Journey to a Healthier You:
A Case Study of Evidence-Informed Interventions for Weight Management in Primary Care

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COUN 6387: Clinical Skills for the BHC

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April 26, 2023

FG is a 45-year-old Hispanic woman who has been presenting to the primary care clinic due to a history of hypertension, high cholesterol, and type 2 diabetes mellitus, she is taking the medications prescribed but is sometimes inconsistent with them. FG is currently married and has three kids, all of whom are in their teenage years. FG lives in Weslaco, Texas where she has lived for all of her life. Currently, FG has been referred to the BHC due to an inability to lose weight or achieve weight loss goals. FG is culturally Mexican and has always eaten, and enjoys eating, the typical Mexican diet. FG claims to have had issues with her weight since she was a young kid and entered the obese category after graduating from university and starting to work. Currently, FG does not do any physical activity and is largely stationary when working as well, she is usually sitting as a receptionist. Upon intake, FG was questioned about her desire to work on her weight, she was hesitant but was open to suggestions and coming to solutions. The hesitancy was due to multiple attempts in the past that did not yield any real weight loss as she always gained it back quickly, FG reports. FG also discusses that she is aware much of her being overweight has to do with her eating habits but claims that between working and dealing with her family, there is little time and energy to focus on her health. Generally, her eating habits consist of skipping breakfast and going out to eat at fast food restaurants for lunch and dinner. Part of the reason for this is due to both FG and her husband working full-time to make enough money to live, as they sometimes struggle with money which she notices increases her weight, but she attributes it to stress. FG claims to have never tried keeping a food journal, monitoring her calories, or focusing on what she is eating. The only diets that she has known of and participated in revolved around not eating certain foods which did not last long. On PHQ-9 FG scored a 6, indicating mild symptoms of depression, and on the GAD-7 she scored a 10 indicating moderate anxiety levels. Otherwise, FG has never been diagnosed or seen by any other mental health care provider. When asked about willingness to make changes in her life to work on the weight issues, she expressed willingness and a desire to meet goals that led her to lose weight. As far as barriers to weight loss are concerned, FG reports that sometimes it is a

struggle to try and eat healthy because her whole family struggles with weight issues and someone is always bringing “temptations into the house,” as she reported. FG reports not binge eating and just eats what those around her would consider normal despite knowing that she is eating more than an average person would. Usually, for dinner, the family will eat together while they watch a TV show to spend family time together, many times this consists of buying a family-sized meal or two and having it out on the table for everyone to serve as they like. While FG is interested in weight loss, she feels as though no one else in her family is supportive of this goal. FG understands the interplay of her weight and the comorbidities present but especially struggles due to the lack of social support from her immediate family. Since FG, as noted earlier, is working, and taking care of the family, it leaves her little time to work on herself whether that be physical or mental health.

FG has an issue with both eating habits as well as managing her weight, despite attempts in the past they have not led to successful management. Part of this has to do with the busy lifestyle that she leads, from working to being a homemaker. Her behavior and health attitudes seem to conform her life around those around her leaving little to no time for growth mentally or health conscientiousness for herself. Further, her cultural diet worsens the situation as the breakdown of the historical diet is considered unhealthy, especially when overeating these meals. Money is also part of the issue as she feels as though she has to stress excessively sometimes to make sure they have money for food, rent, and other living expenses. Therefore, not just the lack of physical exercise that she talked about, but the diet and stress play important roles in not being able to manage her weight. Further and most importantly FG seems to have little in the way of social support as those in direct contact with her do not see this as a major problem. This lack of support worsens the chances for her to lose weight as she becomes dispirited during any past attempts and has not been able to continue. The consequences of this lifestyle are apparent to FG, and they include diabetes, hypertension, and high cholesterol, as well as moderate anxiety and mild depression. Despite these comorbidities, potentially as a

coping mechanism, FG continues participating in her current lifestyle. With all this being understood, acknowledging the factors in her life are vital to promoting weight loss and weight management. Focusing on helping her manage her weight with her current lifestyle and culture is vital to promoting greater health for FG.

Weight management seems like a simple term upon first observation – to simply monitor and control one's weight. In practice, it is rarely as easy as sticking a band-aid onto a cut. For most of modern medical history, weight management focused on using one size fit all approaches to weight loss, which is why so many different programs exist claiming rapid weight loss guarantees. Rarely do these programs work for everyone again highlighting the reason there are so many programs available. Thus, coming up with true definitions of weight management is important because even figuring out treatment plans can be tricky as well as coming up with goals that are realistic and achievable which highlight the necessity to move toward more personalized care plans (Golubic et al., 2022). Further, most cases of weight management have to do with working with chronic cases of obesity rather than milder levels of increased BMI, which is the main indicator of weight in primary care. When a patient comes into clinic whether for weight management or another ailment, assessing BMI is standard but acknowledging and using weight-related counseling is not. The concerning idea behind this is that quality counseling by healthcare providers does lead to higher levels of motivation to lose weight (Jay et al., 2010), part of this quality is about building rapport because otherwise, the simple perception of the healthcare worker's health plays a role in the motivation building for the patient (Alnasiri & Alruwaili, 2021). Further taking into different cultural and diversity considerations are critical to building the encompassing holistic healthcare required to work on weight management. Thus, weight management ends up not being as simple as the term seems to be as this management requires a whole team to manage effectively with mental health, behavioral interventions, medication therapy, education on exercising, and nutritional education (Kheniser et al., 2021; Yumuk et al., 2015). Another problem in providing care for weight management is a physician's

perceived lack of time or efficacy of treatment plans (Leverence et al., 2007), which further supports the need for aid from other healthcare providers and a multidisciplinary team to form a holistic plan.

Part of the holistic approach mentioned starts with the primary care provider as weight management is not typically a reason for going to the clinic despite being commonly associated with other chronic illnesses. Having providers learn to counsel or provide referrals can be crucial to long-term weight management in clients because it starts to build the multidisciplinary care team required, especially since weight management counseling is not typically a standard practice (McAlpine & Wilson, 2007). One first step that is commonly overlooked is the mental health aspect of weight loss and long-term management, so by referring to counselors or therapists, treatment plans can encompass the different ways in which mental states manipulate weight. Combining mental health with classical weight management shows improvement in almost all aspects of a patient's life, including classical health issues, mental health, and promoting positive behavioral changes (Mohseni et al., 2022). Classically the strategies of weight loss are looked at as independent actions with little interplay and discussed as distinct entities. The classic two entities are diet and exercise. Many times, these are not discussed together or modified with the other in mind, further problems arise when other factors are not considered such as mental health, sleep, and stress levels. Part of this holistic review requires that healthcare providers work together to develop treatment plans and goals that interact fluidly rather than clashing. Since all the factors that are looked at when discussing weight management have the same goal outcomes, the plans should aid each other with the goal of lifelong weight loss. When looked at together better weight loss and increased longevity of weight loss is seen providing better weight management since they positively reinforce each other (Cheng et al., 2018). On the other side of the argument when only one management approach is used there is a much lower level of adherence to weight management leading to worse long-term outcomes, and it compounds when other chronic diseases are present (Van

Gaal & Scheen, 2015). So, while diet (Calyniuk et al., 2016; Jane et al., 2015) or exercise individually (Petriduo et al., 2019; Donnelly et al., 2009) is effective in losing weight the idea of weight management is to provide long-term care rather than simply looking at the ability to lose weight which means utilizing all aspects of care to promote increased health outcomes. The idea that weight loss is an individual venture is also somewhat troublesome meaning that creating a support system is critical in creating the highest chances of success in weight management (Cruwys et al., 2020), which underpins the idea of using a holistic approach by supporting familial or social involvement by those the patient can rely on.

Further aspects that need to be considered in this holistic model of care are the cultural and diversity aspects that are frequently overlooked. This tendency to overlook an individual's unique situation leads to increased risks of low adherence due to incompatibility with the lifestyle of the patient (De Leon et al., 2020). When there are clear findings that support differences in cultural understandings of foods eaten, weight management, and perceptions of eating behaviors (Dao et al., 2021; Rodríguez-Arauz et al., 2016). Racial identities are a commonly overlooked aspect of weight management that needs to be addressed first, because of the unique cultural and eating routines but also because of genetic and epigenetic differences. For example, it is not exactly clear whether obesity precedes diabetes or whether there is a symbiotic interplay between obesity and type 2 prediabetes leading to type 2 diabetes, what is known is that in most cases of type 2 diabetes, obesity is present. The reason this is important to consider is that classical BMI cut-offs for overweight or obesity categories may be less helpful in minority groups, thus earlier check-in and screenings could be required (Golubic et al., 2022; Tillin et al., 2015). This means that paying attention to the unique racial makeup of an individual can lead to better weight management and steering away from furthering chronic diseases associated with obesity (Caleyachetty et al., 2021). Further in looking at diversity considerations, just simple disproportion of obesity in different races indicates health care disparities that need to be taken into account. Obesity tends to be higher in minority groups

than in non-Hispanic white populations (CDC, 2022; Office of Minority Health, 2020) indicating potential areas for improvement in the quality of care for these minority groups. The exact reasons are not clear but the interplay between the different aspects of a culture and lifestyle can be noted as potential suspects. Further cultural aspects that are overlooked frequently are language barriers, people who are not fluent in English may have difficulty understanding material, plans for weight management, and even access to factual information. While finding weight loss information online may only provide limited success, there tend to be even fewer resources for those who speak Spanish with minimal resources being supported (Cardel et al., 2016). This emphasizes the necessity to create an environment where resources are available to those who may need the resources in languages other than English.

The two main interventions that will be looked at are cognitive behavioral therapy and family-based interventions. The rationale for family-based interventions is relatively straightforward since it revolves around building up the support system for FG. The ideas are that by educating other family members and involving them in the treatment goals, FG may be more likely to stick to the weight loss plan due to having others to rely on. As far as cognitive behavioral therapy is concerned, the rationale is focusing on removing negative thoughts and working on anxiety and depression with further action on weight loss by helping FG get into a more positive mindset.

For cognitive behavioral therapy, much of the focus will be on either psychoeducation or cognitive restructuring. Mindfulness-based approaches aid in reducing emotion-based eating and binge eating (Katterman et al., 2014). By using approaches that build mindfulness, we can aid in the conforming and adherence to the goals set by FG (Dunn et al., 2018). Further, by using cognitive behavioral therapy better exercise outcomes tend to arise promoting not just better dieting and mental states but physical activity as well (Barrett et al., 2018). The combination of these two effects can drastically help patients get into the correct mindset needed to make these permanent life changes, and so by using cognitive behavioral therapy, we

guide the patient to both increase cognitive restraint as well as reduce the emotional eating that very well could be furthering issues (Jacob et al., 2018). Using these techniques together with the goals that FG wants to set both short-term and long term for lifestyle modification can allow healthcare providers to monitor the mental states associated with her journey and empower her to be able to effectively meet all the goals she would like to hit leading to a better overall quality of life (Mohensi et al., 2023). Weight loss and management end up being much more effective when cognitive behavioral therapy is combined with these lifestyle modifications and goals (Cooney et al., 2018). As far as specific tasks will go, journaling is a great starting point where she can both monitor what and when she is eating as well as how she is feeling and what she is doing while eating (Butryn et al., 2007). Cognitive structuring will be used to learn techniques to notice and break out of negative mindsets that may cause her to relapse into old habits. Due to the busy lifestyle, the use of relaxation techniques will be used to teach FG as well as guide in session to a point of calmness when feeling excessively anxious.

On top of the cognitive behavioral, and arguably the more important of the two when starting treatment plans, are the family-based interventions. The role of family and other social circles is critical when one is looking to make lifestyle changes, this is especially true with something like attempting to lose weight. Partly because eating is something completely natural to partake in, but also because eating is something we frequently do with others. Plus, in aiding the patient, the family members or social support members tend to in part get hit by these habits and can lose weight as well (Gorin et al., 2018), this is especially true in the setting of spouses, probably due habits of eating together or the same meal that one of the pair cooks (Gorin et al., 2008). Another idea is similar to the psychoeducation in cognitive behavioral therapy which is simply teaching the family members complications of morbidity. Since having a parent or two with obesity increases the risk of obesity in children (Fuemmeler, 2013), there is good reason to promote positive behaviors and practices for the entire family to receive the carryover results as data shows that spouse involvement aids in effectiveness (McLean et al., 2003). On top of these

family-based approaches, it would be extremely beneficial to help her find support groups that have similar goals to strive towards completing the goals together as this promotes sticking to the plan since group placement can change the outcome (Leahey et al., 2010). These interventions will be a tool to be an adjunct to the individual goals and responsibilities but together with the two behavioral health interventions greater results will be achieved than alone (Nizamani et al., 2022).

As far as individual goal management, starting with diet modifications would be the ideal scenario but it is a bit unrealistic to expect huge changes in diet, especially if they go against the cultural norms of the family. Short-term diet goals can consist of eating under a certain calorie limit every day of a week or only eating fast food once or twice a week rather than every day. These goals are realistic, achievable, discrete, and timely. To start with exercise would be a great goal but shooting too far can be discouraging, so if exercise is to be one of the goals, then starting with walks would be better. Similarly, to dieting, the idea is to start small and slowly build up sustainable habits. By promoting these behaviors and setting these goals on top of the family-based interventions, an environment of health will start to be created where each person can motivate the other.

Problems that may arise with this case and weight loss revolve around two main points, first is remission into older behaviors, attitudes, and mentalities. The second has to do with the unwillingness to participate by family members. Despite the therapies aiming at working to avoid these problems, there is still a likelihood that they occur regardless which means that the treatment modality will have to be modified accordingly. For example, if the family is largely unwilling to help FG, then situations such as not eating more than one plate of food. Referring to the cultural and diversity considerations, while language is not an issue with FG, she has noted adherence to a classical Mexican diet so it would be helpful to further combat this with a culturally competent nutritionist that can aid in a sustainable diet plan that does not remove FG from her lifestyle. Ultimately the goal would be to achieve positive long-term weight

management using behavioral and habitual changes but using pharmacological treatment can also aid in FG's treatment, especially with the underlying comorbidities of type 2 diabetes, hypertension, and high cholesterol.

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