb, high fat diet), how realistically would you be able to include this diet into your daily life?
5. What is your ideal weight/size? Do you have any other health goals?
6. What can your primary care doctor do to help your weight management journey (resources, medications)? Had any previous primary care doctors discussed your weight in the past; how did that make you feel? How should doctors approach the topic of weight management to patients?
7. Let's talk about your perspective about obesity, do you feel that obesity is a disease? Is it a medical condition that should be discussed with a doctor?

PCP

1. What is your position (resident, faculty)? How long have you been at Family Health?
2. How comfortable do you feel discussing the topic of obesity to your patients?
3. Do you frequently discuss the topic of obesity with patients? When do you typically bring up the issue of obesity with patients (pt is approaching obese stage, low-medium risk obesity, pt is diagnosed with comorbidities) How do you approach the topic of obesity with patients?
4. In your opinion, when should primary care providers bring up the issue of obesity with patients (probes: patients are already at BMI 30+, patients are diagnosed with comorbidities -diabetes, cardiovascular, experiencing pain, thyroid disorders?
5. What is your clinical perception of obesity? What is your perception of obesity and its relation to other chronic conditions? What is your perception of the reasons or circumstances that cause a patient to gain weight; and continue to gain weight? In the past what have been some barriers for patients to lose weight? What have been some facilitators?
6. What is your general experience of managing obese patients? Are patients receptive, defensive, so on?
7. In the ideal case, what steps would proceed after you've brought up the issue of obesity to a patient (probes: patient will request information, pcp refers to resources, pcp prescribes medication)?
8. What are the barriers as a primary care provider for more active involvement in managing weight loss (probes: time, reimbursement, workload, time, lack of information about obesity, education?) What are some facilitators as a primary care provider for more active involvement in weight management (support of preceptor, system support-billing, education, patients' circumstances?)
9. Do you consider obesity a disease? Do you address obesity as a disease (can be treated with medication, healthcare team guidance)?
10. Do you have any suggestions or thoughts on how to improve weight management in obese patients (education on healthy lifestyle, resources, system support)?

Promotoras

1. How long have you been a community health worker? How long have you been a community health worker for family health?
2. Let's think about the population you work with, what is your perspective as a community health worker about the issue of obesity in the patients you work with?
3. From your past experiences with patients, what type of unhealthy environments do you observe in patients' home (unhealthy food and food cooking practices)? Typically, how do you approach patients about the unhealthy environments? How do you assist patients? What methods have you suggested to patients in the past that have been effective?
4. In your opinion, how do you see the role of PCP in helping patients to manage weight?
5. What is your ideal of a PCP role in management of obesity? How do you envision the ideal procedures a PCP would take to be effective in the management of obesity in their patients [follow up about obesity at each visit, refer to relevant resources)?
6. In your opinion, how would you describe the process of the coordination of care between the community health worker and pcp? How would you like to see care coordinated with the PCP (PCP , pts and CHW giving feedback about pts' unhealthy habits and problems in achieving healthy life style, financial issues for unhealthy eating)?
7. What are your suggestions for helping and educating patients and community about healthy life style changes?

Health Care Payors

1. How do you see obesity management and impact of healthy lifestyle changes? Do you consider obesity a disease?
2. What are some common barriers and facilitators of obesity management as a chronic disease?
3. What are some current reimbursement methods that you are aware of that are directly linked to obesity management? Indirectly? (probes: dietary counseling, medication, bariatric surgery)
4. What are the most common reimbursement methods you see most clinics use?
5. As a health care payor representative, what are some common barriers you notice for insurance companies to provide reimbursement methods? Facilitators?
6. What are some reimbursement methods have you noticed providers do not typically use, but feel they should?
7. What other type of reimbursement methods could you possibly recommend?
8. Where do you see possibly areas for improvement in reimbursement methods?
9. If you/your organization are presented with evidence will you consider reimbursement and approval of obesity medicines and surgery?

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