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Reducing Weight Bias: Creating an Anti-Weight Stigma Educational Simulation for

Nurse Practitioner Students

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A DNP project submitted in partial fulfillment of the

requirements for the degree of

Doctor of Nursing Practice

Seattle University

2021

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ABSTRACT

Background: Large-bodied people make up the majority of the American population, but healthcare providers are rarely taught specific techniques and strategies for management of their care and medical spaces are designed with furniture and equipment that does not accommodate large bodies. This alienation has resulted in a measurable detriment to the population's mortality and morbidity, such increased mortality of 60% from experiencing weight stigma and over 50% high combined cancer death rates as compared to the rates of those with normal BMIs (Sutin et al., 2015; Calle et al., 2003). **Objective:** This project will examine the evidence about weight stigma, efficacy of weight loss methods, investigate the large-bodied community's experience of healthcare, and create an anti-weight stigma educational simulation for nurse practitioner students.

<u>Methods:</u> Data was gathered using an online survey of self-identified fat/overweight/obese/largebodied individuals experience with healthcare, in addition to published literature on the large-bodied patient experience, to create a high-fidelity educational simulation in accordance with the International Association for Clinical Simulation and Learning (INACSL) guidelines and with expertise of the Seattle University Clinical Practice Lab.

<u>Results:</u> Based on the survey results a simulation of a routine wellness exam for a large-bodied midthirties assigned female at birth individual was developed with potentially stigma affirming care pieces of weighing the patient, armed patient chair in the exam room, a "normal' sized blood pressure cuff, a usual sized patient gown, patient exam table, physically examining the patient, and provider communicating the exam with the patient.

Implications: The simulation created is one tool to help address weight bias and stigma. Due to the non-evidence supported nature of weight loss recommendations there is much more extensive anti-weight stigma and bias work needed for medical education and provision of care to be equitable.

Reducing Weight Bias: Creating an Anti-Weight Stigma Educational Simulation for

Nurse Practitioner Students

America's "obesity epidemic" is entering its third decade as a public health crisis and it has failed to achieve widespread reduction of American BMIs. The National Center for Health Services survey data from 2016 estimates over 71% of American adults ages 20 and above are overweight or obese (Fryer et al., 2018). While a sustainable non-surgical method of weight loss has not yet been identified, there is consensus that being overweight or obese is inherently detrimental to a person's health. Implicit and explicit weight bias has been found to be stronger than biases for race, gender, or age (Teachman, et al., 2003). Puhl and Heuer's (2009) review of obesity stigma found evidence of bias and discrimination across employment, healthcare, education, media, and interpersonal relationships (Puhl & Heuer, 2009). The medical community is not immune to weight bias and is often a potent perpetuator of weight stigma. The evidence for weight bias within the healthcare field is extensive and has been documented since the early 1990's (Teachman et al., 2001). Providers consistently endorse believing negative stereotypes of overweight and obese patients such as the belief that patients don't care about their health, they will be noncompliant with care plans or treatment, and their weight is the result of personal failing. When surveyed, medical students endorsed similar stereotypes and reported preceptors and residents regularly making derogatory comments or jokes at the expense of large-bodied patients. This contributes to a clinical culture that condones and perpetuates weight stigma (Phelan, Sean M. et al., 2014; Phelan, Sean M. et al., 2015). Despite viewing large-bodied patients negatively, providers and students endorsed feeling unprepared to care for them (Forhan et al., 2013; Major et al., 2014; Phelan et al., 2014; Phelan et al., 2015; Tomiyama et al., 2018).

Large-bodied people make up the majority of the American population, however, healthcare providers are rarely taught specific techniques and strategies for management of their care. Our medical spaces are designed to exclude them with furniture and equipment that does not accommodate

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large bodies. This alienation has resulted in a measurable detriment to the population's mortality and morbidity. Sutin et al. (2015) found the experience of weight stigma increased mortality by 60%. Calle et al. (2003) found that compared to people with normal BMIs, overweight/obese men had 52% higher combined cancer death rate and overweight/obese women had a of 62% higher combined cancer death rate. It is unsurprising that large-bodied patients report avoiding and delaying care due to weight stigma induced stress in the medical setting (Puhl & Heuer, 2009). Aldrich, T., & Hackley, B. (2010) found that in 15 of 17 studies examining associations between obesity and cervical cancer screenings there was a significant inverse relationship between recent pap testing and obesity. Plainly put the higher the persons weight the less likely they were to have had a cervical cancer screening. Fear deters patients from seeking medical treatment until it is unavoidable and even then, it is not uncommon for medical providers to dismiss their concerns as sequelae of being fat.

Discrimination and stigmatization of any group is wrong, shame is not an effective motivator, and even if it were, discrimination and stigmatization would not change the lack of effective, evidence based, non-surgical weight loss interventions. If weight loss by diet and exercise were an achievable outcome the American population would not be majority large bodied. Currently there are no effective methods for weight loss (Colquitt et al., 2014; Lim et al., 2019; Mastellos et al., 2014; Nield et al., 2007; Norris et al., 2005; Padwal et al., 2003; Shaw et al., 2006; Semlitsch et al., 2021; Serraldo- Zúñiga et al., 2019; Taghivi et al., 2021; Wieland et al., 2012). However, large-bodied patients still need and are deserving of medical care that is respectful, thorough, and evidence based. This can be framed from a population health perspective of reducing morbidity and mortality by enabling people to receive care before they are ill or ensuring better distribution of resources by avoiding unnecessary hospitalizations. More importantly, there is a moral imperative to address discrimination, marginalization, and inequity caused by prejudice systems.

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Purpose of Project

Large-bodied patients face many barriers to receiving equitable care, but one of the most concerning is the weight bias of medical providers, including nurse practitioners. As the medical community begins to reckon with the effects of systemic biases, there has been a move to increase training to counter it, but that has yet to include weight bias. This project will 1) examine the evidence about weight stigma, 2) examine the evidence about the efficacy of weight loss methods, 3) gather data from the large-bodied community about their experience of healthcare, and 4) create an anti-weight stigma educational simulation for nurse practitioner students. The project aims to begin the process of addressing weight stigma as part of nurse practitioner education to better prepare graduates to care and advocate for large-bodied patients.

Literature Review

Search Method

A review of literature regarding weight stigma generally, weight stigma specifically within health care, and the efficacy of attempted weight loss methods was performed. Multiple searches were conducted of Seattle University's online collections, PUBMED, EBSCOhost, JSTOR, CINAHL, Cochrane Library, Google Scholar, and other university libraries electronic collections. For the topic of weight stigma the author focused on peer reviewed articles and searched using keywords weight stigma, weight discrimination, weight bias, fatphobia, anti-fat bias, and fat bias. For information regarding the efficacy of weight loss methods the author focused on meta-analysis and review articles because these captured the broader picture of weight loss methodology research, rather than individual studies of different methods. Results were limited to English language and not restricted by method or year. **Weight Stigma**

Weight bias, anti-fat bias, fat-bias and fatphobia are terms used within literature to discuss weight stigma. The terms are not synonymous, however within weight stigma research these terms are used interchangeably to name weight stigma. There has been a trend away from fat-bias in more recent literature, likely due to the negative connotations of the word fat. For the purposes of this review weight bias will be used to describe the negative associations and feelings provoked a large-bodied person in an individual. Weight stigma will used to describe the negative societal perceptions, assumptions, stereotypes, and judgements experienced by large-bodied individuals.

Puhl & Heuer (2009) theorized that weight stigma is one of the most prevalent and explicit stigmas' due to the "obesity epidemic" narrative used to dehumanize large-bodied people as a drain on social resources. The word "fat" within American society is considered a pejorative, synonymous with words like lazy, ugly, unintelligent, and undesirable (Puhl & Heurer, 2009). The belief that weight is a modifiable characteristic of the human body is used to justify and promote stigmatization of large bodies, in fact it has been pitched as a public health tool to encourage people to lose weight (Major et al., 2018). It also contributes to the assumption that large bodies stem from a moral or personal failing/weakness. Ambwanai et al. (2014) asked young adult participants to what extent they agree with "one of the worst things that could happen to a person would be for [them] to become obese", more than one-third agreed with the statement. The perpetuation of stigma occurs in almost every aspect of an individual's life; media, professional settings, educational settings, healthcare, platonic and romantic relationships, and family (Lee & Pausé, 2016; Major et al., 2018; Phelan et al. 2015; Puhl & Heuer, 2009). The rate of internalized weight stigma even prevents large-bodied individuals from finding in-group relief, unlike most other stigmatized groups (Major et al., 2018). Major et al. (2018) summarized it well "people who are overweight or obese have a "spoiled identity" that engulfs perceptions of them as a person and disqualifies them from full social acceptance."

The effect of this profound stigmatization extends through economic, interpersonal, political, and healthcare realms. Puhl & Heuer (2009) found that large-bodied people experienced a 5.8% to 24%, for women, and 3.5% to 19.6%, for men, wage decrease when compared to "normal" weight

counterparts. In a 4,290 participant nationwide prospective cohort study from the United States, after adjusting for sociodemographic, smoking status, exercise, and self-reported health status, researchers found that obesity was associated with reduced employment for men and women. Roehling et al. (2007) found discrimination against overweight and obese people by employers in selection, placement, compensation, promotion, and discharge. Even within families' parents are less likely to assist with the cost of college for daughters that are overweight (Major et al., 2018).

In Major et al.'s (2018) chapter of 'The Oxford Handbook of Stigma, Discrimination, and Health' "The Negative and Bidirectional Effects of Weight Stigma on Health", the authors detail the different aspects of weight stigma and the way it affects health. They identify two major pathways by which weight stigma affects the health of people who are objectively large and, to a lesser degree, those who perceive themselves to be large. The first is by "enacted stigma" or actions and policies that discriminate against those with large bodies. This includes items such as social exclusion, isolation, harassment, discrimination in education, and in the professional opportunities. For large-bodied people this results in acute and chronic stress, limits their educational opportunities, their income, degrades their social relationships, and precludes them from quality healthcare. The second mechanism is "weight-based social identity threat", or the state in which a person is concerned that they are being stigmatized because of their weight. The individual is then put into a hypervigilant state of awareness looking for and anticipating rejection. This state results in the same negative health affects that enacted stigma does, even in the absence of enacted stigma. This further contributes to high levels of chronic stress, which is linked to many obesity associated diseases such as heart disease and diabetes. It is also linked to increased prevalence of mood disorders, increased physiological response to stress such as increased consumption of calories, dysregulation of appetite, and disordered eating behaviors. The authors conclude with "stigmatizing people who are overweight is not only unsuccessful and likely to

backfire but also harmful to the health of individuals who are, or who believe themselves to be, overweight" (Major et. al, 2018, p. 27.)

Weight Stigma and Healthcare

Weight stigmatization is endemic to the healthcare system, as seen in studies such as Phelan et al.'s (2014) report that medical students identified large-bodied individuals as the most common target for derogatory humor by their preceptors and residents. In the same study Phelan et al. found explicit and implicit weight bias to be the most prevalent form of bias among the medical students. More concerning was their finding that the student's weight bias increased during medical school. Hebl & Xu (2001) found that doctors reviewing charts of patients that were portrayed as obese would spend less time with these patients and rate the visit as a waste of time but did not feel the same about the same patient when portrayed as thin. Bias against large-bodied patients has been documented throughout healthcare, including but not limited to nurses, medical students, and physicians (Phelan et al., 2015). Foster et al.'s (2003) survey of 620+ primary care doctors found that more than half saw obese patients as noncompliant, awkward, and unattractive, and one-third saw them as lazy, weak-willed, and sloppy. Paradoxically, providers and students endorsed feeling unprepared and under trained to care for large-bodied patients. It was not clear whether they were referring to providing weight reduction care or general wellness care or both (Chang et al., 2010; Forhan et al., 2013; Fryar et al., 2018; Hebl & Xu, 2001).

Large-bodied patients consistently report that that when presenting for medical care their chief complaint is either ignored or the condition is solely attributed to their weight. Anecdotally, there have been reports of patients misdiagnosed for years as having a weight induced problem, when there was an underlying condition unrelated to their weight causing their symptoms (Puhl & Heuer, 2009; Sutin et al., 2015; Tomiyama et al., 2018) In self-reported surveys large-bodied patients said; a) they felt burdensome to the provider, b) that they put off preventative care measures such as cervical cancer screenings due to discomfort and embarrassment, c) they avoided seeking medical attention because they feared judgement and shame from providers, d) the dread of being weighed prevented them from seeking care (Puhl & Heuer, 2009). In a study of weight stigma, perceptions of discrimination due to weight were associated with a 60% increase in mortality, even after controlling for factors such as smoking, physical activity level, BMI, and self-reported health (Sutin et al., 2015). This could be due to large-bodied patients' avoidance of medical practitioners and treatment, as mentioned above (Puhl & Heuer, 2009).

Clinical facilities and tools are a silent culprit in the validation of the patient experience of weight stigma (Tanneberger & Ciupitu-Plath, 2018). The lack of size appropriate tools, such as exam tables, gowns, speculums, or blood pressure cuffs, is internalized by patients as a personal failing instead of a facility failure (Puhl & Heuer, 2009). The seating at most clinics does not accommodate large bodies comfortably or sometimes at all, which enacts further stigma upon the patient (Major et al., 2014; Puhl & Heuer, 2009; Tomiyama et al., 2018). For medical professionals, the lack of appropriate assistive devices, personnel, or tools produces frustration and blame that is directed at the patient. The lack of size accommodating infrastructure slows down workflow, puts patient lives at risk, and puts a physical strain on the bodies of health care workers that provide direct patient care (Hebl & Xu, 2001; Tanneberger & Ciupitu-Plath, 2018).

Many conditions and diseases are associated with obesity, though those associations are often treated as causative. It appears to be an aspect of weight stigma that weight is assumed to be the causal factor for comorbidity (Garvey et al., 2016). As previously discussed, weight stigma places an enormous amount of stress upon large-bodied individuals. Weight stigma is associated with decreased ability to regulate dietary intake and a decreased perception of an individual's dietary control. This effect is not limited to objectively obese/overweight people, it also effects individuals that perceive themselves as being fat. Inversely, objectively overweight/obese people that do not consider

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themselves to be fat do not demonstrate dietary dysregulation and feel more in control of their dietary intake (Major et al., 2014). In a survey of medical students' weight stigma was associated with increased; a) substance use, b) isolation, c) perception of lack of mastery, d) worse overall health for students who were overweight or obese (Phelan et al., 2015). The effects of weight stigma on medical students could provide insight into why people-of-size are underrepresented in healthcare.

The persistent casual assumption that higher BMI results in comorbidity is complicated by a growing body of research about the effects of stress on the human body. Increased stress is demonstrated to increase appetite for high fat, high calorie food, suppress the immune system, and cause persistent activation of the cardiovascular system. Outcomes that contribute to conditions such as diabetes, hypertension, and hyperlipidemia, which are currently considered a result of high BMI (Major et al., 2014; Puhl & Heuer, 2009). The presumed casual direction of high BMI as a results of weight stigma influences research conclusions and inhibits the scientific understanding of disease etiology. Calle et al.'s (2003) report on obesity increased risk of cancer is a good example of weight stigma influencing medical study conclusions. A retrospective cohort examination of 900,000 Americans that died of cancer and concluded higher BMI increased cancer incidence and mortality. Notably, the researchers did not control for socio-economic status, insurance coverage, access to medical care, or history of utilization of medical services in their analysis. The association is presented as a causal relationship with increased BMI and weight reduction the solution. It is not considered that the increased cancer risk associated with higher BMI is a result of healthcare avoidance or provider weight bias preventing appropriate care. This pattern of predetermined casual direction is endemic to medical research. As a result, the medical community's ability to address major community health concerns such as diabetes, heart disease, and hypertension is limited (Major et al., 2018).

Weight loss

How to lose weight is considered common sense knowledge, increase your energy output, and decrease your energy intake, then your body will shrink. The American media is saturated by questionable weight loss before and after images selling products and diets to consumers. When large-bodied people are represented in media, attempts at weight loss are an integral component of their narrative (Puhl & Heuer, 2009). The American Academy of Clinical Endocrinologists (AACE) 2016 Obesity Clinical Practice Guidelines utilize the calories in/calories out model for the majority of their weight reduction strategy recommendations to providers. AACE recommendations for disease mitigation are weight reductions of 5-20% of a patient's body weight, achieved by exercise and diet modifications (Garvey et al., 2016). The specifics of lifestyle modification strategies are not detailed within the AACE report. Neither are the expected attainable weight loss amounts of each method listed to help guide providers in their patient care. The AACE guide does not contain information about outside evidence-based sources for guidance on lifestyle modification patient education or care plans or cite resources for the efficacy of the weight loss methodology recommendations.

The evidence for the efficacy of various weight loss strategies is limited and the area of study has major challenges to the quality of evidence produced including but not limited to; lack of standardization, variance of study methodology, variance in basic participant information reporting, short durations, selective participant recruitment practices such as required weight loss prior to trial, or extended interviewing to find "highly motivated" participants, lack of controls, lack of follow-up, poor participant retention, vulnerability to study completer bias, not applicable to real world situations, and lack of oversight (Douketis et al., 2005; Laddu et al., 2011; Primack, 2018; Tomiyama et al., 2013). The poor quality of evidence to support weight loss as a treatment modality is even reflected in the various Cochrane reviews of different approaches to weight reduction for general and specific groups. The author compiled eleven reviews of weight loss methodologies for adults from the past 20 years and of

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that eight acknowledge in their conclusions the poor quality of evidence that prevents definitive recommendation and call for more rigorous research to be undertaken (Colquitt et al., 2014; Lim et al., 2019; Mastellos et al., 2014; Nield et al., 2007; Norris et al., 2005; Padwal et al., 2003; Shaw et al., 2006; Semlitsch et al., 2021; Serraldo- Zúñiga et al., 2019; Taghivi et al., 2021; Wieland et al., 2012). Notably, Shaw et al., (2006)'s Cochrane review of "Exercise for overweight or obesity", one of the most prescribed treatments, was completed in 2006 and has not yet been updated, though there have been reviews scheduled. The 43 studies they identified all contained a diet component in addition to exercise and the average weight loss was 1.0 kg-1.5 kg, they did not identify the average study follow up period. As noted previously, clinically significant weight loss starts at 5% of body weight per AACE recommendation (AACE, 2016). Despite the average weight loss not meeting that criteria, Shaw et al. still concluded "The results of this review support the use of exercise as a weight loss intervention...".

The author located multiple articles reviewing weight loss methodologies for efficacy, many are subject to the challenges noted above, particularly lack of long term follow up and high attrition. Two reviews, Douketis et al. (2005) and Tomiyama et al. (2014), stood apart for their rigorous inclusion/exclusion criteria, focus on long term efficacy, and objective measures of health such blood pressure or blood glucose. Douketis et al.'s "Systemic review of long-term weight loss studies in obese adults: clinical significance and applicability to clinical practice" reviewed evidence for dietary/lifestyle, pharmacological, and surgical interventions for weight loss. Specifically, they looked at the efficacy of the method defined by absolute weight loss and proportion of participants with five percent or greater loss of total body weight, effects on cardiovascular health, and how applicable to the real world setting they were. For dietary and lifestyle, no intervention produced a five percent weight loss at the 2-4 year mark. Surgical interventions produced a 25-75kg weight loss after 2-4 years and demonstrated some efficacy at the prevention of type two diabetes. Pharmacologic interventions produced weight losses of 5-10kg, however, all but one study were only a year in length with no further follow up, and did not

include monitoring once the participants stopped taking the medication. Even at five percent or greater total weight loss, no cardiovascular improvements were consistently noted. The average attrition rate of the studies was 30-60%, only seven studies of lifestyle or surgical interventions included a "usual care" control group, most study results were based upon those who completed the study, or a "last observation carried forward" method of including all participants last known weights regardless of when they left (Douketis et al., 2005).

Tomiyama et al. (2013)'s review investigated the assumption that dieting for weight loss is beneficial to patient health. They reviewed long term randomized controlled diet for weight loss studies for health effects, this included studies that utilized dietary changes, exercise, medication, behavioral modification, or a combination of the aforementioned methods, and efficacy measured through changes in cholesterol, triglycerides, blood pressure, and fasting blood glucose levels. Their inclusion criteria required eligible studies to have a completely diet free control group, a study goal of weight loss, and at least a two year follow up. There were twenty-one trials that met inclusion criteria, due to the difference in sample population, the mean of each trial was weighted by sample size. The average maintained weight loss from all the trials was 0.94 kg. They found no significant correlation between weight loss and changes in blood pressure, fasting blood glucose, cholesterol, triglycerides, and coronary morbidity/mortality. The average change of systolic and diastolic blood pressure in nonantihypertensive medicated participants was a reduction of 2.37 mmHg and 2.71 mmHg respectively. Though there was no significant correlation between fasting blood glucose and weight loss, diet did appear to be beneficial in the prevention of diabetes. The investigators identified several possible confounding factors for the slight improvements in health; increased access to healthcare, increased social support, healthier diet, and increased exercise. Though weight loss is not significantly correlated to health benefits, healthier diet and routine exercise have been found to be beneficial for hypertension and diabetes (Norris et al., 2005; Shaw et al., 2006). Large-bodied people are known to avoid

interactions with health care providers (Puhl & Heuer, 2009), but the study participants had frequent and prolonged contact with healthcare providers. This could have resulted in earlier diagnosis and treatment of medical conditions, translating to the slight health benefits seen in the results. In absence of correlation, Tomiyama et al. call into question the presumed causal link applied to weight and conditions like hypertension, diabetes, and hyperlipidemia.

Booth et al., (2014) focused their review specifically on the efficacy of behavioral weight loss interventions performed at the primary care level. Their inclusion criteria were; primary care based, behavioral weight loss strategies, random controlled trials, main outcome of weight loss, and a follow up of at least twelve months. They were able to include 15 trials, though only a few explicitly used interventions based in behavioral science, and participant inclusion criteria was varied. Authors noted that many of the articles were unable to be assessed for bias with the Cochrane tool due to insufficient information on their methodologies. Almost half of the studies failed to report results data such as sample size or consistent weights measurements of participants. The meta-analysis of the other eight trials found an average weight loss of 1.36 kg at twelve months and 1.23 kg at 24 months. These amounts fail to meet the five percent threshold for clinically significant weight loss, leading the authors to conclude that behavioral interventions are an ineffective weight loss tool in the primary care setting.

Laddu et al.'s (2011) review article did not identify singularly or a combination of: diet, exercise, pharmaceutical product, or behavioral intervention that produced sustainable weight loss of >10% of body weight. Though their conclusion is that encouraging weight reduction of ten percent or more is still appropriate. Primack (2018) added a novel inclusion criteria of "real world evidence" in acknowledgement of the incongruence of weight reduction results in the laboratory setting versus in the real life setting. The criteria are an important consideration in the evaluation of weight reduction studies because clinical trial data rarely translates to real life application. The interventions included were nutritional, behavioral, pharmaceutical, or exercise based. Of the 62 studies that met criteria for

this review, the majority resulted in less than a five percent loss of body weight. Primack noted the high number of studies requiring very low-calorie intake by subscribing to a food service or commercial product and whether the practice was sustainable long term. The longest follow up duration was two years, but that was only one of the 62 studies (Primack, 2018).

The established care protocol for a large-bodied patient is to prescribe weight reduction to treat their diagnosis of overweight/obese, the question persists though, how? The National Center for Health Services estimates that almost 50% of the American population dieted in 2014-2016, including 60% of obese people, yet there was no reduction in the population of overweight/obese individuals (Martin et al., 2018). Without strong evidence for sustainable and real-life applicable weight reduction methods that produce clinically significant weight loss, medical providers are setting patients up for failure. The continued prescription of weight loss is not benign, it perpetuates and justifies the stigmatization of large bodies. The practice harms large-bodied patients, who internalize their failure to achieve unrealistic weight reduction, set by popular culture and the medical establishment, as a personal failing, which further contributes to the burden of weight stigma and shame (Puhl & Heuer, 2009).

Methods

Design, sample, and setting

To ensure the simulation contained accurate weight stigma affirming elements; an online survey about the healthcare experience of self-identified overweight/obese individuals was conducted. The deidentified information was then analyzed for common respondent themes, significant details, and experiences. Using the data gathered from the survey in conjunction with published literature on the large-bodied patient experience, a high-fidelity simulation was created in accordance with the International Association for Clinical Simulation and Learning (INACSL) guidelines and expertise of the Seattle University Clinical Practice Lab. Seattle University's Institutional Review board identified the project as non-human subject research.

Participants

Using the author's membership of online private or "closed" Facebook "Fat" community groups, which was established prior to beginning this project; the author obtained permission from the moderators of each group, posted a solicitation for participants that explained the project, what role the survey played, the inclusion/exclusion criteria, what kind of questions were asked, and a link to the Qualtrics hosted survey. The author clearly identified themselves, their contact information, the institution they are a part of, that the data was to be de-identified, and that any participation is entirely voluntary. The sample size threshold was set at 11 responses, due to the qualitative nature of the data and for feasibility. Inclusion criteria for the survey was; the participant being age 18 or older, self-identified as fat or other synonym for fat identified, lived in the United States, and had received healthcare through the American medical system. Exclusion criteria for the survey was: people under the age of 18, that did not identify as a person with a fat body, that did not live in the United States, and had not received medical care from the American healthcare system.

Data Collection Procedure

An online survey was created using 'Qualtrics', a Seattle University licensed software for data collection. The survey and the data collected was all contained on the Qualtrics servers, participant solicitations contained a link to the survey, but no other reposting of the survey occurred. The solicitation post included a link to the survey for those who wished to participate. The first page of the survey was a Seattle University informed consent that participants had to affirm to be able to continue to the survey. The survey consisted of 18 Likert rated questions and three optional open-ended questions. Once completed the participant submitted the survey and the raw survey data was stored within the Qualtrics program for analysis. Identifying information was not collected and responses were de-identified as needed. Qualtrics has an encryption program as an included service and all information that is collected is stored behind multiple security features, such as firewalls and continuous network

monitoring. The coded data was stored in an encrypted and password protected file within Seattle University cloud storage, in addition to the researcher's home password protected hard drive as an encrypted and locked file. This data was destroyed at the completion of the project, there are currently no plans to retain any data beyond what is part of the written component of the project.

Measures

The survey questions are from several different validated measure of weight stigma tools. These are Vartanian's (2015) "brief version of the Stigmatizing Situation Inventory" modified for relevance to the healthcare setting. The questions ask about participants experience of weight stigmatizing situations in healthcare and establish whether the participant has experienced stigmatization within the medical setting (Vartanian, 2015). Hatzenbuehler et al's (2009), modified for weight discrimination specificity, Krieger et al (2005) "Experiences with discrimination scale". The questions that were selected were edited to reflect a healthcare setting and assessed participants experience of weight discrimination (Hatzenbuehler, 2009). The last validated tool that was used was the 'Beliefs about Obese Persons Scale (BAOPS)' (Allison et al, 1991), modified for relevance to healthcare situations and targeting the patient's perceptions of their provider's attitude towards obese persons. This measure examined the patient experience of their provider and what message the patient received from them. The three opened ended questions solicited participants specific experiences with the healthcare system that were negative or positive and what changes would improve their experience of healthcare.

Data Analysis

Quantitative data was analyzed with descriptive measures of central tendency and variation. The three sets of questions were compared to one another to assess the consistency of participants experience and to look for patterns or themes. The quantitative data was assessed in comparison to respondent open ended question answers to look for possible context, themes, or patterns. Qualitative data was initially analyzed by content analysis first cycle in vivo, processing, and emotion coding (Saldana, 2009). Second cycle coding was conducted using focused and pattern coding, utilizing visual representations as appropriate, to assess for common themes and specific attributes of situations in participants experiences that validated or perpetuated stigma (Miles et al., 2020). Coding was accomplished with both manual coding methods and data assistive software, including Qualtrics and Microsoft excel. The information was then used in the construction of the high-fidelity simulation for anti-weight stigma education.

Results

Fifty-two survey responses were collected and analyzed. The three short answer questions were optional with, 43, 43, and 33 responses, respectively.

Stigmatizing Situation Inventory Set

The stigmatizing situations inventory questions utilized a stem of '*How often have you experienced discrimination, been prevented from doing something, been hassled, or made to feel inferior in any of the following situations because of your weight?*' and then asked participants to rate the four situations on a five-point Likert scale of never, rarely, sometimes, often, or always. The four situations that were provided were; 1) going to a healthcare clinic, 2) interacting with a healthcare clinic's staff, such as when checking in for an appointment or being brought back to the exam room, 3) during an appointment with a healthcare provider, such as a physician assistant (PA), nurse practitioner (NP, or medical doctor (MD, 4) when seeking medical treatment or advice for a non-weight related concern. (See *figure* 1, on page 21, for graph of respondent answers.)

The most stigmatizing situation was seeking medical for a non-weight related concern with 50% of respondents selecting 'often' and an additional 17.31% selecting 'always'. 50% of respondents also selected 'often' for stigmatization during an appointment with a provider, but only 7.69% selected 'always'. Nearly the same number of respondents, 48.08%, selected 'often' for entering into a

healthcare clinic, followed by 42.31% selecting 'sometimes'. Most respondents 'rarely' felt stigmatized during interactions with clinic staff, however 30.77% selected 'sometimes' and 21.15% selected 'often'. The majority of respondents selected an occurrence rate of sometimes or higher for all situations presented. This is further validated by evaluation of the mean score of each situation, which was 3.78 for questions four, 3.65 for question three, 3.46 for question one, and 2.82 for question two. The only situation in which one respondent selected never was for entering into a healthcare clinic.

The data is an indication of the participants poor experience of healthcare, with all situations happening at least 'sometimes' and most happening 'often'. The trend in responses identifies time participants spend with a provider as the most stigmatizing, particularly if they have presented to the visit for a non-weight related concern. This is not surprising, given providers are responsible for diagnosis and treatment of patients. This means the provider holds the authority to grant or deny care for a patient.



Figure 1

Experiences with Discrimination Set

The stem for the experience with discrimination set was 'Below is a list of situations that people encounter because of their weight. Please indicate whether and how often each of these situations happen to you.' then asked participants to rate the four situations on a five-point Likert scale of never, rarely, sometimes, often, or always. The participants were presented with nine situations; 1) having a medical provider recommend a diet, even if you did not come in to discuss weight loss, 2) having a medical provider or staff assume you are uneducated about nutrition, 3) having medical staff assume you overeat or binge eat because you are overweight, 4) having a medical provider assume you do not exercise because you are overweight, 5) not being provided appropriately sized gowns/drapes/blood pressure cuffs by medical staff, 6) not having a chair, exam table, a doorway/entrance, or piece of medical equipment that is suited/fits/is accessible for you, 7) delaying or avoiding screening tests, such as pap smears, colonoscopy, or mammogram, 8) delaying or avoiding seeking care for non-weight related concerns, 9) having a medical provider recommend weight loss for an issue or concern unrelated to weight. (See *figure 21*, on page 23, for respondent results.)

The most common occurrence for participants, with a mean score of 4.02, was having medical staff assume they did not exercise, meaning on average this happened 'often'. Having medical staff assume participants were uneducated about nutrition was a close second, with a mean of 3.92, almost making it an 'often' experience for the majority of participants. Situations 3, 1, and 9 had mean scores within 0.08 points of one another, at 3.65, 3.62, and 3.58, respectively. These translate to participants on average experiencing assumptions of binge eating, offers of unsolicited diet advice, and prescriptions of weight loss for a non-weight related complaint regularly. Situations 8 and 5's mean scores were also very close to one another at 3.44 and 3.37, putting the occurrences more than 'sometimes' for most participants. Situations 7 and 6 were the only situations with mean scores under 3, or less than 'often' for the majority of the participants, situation 7 had an average of 2.96 and 6 was 2.64. Overall, 78% of the situations presented happened more than 'sometimes' to the majority of participants, notably nineteen participants reported medical staff assume they don't exercise 'always'. For situations 1 - 4, only one participant selected 'never' in response to each item. Looking at the percentage of responses that were 'sometimes' or above further confirmed the ubiquity of these experiences. Five situations, 4, 2, 1, 3, & 9, actually had greater than 85% of the participants reporting at least a 'sometimes' occurrence.

The rate at which participants were subject to these discriminations based upon their weight is disappointing. The prevalence of these experiences can be used to further inform why large-bodied patients avoid medical care. The participants of this survey conveyed in their responses that they can reasonably expect at least one, but likely more, discriminating situations while pursing healthcare.

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Figure 2

Beliefs about Obese Persons Set

This set of statements was prefaced with the stem '*Most medical providers think...*' then a seven-point Likert scale of; 1- strongly disagree, 2 – moderately disagree, 3 – somewhat disagree, 4 – neutral, 5 – somewhat agree, 6 – moderately agree, and 7 – strongly agree. The following five statements were then presented; 1) Obesity is usually caused by overeating, 2) Most obese people cause their problem by not getting enough exercise, 3) The majority of obese people have poor eating habits that lead to their obesity, 4) In many cases obesity is the result of biological disorder, and 5) Most obese people do not follow treat recommendations.

This set aimed to measure the participants perception of medical provider weight bias because regardless of the provider's true level of bias, stigma confirmation occurs when the patient perceives weight-based identity threat(See *figure 3*, on page 25, for respondent results.)

The mean scores of statements 1, 2, and 3 all exceeded 5.5 points, presumption of poor eating habits had the highest mean score at 5.76, followed by weight being a result of overeating at 5.71, and 5.61 for weight being a result of exercise avoidance. The mean of these scores demonstrates that participants on average almost 'moderately agree' that providers hold these views of large-bodied people. Statement 5, obese people are non-compliant, had a mean score of 5.1, which seems to be in accordance with the results of the first three statements. These high degrees of agreement with the judgmental/blame statements are further validated by the mean score of statement 4, obesity is often the result of biological disorder, at 3.65 points. Statement 4 is the only one of this set that does not contain a value judgement of large-bodied patients and ironically is the most evidence based. It is not a belief that co-exists easily with the other four statements the participants rated. Overall, the mean scores of these statements suggest that patients are experiencing biased and ineffective providers, which in addition to being stigma affirming, is also suggestive of non-evidence-based treatment due to a fundamentally flawed understanding of weight regulation.

This was also reflected when looking at the proportion of participants that selected one of the 'agree' options. The statement rankings remain the same when counting all three 'agree' options, statement 1 was 82% of participants, statement 3 was 80% of participants, and statement 2 was 78% of participants. Though statement 3 had the second highest mean score, it had the most 'strongly agrees' of all the statements with thirty-two participants selecting it. Statement 2 had twenty-five 'strongly-agrees' and statement 3 had twenty-four. Statement 4's 'agree' proportion was 68% and statement 5's was 35%, which was not unexpected. Statement 4 was the only one to receive a significant number of

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'neutral' responses, eleven of them or 22%, the next nearest was statement 5 with four or 8% of the respondents.

These results are significant because they demonstrate the level of perceived bias that our respondents experience in seeking medical care. The perception that a provider holds these views is enough to validate weight-based identity threat, which further alienates large-bodied patients from medical care. These statements are also indicative of the lack of quality healthcare education regarding weight and weight regulation.



Figure 3

Short Answer 1

What elements of a medical visit do you the most stigmatizing or difficult?

Participants responses to this question followed several main themes involving the physical environment, interpersonal interactions, and medical treatment. For the physical environment participants identified lack of accessible equipment as a highly stigmatizing factor. Starting from entering the clinic, there not being chairs without arms or wider chairs available, to the exam room,

wrong sized blood pressure cuffs, patient gowns, even patient exam tables. Participants described being subject to equipment that did not fit them as "humiliating" and "dehumanizing". "Getting on the scale, the blood pressure cuff not fitting is blamed on me; my high blood pressure due to humiliating anxiety and painful cuff experience being blamed on me; poor fitting dressing gowns." reported one participant. A frequent culprit that was identified was the patient exam gown, often compounded by a lack of or wrong sized drape. One participant responded, "gowns that don't fit properly are embarrassing." The setup of the physical environment was also a common factor, mainly the placement of vital assessment stations in public areas, which was compounded by staff refusal to accept a declination of being weighed. Evidenced by participant responses such as "Making audible disapproving noises at the scale, lack of patience when I don't want to know the amount."

Endemic to participant responses was stigmatizing interpersonal interactions, such as the staff refusing to respect a patient declining being weighed. Evidenced by responses such as "when I get pushback for not wanting to be weighed." and "The request to have weight taken and it always needing to be a negotiation." We non-verbal communications and verbal communications. Participants reported signals of judgement from medical staff and providers by facial cues such as frowns or flattening of facial expression, lack of eye contact or not looking in the direction of the patient, hesitancy of physical touch, brevity of physical touch, or lack of physical touch. One participant submitted "...when the provider gets a disappointed look on their face when they first see me, when a provider or tech is visibly or vocally grossed out by my body or won't touch or examine me." In verbal communications participants reported insincerity, condescension, rote impersonal tone, dismissiveness, and Responses included "Treating me as an actual patient instead of a fat blob to get out of the clinic as fast as possible." and "Not being viewed as a real person and the doctor or nurse blindly following protocols." Participants commonly reported feeling that providers assumed they were unintelligent and did not believe them if they reported habits that were not aligned with stereotypical assumptions of

large-bodied people. "I get asked every single time [about her diet], no matter what I'm there for, and they're always telling me to cut back on chips and soda even though I haven't had either in years." said one participant and "Being judged at first glance. I.e., I'm lazy, must not exercise, binge eats, etc." Participants were left with the impression that they were inconveniencing the provider by having sought care. Said one participant "Behaving like they are put out by having to find a different sized cuff or gown." They also reported not feeling listened to when they attempted to communicate with providers about their chief complaints, their treatment goals, and their treatment preferences. Participant's responses included "Being told to just lose weight instead of being offered solution that straight sized people would get." and "talking about long term issues like watching for Parkinson's, and somehow weight management always comes up."

One of the most reported treatment events was having their chief complaint be blamed on their body size, regardless of the complaint. Said one respondent "Telling me all my problems are my fault because I choose to be fat. That's the worst." Another said "The worst part is going in for something I *absolutely know* is unrelated to my weight or BMI and being dismissed because they assume it's just because I'm fat." Unsolicited weight loss was another common occurrence for participants, even after participants had explicitly stated that they did not want to talk about weight/ weight loss or disclosed a history of disordered eating. "Doctors bringing up weight for anything and everything and telling me to lose weight, diet, etc. despite my history of eating disorders." Most felt that providers assumed that they wanted to lose weight or should express distress at the size of their body. "Additionally, when I didn't immediately express regret about my weight gain or say "Yes, I know I need to lose weight." she asked if I'm trying to lose weight and said "Do you just not care?"" When reporting dietary and exercise habits, many felt disbelieved if not conforming to stereotypes and judged regardless. "I feel like I always have to prove I'm not stupid that I understand the science etc for them to take me seriously." said one respondent. Even for those who were open to discussions of diet were frustrated that providers had little to offer them besides a variation of eat less and exercise more. Responses included "The constant "eat less, exercise more" line, with no support to be able to do that any differently than I did before the visit." and "...[the doctor] will likely be more focused on weight loss rather taking the time to truly talk about my existing diet/fitness habits with me and discussing what works for me." Being weighed was a significant source of stress and stigma affirmation for participants and contributed to providers tunnel vision focus on their body size, rather than their chief complaint. "I once had a doctor tell me there was nothing wrong with except that I was fat. If only I would lose weight, I'd be fine. I was diagnosed with endometriosis and PCOS not long after that." said one participant. Underlying the entire experience for most participants was a feeling or fear that they were not receiving medically appropriate treatment. A sentiment succinctly expressed by one participant "As a fat woman, not only do I not trust health care providers to provide me with ethical or appropriate medical care, I also don't trust them to not actively dehumanize me to my face when 'discussing options.'"

Short Answer 2

What actions by a clinic staff or provider have made you feel welcome/comfortable?

Answers to this question included many items that were the inverse of the responses to question one. Accessibility of spaces and equipment such as the right sized blood pressure cuff, gowns, or armless chairs, not being weighed or there being unremarked acceptance of them declining a weight, providers not initiating weight loss conversations, eye contact and looking at participant, and focusing on the chief complaint. Responses from participants included "Actually listening to my concerns and not immediately turning to losing weight or my weight being a factor in my concerns.", "Asking if I want to discuss weight. Asking consent-based questions.", "Asking about my exercise and diet behaviors instead of just assuming. Asking about my health goals and past healthcare experiences.", "having larger seats, gowns, BP cuffs, etc.", and "Automatically used appropriate sized things." Other items that respondents identified were body inclusive signage within the office or visible 'health at every size' materials. "I went to a clinic that had a huge 'Your Rights as Patient' poster and one of the items on the list was about receiving quality care in any size body." reported on participant. For the patient provider interaction specifically, respondents identified consent centered care, being asked what their healthcare goals were, body neutral language like "large bodied" instead of words like "obese" or "overweight" and focus on objective measures of health such as blood test results. "A few people have admitted the challenges of higher weights in polite ways that acknowledge the lack of control and complex origins." said one participant. An interesting response from multiple participants was having other large-bodied people working in the clinic or as the provider as a potent anti-stigma mechanism. "Also having other fat ppl [people] on staff." and "By far the most helpful thing would be to have fat providers (not small fat.)" The responses could be summarized as representation, individualization of care, respect for autonomy, accessibility, and consent.

Short Answer 3

Are there any specific situations or experiences, positive or negative, that you would be willing to share?

Participants were generous in their willingness to share their personal experiences with the healthcare system. The themes identified above carried through these responses, such as providers being unrelenting in their prescription of weight loss at all costs, but there were several novel ones. The most concerning theme of these responses was life threatening delay in care due to provider prejudice. Several participants shared events in which providers dismissed their complaint as the sequelae of fatness, when in fact the person was very ill. What the author found quite striking about these was that in several of the situations, the person had a supportive primary care provider who had treated them appropriately and it was a specialist who dismissed them. Another distressing theme was the frequency of medical gate keeping, denial of treatment or the denial of referral for services until the person lost weight. Another variation of this gate keeping was the invalidation of patient experience, such as

gender identity, due to having a large body. One participant poignantly summarized their experiences of healthcare as "so really the problem is me and my fat body."

Discussion

The results of the survey were demonstrations of themes identified by articles in the literature review for this project. The reports of delaying care due to fear of stigmatization, providers not being prepared to offer strategies or tools to achieve the blanket prescription of weight loss, and misdiagnosis of conditions due to the assumption that weight was the etiology of all ailments to name a few. From the rated question sets most of the respondents had experienced care that was biased. Notable from those results was the larger role that the provider played in the participant's experience of weight bias because many of the concrete examples like being weighed or having their blood pressure taken are not part of the provider role. A recurrent item from the rated questions and the short answer was unsolicited weight loss advice and participant's weight being blamed for any and all ailments. This was particularly prevalent when respondents were seeking care for non-weight related concerns. The perception of provider's belief that large-bodied patients are at fault for their size and that they should be able to fix their size with diet and exercise seemed to compound the patient's experience. This was not helped by the perceptions that medical staff did not believe participants if they reported eating and/or exercise habits that were considered healthy. It is difficult to build a therapeutic relationship with a provider who you do not trust believes what you say and doesn't listen to your concerns.

The data yielded some concrete items that can be incorporated into an educational simulation to help interrupt the stigma affirmation for large bodied-patients. Respondents found the experience of too small equipment being used or provided as a potent trigger of stigma affirmation. Items like blood pressure cuffs and gowns were the most cited culprits. Exam room furniture such as chairs or even exam tables were also identified. Using a heavily consent based approach to care, such as asking the patient if they want to be weighed, is another item that can be incorporated into simulation. This

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extends to physical exams and making sure that patients are being asked for their consent throughout their exam, which also provides the opportunity for a patient to decline portions of exams they find difficult. The usage of neutral language when referring to body sizes and physically interacting with the patient's body when needed, rather than avoiding it. This also provides the opportunity to teach the simulation participants about common mistakes made during the physical exam of larger bodies.

Some of the items that respondents identified as being a positive influence on their experience are not easily addressed, but important. Primarily the importance of representation of large-bodied people within healthcare. The concept that representation of a marginalized group within a system of power helps mitigate bias is not new. The concept is not usually applied to large-bodied people as a population though and respondents were clear that they had better experiences when their healthcare team included large-bodied individuals. The health paradigm 'Health at Every Size' was also identified as being a positive influence and that could be helpful to start incorporating 'HEAS' principles into medical education.

Simulation

The data that was collected and analyzed from the survey was used to create a high-fidelity educational simulation aimed at reducing the patient experience of weight stigma and provider weight bias. The simulation was constructed following the guidelines of the International Association for Clinical Simulation Learning (INACSL) and in partnership with Seattle University Clinical Practice Director. In accordance with those guidelines an approximately 15-20 minute patient scenario and script was written with the following three objectives; 1) practice patient centered/trauma informed care, 2) identify weight stigma affirming aspect of the visit, and 3) identify 1-2 strategies to interrupt common weight stigma affirming situations. Prior to participating in the simulation students are provided topic specific resources to review on weight stigma and on trauma informed. To assess the participants during the simulation an eleven-point Creighton tool, a list of actions that either interrupt weight stigma affirmation or are concordant with patient centered/trauma informed, was created. In the simulation debrief guide the following three themes were identified for discussion, in addition to five discussion questions specific to this simulation; implicit power differentials that inhibit patient agency, the role of stigma affirmation in the alienating of large-bodied patients from healthcare, and modification/accommodation for normal physical variation of the human body. The five discussion questions are; 1) why did Jessi want to change primary care providers?, 2) was it hard to ask Jessi to hold or move parts of her body? Why?, 3) is it harder to do exams on large bodies? How so?, 4) in your experience is it typical for clinic spaces to not have items, like the chair or blood pressure cuff or gown, readily available?,) how did it feel to not discuss weight loss?.

Based on the survey results the simulation is of a routine wellness exam for a large-bodied midthirties assigned female at birth individual, named 'Jessi Owens'. 'Jessi' will be played by a standardized patient and unless the actor is large-bodied, will wear a large-body body suit. The potentially stigma affirming care pieces are weighing the patient, armed patient chair in the exam room, a "normal' sized blood pressure cuff, a usual sized patient gown, patient exam table, physically examining the patient, and using trauma informed care principles in provider communication with the patient. During the simulation, the student is provided the opportunity to recognize these various elements and prevent them from becoming weight stigma affirming parts of the visit by actions such as checking the blood pressure cuff size before applying it to the patient and retrieving an appropriately sized cuff. 'Jessi' will also have verbal cues to use in the event the student has not yet recognized one of the stigma affirming elements. After the simulation is completed, the students will discuss their experience in a facilitated debriefing.

The objective of having the students complete this scenario is twofold. First, the preparation materials required to participate in and perform the simulation, educates the student about weight stigma and its effects on patients. Performing the simulation gives the student the opportunity to

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practice seeing the clinical space through the eyes of a large-bodied patient and how something mundane to them can be harmful to a patient. Second, the experience and following debrief, begins to help students understand how weight bias, individually and within the medical system, perpetuates these harmful and counterproductive practices. It was important to the author to approach the bias of providers through the lens of the patient experience to help diffuse defensive reactions that can occur when learning about biases. For respondents of the survey a powerful mitigating factor for the experience of weight bias was having a provider acknowledge it and be respectful of their body. Ideally, participants of the simulation are set on a path to become those providers.

The simulation was created using neutral language meant to allow for customizability as needed and to not be over restrictive in its usability. The scenario is also written to be adaptable to registered nurse students and interdisciplinary simulation scenarios. The issues of weight bias and stigma are not confined to the nurse practitioner role and anti-weight stigma training is needed for all levels of healthcare.

The next steps for the simulation specifically are to complete formal beta testing, incorporate into curriculum, and do pre-post testing of participants to assess for efficacy of achieving objectives. It is possible that another graduate student could utilize the simulation for their doctorate of nursing practice project. Another avenue for research that was discovered during the informal beta testing at the simulation was auditing clinical spaces for body inclusivity. During the informal beta testing at the Seattle University Clinical Practicum Lab, it was discovered that the outpatient exam rooms lacked critical equipment such as; different size blood pressure cuffs, chairs of different arm configurations, different sized patient gowns, different sized drapes, and the scale was in the "public" area of the clinic. This lack of size inclusive equipment is even more concerning when the Clinical Practicum's role in education of nursing professionals is considered. The creation of an audit tool for clinical spaces would be beneficial in being able to establish whether a clinic setting meets basic body inclusivity requirements

of patient care. Such a tool could also be a used a good entry point for clinical staff education on weight bias and stigma because it is a low stakes conversation, and most people would agree that a clinic should have equipment suited for all patients.

A reader of this paper suggested the creation of a short key points summary and practice pearls document for providers as another possible route for further exploration. The target audience of such a document would be clinical providers currently in practice and for clinic leadership. The document would require a succent and approachable summarization of the evidence about weight loss, the impact of weight bias, and practical changes providers can make to better support large-bodied patients. In a similar theme, such a document would be useful for the faculty of the Seattle University's College of Nursing, though with some more detail included. An extensive review of the nursing curriculum for weight biased information and teachings would be a worthwhile as both a support of large-bodied patients and to practice the schools commitment to evidence-based practice. A more targeted intervention could be the incorporation of 'Health at Every Size' principles into courses about care planning and treatment plans. A different portion of nursing education that would benefit from further research is a review of the 'physical assessment' courses for body inclusivity and accuracy. There are differences

Limitations

The survey was specifically looking for the healthcare experience of large-bodied individuals, however several different sampling biases were possible. Some of the groups were specific to health conditions, such as PCOS, this might have resulted in an over representation of negative healthcare experiences due to high healthcare utilization. Healthcare experiences might have been more dissatisfactory due to having a condition that is often under-diagnosed, under-treated, and misunderstood because of being large-bodied. Many of the groups were explicitly fat politicized spaces, this also could have resulted in an over representation of dissatisfied individuals because healthcare equity is a common topic within fat politics. Due to the survey not collecting identifying information, it would have been possible for a person to take it multiple times and skew the results. It is also possible that someone who was not large-bodied could have responded to the survey as no proof of size was required. Though the author thinks that unlikely because being considered large-bodied comes with zero social benefits and claiming 'fatness' would come at substantial social risk.

There was an immense amount of weight bias identified within the healthcare system exists at all levels. The simulation that was created as part of this project is currently specific to nurse practitioner students at Seattle University, which limits its impact. It is also a limited scope simulation due to the nature of simulation learning, which requires highly focused achievable learning objectives. It would be appropriate for the efficacy of the simulation to be tested to assess whether it is addressing weight bias and stigma as intended, as part of this project evaluation that was not possible due to the constraints of COVID-19 and time.

Conclusion

Through the literature review of this project the prevalence, severity, and breadth of weight stigma was identified and discussed. The literature review also demonstrated that a corner stone of medical practice, weight loss, is not supported by evidence. There was not one method, other than metabolic surgery, that had quality long term data demonstrating its efficacy at reducing weight (Douketis et al., 2005; Laddu et al., 2011; Primack, 2018; Tomiyama et al., 2013). Which further demonstrates the depth of weight stigma that exists within American culture and medicine. The majority of Americans move through this world in marginalized bodies that are underrepresented, poorly understood, and subject to constant negative commentary. The medical system is an authoritative structure granting permission to society to discriminate against large-bodied individuals by perpetuating the myth of weight loss. We are also participating in the hampering of our own research into various conditions by applying assumed casual links between weight and any condition that co-

occurs with it. The focus on pushing people to reduce their body size has not worked, Americans have continued to increase in size since the 1980's (Puhl & Heuer, 2009).

It is time to re-humanize large-bodied people and provide the high-quality care we are trained to provide those in thin-bodies. Regardless of whether we aesthetically appreciate large bodies, they are just as deserving of care as any other patient. From a population health perspective, we cannot address the health inequities that exist if we do not address weight stigma, if only because we cannot treat patients who do not come for care. These are patients that will require extensive trust building and support to be successful. It will also require medical providers to reframe what "success" looks like, to be reflective of the reality of weight. The educational tool created for this project is a small step in the right direction and hopefully one that prompts more to follow.

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Appendix A: Survey Solicitation

Solicitation Post Healthcare Experience Survey

Content Warning Mentions of medical fatphobia and use of the terms obese & overweight.

TDLR: Fat nurse practitioner student seeking volunteers to take a 15-20 min survey on their healthcare experience as a fat person.

Hello,

My name is Andrea Eickelmann and I am nurse practitioner student at Seattle University. For my doctoral project I am working on creating an anti-weight bias training simulation for nurse practitioner students, because currently we get zero training on weight-bias/weight-stigma/fatphobia. As a fat person, I have my own negative healthcare experiences, but I do not want to assume my experiences are representative of all fat folk. So, I am looking for volunteers to take a 15-20 minute 21 question survey about their healthcare experiences.

The survey collects no identifying information, such as names or email addresses, nor demographics, such as age or gender. Any identifying information that might be provided, such as a clinic name or provider name, will be removed from the data to ensure anonymity. The required attributes of participants are:

-Age 18 or older.

-Are fat/overweight/obese/euphemism for a body with lots of adipose tissue.

-Have received medical care in the USA.

-Live in the USA.

These attributes are affirmed by your consent to participate in the survey, rather than by collecting data such as birthdates.

Most of the questions only require that you rate how applicable the question or statement is to your life experience. There are three open ended questions that ask about specific actions/words/physical equipment or space/etc. that made a healthcare experience positive or negative and provided space for as much detail as you wish give. I hope that participants will be willing to share specifics about experiences because those are what help create effective educational simulations. You are not required to answer all the questions to submit the survey and the only question you MUST answer is the initial consent to participate. Your participation is completely voluntary and you can stop at any time.

All the data the survey collects will be stored on secure servers of the survey program "Qualtrics". If at any time data is moved to another program, such a excel or word, that file will be encrypted and

password protected. Once the project is complete the data will be destroyed and the final product, educational simulation scenario, will not contain any identifying information.

Lastly, a huge thank you for reading this post, and my unending gratitude to those who choose to participate.

If you are willing to participate the link below will take you to the survey. LINK

If you would like to get in touch with me, I can be reached at: Andrea Eickelmann (She/Her), RN | DNP Student, FNP, class of 2021 COLLEGE OF NURSING | SEATTLE UNIVERSITY Phone: upon request | eickelma@seattleu.edu

If you have any questions about rights of research participants, contact the SU Institutional Review Board (research oversight body) at Phone: 206-296-2585 | irb@seattleu.edu

Appendix **B**

Experience of Weight Stigma in HealthCare Survey

The purpose of this survey is to help create an anti-weight bias training tool for Nurse Practitioner students and the researchers goal is to create real world situations. Below you will find a series of questions about your experiences with healthcare as a heavy/large/fat individual. The units of the scale will be listed above the selection column and stated in the question. The last few questions are open ended and we hope you will share with us some of the specifics of your healthcare experiences. Thank you for taking the time to do this survey today.

Modified for relevance from Hatzenbuehler's version of "Experiences with discrimination scale" originally by Kreiger et al. (Hatzenbuehler ML, Keyes KM, Hasin DS, 2009)

For the following set of questions the answer is as follows 1 – Never 2 – Rarely 3 – Sometimes 4 – Often 5 – Always

How often have you experienced discrimination, been prevented from doing something, been hassled, or made to feel inferior in any of the following situations because of your weight?

- 1. Going to a healthcare clinic.
- 2. Interacting with a healthcare clinic's staff, such as when checking in for an appointment.
- 3. During an appointment with a healthcare provider, such as PA, NP, or MD.
- 4. When seeking treatment for a reason unrelated to your weight.

Modified for relevance from Stigmatizing situation inventory – brief 'SSI-B' (Vartarian, 2015)

Below is a list of situations that people encounter because of their weight. Please indicate whether, and how often, each of these situations happens to you.

1-Never 2-Occasionally 3-Sometimes 4-Often 5-Always

- 1. Having a medical provider recommend a diet, even if you did not come in to discuss weight loss.
- 2. Having a medical provider or staff assume are you uneducated about nutrition.
- 3. Having medical staff assume you overeat or binge eat because you are overweight.
- 4. Having medical staff assume you do not exercise because you are overweight.
- 5. Not being provided appropriately sized gowns/drapes/blood pressure cuffs by medical staff.

6. Not having a chair, exam table, a doorway/entrance, or piece of medical equipment that is suited for you.

- 7. Delaying or avoiding screening tests, such as pap smears, colonoscopy, or mammogram.
- 8. Delaying or avoiding seeking care for non-weight related concerns.
- 9. Having a medical provider recommend weight loss for an unrelated to weight issue or concern.

Questions modified from 'Beliefs About Obese Persons Scale' (BAOPS)

Below is a list of statements please rate how much you agree or disagree with each.
1 - Strongly disagree 2 - moderately disagree 3 - slightly disagree 4 - Neutral 5 - Slightly agree. 6 - moderately agree 7 - strongly agree

Medical Providers think...

- 1. Obesity is usually caused by overeating.
- 2. Most obese people cause their problem by not getting enough exercise.
- 3. The majority of obese people have poor eating habits that lead to their obesity.
- 4. In many cases obesity is the result of biological disorder.
- 5. Most obese people do not follow treat recommendations.

Open Ended

- 1. What elements of a medical visit do you find the most stigmatizing or difficult?
- 2. What actions by a clinic or personnel have made you feel welcome/comfortable in seeking care?
- 3. Are there any specific health care situations you have been through as a

heavy/large/overweight/fat person, positive or negative, that you would be willing to share?

Appendix C

Brief Description of Client

Name: Jessi Owens

Date of Birth: 05/26/1984

Gender: cis-female, she/her pronouns **Age**: 37 **Weight**: ~137kg / 300lbs **BMI** 53 **Height**: 5' 3"

Race: White Religion: Unknown/Undetermined

Major Support: Elliot Smith (They/Them) (Partner) Support Phone: 428-123-4567

Allergies: Penicillin & Latex Immunizations: Current including Flu & Covid 19 (Pfizer)

Attending Provider/Team: Establishing care today

Past Medical History: Carpal tunnel R wrist, left medial meniscus tear, pneumonia, and dysmenorrhea.

History of Present Illness: Here for annual wellness exam and establishment of care.

Social History: Works at Jane University Finance as a mid-level accountant, rents an apartment with her partner Elliot (they/them pronouns) and their 2 cats Sprout and Arya. Is in a monogamous relationship with partner, last STI screen a year ago. Current birth control is partnering with AFAB (assigned female at birth) individuals, ie abstaining from contact with penis having individuals.

Consumes both tea and coffee aprox. 2-5 cups a day (drip coffee or brewed tea) Does not drink alcohol

Never tobacco smoker

Uses marijuana 1-2x a week in an edible format

Denies illicit drug use

Omnivorous diet w/ limited red meat consumption.

Moderate Exercise 3-4x a week for 30-60 minutes, enjoys hiking, swimming, and yoga.

Primary Medical Diagnosis: PCOS, Hidradenitis suppurativa, hypothyroid

Surgeries/Procedures & Dates: N/A

Psychomotor Skills Required of Participants Prior to Simulation

(list skills)

Head to toe physical assessment skills for advance practiced nurse. Manual BP/VS – inter-professional simulation with the addition of RN

Cognitive Activities Required of Participants Prior to Simulation

(textbooks, lecture notes, articles, websites, etc.)

Major, B., Tomiyama, A. J., & Hunger, J. M. (2018). The negative and bidirectional effects of weight stigma on health. In B. Major, J. F. Dovidio, & B. G. Link (Eds.), Oxford library of psychology. The Oxford handbook of stigma, discrimination, and health (p. 499–519). Oxford University Press.

Raja, S., Hasnain, M., Hoersch, M., Gove-Yin, S., & Rajagopalan, C. (2015). Trauma informed care in medicine. *Family & community health*, *38*(3), 216-226.

Phelan, S. M., Burgess, D. J., Yeazel, M. W., Hellerstedt, W. L., Griffin, J. M., & van Ryn, M. (2015). Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. obesity reviews, 16(4), 319-326.

https://uconnruddcenter.org/research/weight-bias-stigma/healthcare-providers/

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Simulation Learning Objectives

General Objectives

- 1. Practice standard precautions.
- 2. Employ strategies to reduce risk of harm to the patient.
- 3. Conduct assessments appropriate for care of patient in an organized and systematic manner.
- 4. Perform priority advance practice nursing actions based on assessment and clinical data.
- 5. Communicate with patient and family in a manner that illustrates caring, reflects cultural awareness, and addresses psychosocial needs.
- 6. Make clinical judgments and decisions that are evidence-based.

- 7. Practice within advance practice nursing scope of practice.
- 8. Demonstrate knowledge of legal and ethical obligations.

Simulation Scenario Objectives (limit to 3 or 4)

- 1. Practice patient centered/trauma informed care.
- 2. Identify weight stigma affirming aspects of the visit.
- 3. Identify 1-2 strategies to interrupt common weight stigma affirming situations

For Faculty: References, Evidence-Based Practice Guidelines, Protocols, or Algorithms Used for This Scenario:

Major, B., Tomiyama, A. J., & Hunger, J. M. (2018). The negative and bidirectional effects of weight stigma on health. In B. Major, J. F. Dovidio, & B. G. Link (Eds.), Oxford library of psychology. The Oxford handbook of stigma, discrimination, and health (p. 499–519). Oxford University Press.

This is a link to a whole toolkit about weight bias and stigma that is through Yale University.

https://uconnruddcenter.org/research/weight-bias-stigma/healthcare-providers/

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Setting/Environment

Emergency Room	
Medical-Surgical Unit	🗌 OR / PACU
Pediatric Unit	Rehabilitation Unit
Maternity Unit	Home
Behavioral Health Unit	Outpatient Clinic
	Other:

Equipment/Supplies (choose all that apply to this simulation)

Simulated Patient/Manikin/s Needed:

Standardized patient w/ large body suit as needed for body size

Recommended Mode for Simulator:

Other Props & Moulage:

Equipment Available in Room:		
<mark>r</mark> :		
maybe		
blood pressure cuffs – multiple sizes - some with arms and some without		
Patient Gowns - multiple sizes		
exam table		

Roles

Provider (physician/advanced practice nurse):	Observer(s): Yes, if meant as observers of
-1 ARNP	the scenario but not as active participants of the
Other healthcare professionals:	sim
(pharmacist, respiratory therapist, etc,)	
-Medical Assistant/Office Admin	

Guidelines/Information Related to Roles

Learners in role of nurse should determine which assessments and interventions each will be responsible for, or facilitator can assign nurse 1 and nurse 2 roles with related responsibilities.

Information on behaviors, emotional tone, and what cues are permitted should be clearly communicated for each role. A script may be created from Scenario Progression Outline.

MA – Brusque due to workload, not mean or rude, just efficient.

Jessica – Responds to questions, but does not volunteer information, is hesitant when approaching different physical objects like chairs, tables, or scales. Nervous/slightly anxious.

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Pre-briefing/Briefing

Prior to report, participants will need pre-briefing/briefing. During this time, faculty/facilitators should establish a safe container for learning, discuss the fiction contract and confidentiality, and orient participants to the environment, roles, time allotment, and objectives.

For a comprehensive checklist and information on its development, go to http://www.nln.org/sirc/sirc-resources/sirc-tools-and-tips#simtemplate.

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Report Students Will Receive Before Simulation

Person providing report: Medical Assistant

Situation: New patient has arrived for wellness visit and establishment of care, clinic is understaffed so providers are rooming their patients. (*This not unusual for the clinic.*)

Background: Jessica is a new patient establishing care with your clinic and doing an annual wellness visit. She has had irregular medical care coverage during her 20's, but for the last 3 years had a primary care provider at a different clinic. Indicated when she made the appointment that she was wanting to transition to a different provider

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Scenario Progression Outline

Patient Name:

Jessi Owens

Date of Birth: 05/26/1984

Timing (approx.)	Manikin/SP Actions	Expected Interventions	May Use the Following Cues
0-5 min	Present when Provider calls name. Introduce self and wait for Provider to lead her back. Sit patient in exam room and begin to take vitals	 Learners should begin by: Go retrieve patient from 'waiting room' Introducing selves Confirming patient ID Bring patient back to the room Offer chair without arms 	Role member providing cue: "is it possible to sit in a different chair?" – should be hesitant and not specify without arms unless asked. Cue:
5-10 min	Take a set of vitals to include attempted weight, manual blood pressure, pulse, temperature, respirations. Confirm reason for visit, cover what that entails, and set up gown for patient to change into.	 Learners are expected to: Ask permission to touch patient Check cuff size and retrieve appropriate sized one. Ask whether the patient wants to be weighed ***(maybe happen in 0-5) Affirm reason for appointment, full physical, describe process. Check the size of the gown and select one that is large enough. 	Role member providing cue: "I don't think that cuff reads me well." If not adjusting size Cue: "Do I have to be weighed?" Cue: "Will I need to change into gown?" additionally "do you have a gown in my size?"
10-15 min	*Depending on exam table available this will be modified*	 Learners are expected to: Assess whether the exam table and the 	Role member providing cue: "I don't think I fit/can get up on the table"

	Perform standard head to toe assessment. This is time to practice patient centered care and communication. Possibly finish exam	 suitability for the patient. Offer accommodation as needed. Practice patient centered care by communicating with the patient as exam proceeds. Have appropriate draping easily available for patient. Ask for consent to bare skin and first offer for the patient to move clothing/assist with lifting tissue (such as breast tissue) to access exam points. Abdominal exam appropriately assesses quadrants and accounts for anatomical differences such as hanging pannus and belly button displacement to lower quadrants. 	Cue: "should I hold/move *insert body area here* for you?" Cue: "do I need to expose this much skin?" Cue: Abd. Exam specific. "It feels like you're a little high/pressing on my ribs/too low/just on my belly fold."
15-20 min	Finish exam, step out to allow Jessica to change, ask her if there is anything else she would like covered. Jessica will ask if it can be noted in her chart to not weigh her. Follow up with question as to whether there is anything else that would make her more comfortable.	 Learners are expected to: Affirm request to not be weighed/not be informed of weight if weighing is needed. 	Role member providing cue: "is it possible to put in my chart not to weigh me?" Cue:

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Debriefing/Guided Reflection

Note to Faculty

We recognize that faculty will implement the materials we have provided in many different ways and venues. Some may use them exactly as written and others will adapt and modify extensively. Some may choose to implement materials and initiate relevant discussions around this content in the classroom or clinical setting in addition to providing a simulation experience. We have designed this scenario to provide an enriching experiential learning encounter that will allow learners to accomplish the listed objectives and spark rich discussion during debriefing. There are a few main themes that we hope learners will bring up during debriefing, but if they do not, we encourage you to introduce them.

Themes for this scenario:

- Implicit power differentials that inhibit patient agency.
- The role of stigma affirmation in alienating large bodied patients from healthcare
- Modification/accommodation for normal physical variations of the human bodies.

We do not expect you to introduce all of the questions listed below. The questions are presented only to suggest topics that may inspire the learning conversation. Learner actions and responses observed by the debriefer should be specifically addressed using a theory-based debriefing methodology (e.g., Debriefing with Good Judgment, Debriefing for Meaningful Learning, PEARLS). Remember to also identify important concepts or curricular threads that are specific to your program.

- 1. How did you feel throughout the simulation experience?
- 2. Give a brief summary of this patient and what happened in the simulation.
- 3. What were the main problems that you identified?
- 4. Discuss the knowledge guiding your thinking surrounding these main problems.
- 5. What were the key assessment and interventions for this patient?
- 6. Discuss how you identified these key assessments and interventions.
- 7. Discuss the information resources you used to assess this patient. How did this guide your care planning?
- 8. Discuss the clinical manifestations evidenced during your assessment. How would you explain these manifestations?
- 9. Explain the nursing management considerations for this patient. Discuss the knowledge guiding your thinking.
- 10. What information and information management tools did you use to monitor this patient's outcomes? Explain your thinking.

- 11. How did you communicate with the patient?
- 12. What specific issues would you want to take into consideration to provide for this patient's unique care needs?
- 13. Discuss the safety issues you considered when implementing care for this patient.
- 14. What measures did you implement to ensure safe patient care?
- 15. What other members of the care team should you consider important to achieving good care outcomes?
- 16. How would you assess the quality of care provided?
- 17. What could you do improve the quality of care for this patient?
- 18. If you were able to do this again, how would you handle the situation differently?
- 19. What did you learn from this experience?
- 20. How will you apply what you learned today to your clinical practice?
- 21. Is there anything else you would like to discuss?

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Questions for post brief specific to this sim

- 1. Why did Jessi want to change primary care providers?
- 2. Was it hard to ask Jessi to hold or move parts of her body? Why?
- 3. Is it harder to do exams on large bodies? How so?
- 4. In your experience is it typical for clinic spaces to not have items, like the chair or blood pressure cuff or gown, readily available?
- 5. How did it feel to not discuss weight loss?

Jessi Medical History Backstories

<u>Carpal Tunnel Right Wrist</u>: Overuse injury that began in her early 20's from working a food service job but subsided when she graduated college and began working in finance. At around age 29/30 she started having numbness, tingling, and pain. Diagnosed as carpal tunnel, likely due to non-ergonomic electronic usage, particularly typing. Followed treatment plan of braces, PT, and got better equipment at work. Except for the occasional flair if used particularly hard, the condition is well managed.

<u>Left Medial Meniscus Tear</u>: Initial injury occurred while helping a friend move at age 26. Treated with rest, elevation, and ice. Subsided until Jessi was 29 and she began a diet and exercise regime to lose weight. Primary mode of exercise was jogging, walking, and Zumba. A few months after starting the regime the pain became acute enough that Jessi went to the provider. Provider diagnosed the left medial meniscus tear and prescribed ibuprofen + weight loss. Jessi gradually stopped doing the exercises due to pain and sought no further treatment. The knee still bothers her at times.

<u>Pneumonia</u>: Jessi has a long history of bronchitis from childhood, any cold would move into her chest, however she did not get sick very often. At 32 Jessi caught a cold that developed into bronchitis. Unfortunately, this was during the accountant year end time (march April) and she couldn't take time off to get well. About 3 weeks later, she begun having fevers, SOB enough to restrict ADLs, and fatigue. Elliot took her to the ED where she was diagnosed with walking pneumonia, provided script for antibiotics and a recommendation to lose weight.

<u>Dysmenorrhea:</u> Jessi began her period at 13 and from early on had very painful cramps. Her mom would give her ibuprofen, which brought the pain into manageable range. Her periods were regular, heavy flow to start with 3-5 days of cramps that required medication. At age 18, Jessi went to a provider for birth control with the hopes that it would help alleviate her menstrual symptoms, the provider placed Jessi on a low dose combination birth control. The birth control did not help the periods and Jessi spotted/light bled any day she wasn't having her period. She asked the provider if there any other options and the provider said no, too young for IUD, depo shot might cause her to gain more weight, and increased COC dose at her weight increased the risk of blood clots. Jessi went off the birth control and treated pain/premenstrual symptoms with OTC medications.

<u>PCOS</u>: Around age 26 Jessi started noticing that she was having more outbreaks on her face, worse than any she had had as a teenager, and that the hair on her chin was growing in much darker and thicker. She went to her provider, who recommended a pelvic ultrasound to check for ovarian cysts. Jessi did have cysts present, her provider diagnosed her with PCOS (poly cystic ovarian syndrome) and put her on metformin + spironolactone. The provider also spoke extensively about the need for Jessi to lose weight so that she doesn't develop diabetes,

offered a few handouts on "healthy eating", and informed Jessi there were medication that could be prescribed as well. Jessi asked about seeing an endocrinologist, but the provider was not receptive because this condition is managed in primary care.

The management of her PCOS has not changed much, some dosing was updated to reflect therapeutic levels, but the message Jessi received was that the only real treatment was weight loss.

<u>Hypothyroid</u>: Jessi was diagnosed hypothyroid when she was 17. She had classic fatigue symptoms and family history on both mother and father of hypothyroidism. Is managed on levothyroxine and the dose has increased over the years to 200mcg a day.

<u>Hidradenitis Suppurativa:</u> Jessi had HS lesions from the onset of puberty, but because of the locations in her arm pits, under the skin of the side breast, and in the inguinal lines thought it was because she was fat. It was in her early 30s at an appointment at urgent care for a possible abscess/cyst in the right inferior inguinal crease that the provider diagnosed her with HS. Remarking that her scars and lesions were textbook HS. This was helpful because she was able to access diagnosis appropriate treatment in the form of antibiotics. Jessi still manages her HS with good skin care and the occasional round of antibiotics when it flares. She has noticed the flares are worse around her period.

<u>Previous Provider</u>: Jessi felt not listened to or heard by her previous provider. Jessi had told the provider multiple times that she wasn't interested in weight loss treatments, but the Provider would inevitably bring up weight loss regardless of complaint. Provider spent a lot of time warning Jessi of the repercussions of being fat and when her yearly bloodwork came back mostly normal the provider would express disbelief and then assure her that those would change. Jessi stayed with the provider because she didn't go very often and she knew what to expect with that provider, even if it wasn't great. However, Jessi has been practicing HAES approach to health and no longer wants to endure the previous provider.

	Modified Creighton Evaluation Tool		0 = Did not complete 1 = Completed n/a = Not applicable		
1	Recognize the armed chair was not suitable for patient	0	1	n/a	
2	Asked for patient's consent before touching or applying a device	0	1	n/a	
3	Checked size of blood pressure cuff & used appropriate size	0	1	n/a	
4	Asked if patient was ok with being weighed	0	1	n/a	
5	Clearly communicated what the exam will entail and asked patient if any modifications are needed. This should occur before offering the gown.	0	1	n/a	
6	Checked the size of the gown and provided appropriate size to patient.	0	1	n/a	
7	Assessed exam table for possible difficulties for patient to climb upon/be accommodated by the table and provided support as appropriate.	0	1	n/a	
8	Used neutral language to ask patient to assist with lifting tissue as needed to perform exam correctly, ex. Left lateral breast tissue.	0	1	n/a	
9	Performed abdominal exam that utilized proper landmarks (lower ribs and hip bones) to orient exam and examine lower quadrants from the underside of the pannus	0	1	n/a	
10	Through out exam asked for consent to touch and offer opportunity for patient to move cloths for access or assist with body positioning.	0	1	n/a	
11	At end of exam affirm patient preference to not be weighed unless medically indicated and to not be told weight if indicated.	0	1	n/a	
	Total				