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# The Use and Meaning of the Term Obesity in Rural Older Adults: A qualitative study

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#### **Abstract**

The term 'obesity' is associated with societal stigma and discrimination. Eight individual semi-structured interviews and five focus groups with 29 community-dwelling, rural older adults with obesity, seven primary care clinicians, and four rural community leaders were completed using purposive and snowball sampling. Clinicians perceived that older adults are less affected by obesity stigma than younger adults yet this was not observed by community leaders; however, older participants with obesity reported that they often felt ashamed and or stigmatized because of their weight. There was also a disconnect between clinician and older adult understanding of obesity. For older adults with obesity, the word 'obesity' was associated with negative connotations. Just as physiological aspects of obesity persist into older adulthood, so do psychological aspects, such as perceptions of stigma. The use of the word 'obesity' in medical settings may hinder communication between clinician and older participants. Heightened awareness may change the dialogue around obesity.

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# Keywords

qualitative; obesity; aging; older adult; stigma

# INTRODUCTION

Obesity is classified as an epidemic in the United States, costing \$150 billion annually and accounting for approximately 10% of medical costs in the US(Waters & Graf, 2018). Among adults 60 years of age and older, approximately one-third are classified as having obesity (body mass index exceeding 30kg/m<sup>2</sup>) with current rates exceeding 35%, and rising. (Ogden, Carroll, Kit, & Flegal, 2014) Obesity is strongly associated with significant medical morbidity(Flegal, Kit, Orpana, & Graubard, 2013) and nursing home occupancy rate(Harris & Castle, 2017), as well as depression and social isolation. In 2013, the American Medical Association (AMA) recognized obesity as a disease (Garvey et al., 2016), a term that accounts for three essential components: an impairment of the normal functioning of some aspect of the body; an entity consisting of characteristic signs or symptoms; and leading to resultant harm or morbidity to the entity affected. (Mechanick, Hurley, & Garvey, 2017) The AMA recognized through this policy that the causes of obesity are complex and multifaceted, including the built environment(Mathis, Rooks, Tawk, & Kruger, 2017), and not simply the consequence of an unhealthy or sedentary lifestyle. Similarly, the Obesity Society highlighted the importance of the social, physical, and genetic determinants of obesity(Jastreboff, Kotz, Kahan, Kelly, & Heymsfield, 2019).

The word 'obesity' has been associated with negative stereotypes, including laziness and lack of self-control(De Brun, McCarthy, McKenzie, & McGloin, 2014; Roberto et al., 2016) and is strongly associated with significant stigma(DeFleur, 1964). People with obesity experience weight-based prejudice and bias in their day-to-day lives, including health care, education, and employment.(Phelan et al., 2015; R. M. Puhl & C. A. Heuer, 2009; R. M. Puhl, Phelan, Nadglowski, & Kyle, 2016) Studies have shown that exposure to weight stigma predicts increased sustained cortisol and other markers of psychological stress. (Tomiyama et al., 2014) Perceptions of weight bias and stigma have been linked with an increased risk of depression, low self-esteem, exercise avoidance, and weight gain, independent of BMI and among persons of all age groups(Jackson, Beeken, & Wardle, 2015; Papadopoulos & Brennan, 2015; R. Puhl, Peterson, & Luedicke, 2013; Sutin & Terracciano, 2013; Vartanian & Porter, 2016).

In addition to stigma, subsequent behaviors, and stress-linked disease outcomes, labeling theory posits that individuals' identities, self-esteem, and subsequent behavior is influenced by the labels applied to them.(Link & Phelan, 1999) The word "obesity" carries negative connotations and stereotypes which may cause labeled individuals to feel shame and internalize negative group stereotypes. Indeed, several advocacy groups for body positivity prefer the word "fat" to "obese" in order to avoid a label associated with disease. Given these physiological and psychosocial consequences of obesity stigma and the negative connotations of "obesity", some have recently suggested the use of alternatives terms to

obesity, such as 'adiposity-based chronic disease' (ABCD), to circumvent the stigma associated with such terminology(Mechanick et al., 2017; R. M. Puhl & Brownell, 2006).

Much of the obesity stigma literature has focused on younger, middle-aged populations(R. Puhl & Suh, 2015), and only a few studies have demonstrated the perceptions and implications of the term obesity or the stigma experienced by older populations using largescale epidemiological cohort studies (Jackson et al., 2015) or interview-surveys (Sikorski, Luppa, Brahler, Konig, & Riedel-Heller, 2012; Zettel-Watson & Britton, 2008). To our knowledge, none were conducted in rural populations, with clinicians or others involved in older adult community-care. Specific intervention studies focusing on the treatment of obesity in older adults are lacking (Batsis et al., 2017) as most studies are focused in research centers, are on smaller samples and focus predominantly on physical outcomes (Ard et al., 2017; Nicklas et al., 2019; Villareal et al., 2017). There is a marked gap in both interventional studies to reduce the impact of stigma as well as scientific knowledge and understanding of how stigma affects older adults. Gaining such an understanding in the context of the changing demographic in the US may provide foundational data by using qualitative methods to guide the development and tailoring o health promotion interventions in older adults. In addition, such information could increase clinician awareness of their own biases thereby promoting and enhancing meaningful conversations surrounding effective treatments for weight management and possibly improving the interpersonal quality of care for older patients with obesity.

#### **METHODS**

# Study Setting & Design

This qualitative study was conducted as part of a larger mixed-methods study on older adult obesity interventions that integrated various stakeholder perceptions of older adults, clinicians, and community-leaders on the term obesity. This was conducted between November 2016 and April 2017 after approval from the Committee for the Protection of Human Subjects at Dartmouth, and consisted of semi-structured interviews and focus groups with older adults over 65 years of age whose BMI was 30kg/m². Additional semi-structured interviews with clinicians and community leaders who treat or provide services to an older adult population were conducted. All interviews were conducted at the Center for Health and Aging at Dartmouth-Hitchcock, a rural, tertiary care, academic medical center on the border of New Hampshire and Vermont, with a geographic catchment area exceeding 1.5 million persons.

# Sampling & Recruitment

To identify potential participants, a purposive and snowball sampling approach was used. Obese older adult participants were identified through medical record review and referred by their primary care physician or self-identified volunteers via study advertisements. Tear-off sheets and posters were placed throughout a primary care clinic at Dartmouth-Hitchcock. Convenience sampling was conducted within the clinic. A research assistant conducted all medical record evaluations. Clinician and community leaders were identified through professional contacts by the lead author.

### **Study Participants**

This analysis focuses on insights about obesity stigma in three different stakeholder groups (rural, community-dwelling older adults, clinicians and community leaders), an approach that enhances credibility via the triangulation of perspectives(Creswell, Fetters, & Ivankova, 2004). Full methods are previously reported(Batsis et al., 2019). Participants resided in areas designated as non-metropolitan areas. The nearest urban-designated center is >100miles away. Individual semi-structured interviews were conducted with eight older obese adults, seven primary care clinicians who have experience in the treatment of older obese adults, and four community leaders who lead local organizations that serve the needs of older adults. We also conducted five focus groups of 3–6 community-dwelling older adults with an obesity diagnosis (total n=21). We asked the same questions in both evaluations. A total of 29 older participants were evaluated; all were English speaking and did not meet any of the following exclusion criteria: a medical record diagnosis of dementia; psychiatric diagnosis that would interfere with study participation; a life-threatening illness; nursing facility admission in the last 6 months; or history of any type of weight loss surgery.

# Interviews & Focus Groups

After obtaining written informed consent, interviews and focus groups were conducted by one of two research team members. Individual semi-structured interviews and focus groups were 60 and 90 minutes in length, respectively. A priori, the study proposed that the information and content would likely differ depending on the type of inquiry, as specific questions would lend themselves to better group (or individual) discussions than others. The broad purpose of these sessions was to ask a range of aging, wellness, and fitness technology questions. Questions pertaining to obesity stigma were asked in the final 15 minutes (Appendix 1). The interview guide was developed based on an extensive review of the geriatric obesity literature whose purpose was to identify major research gaps that could assist the investigative team in modifying the guide based on input from all members of the research team, as well as from older adults with obesity in the target population described above. Research team members included a clinician-researcher with fellowship training in geriatrics, a qualitative methodologist with formal mixed-methods training, a behavioral scientist, obesity medicine experts, and a research assistant. Clarifying probes were used for all interactions. The interview guide was semi-structured to allow for flexibility and probing. Participants were encouraged to elaborate upon their responses using clarifying probes. The guide underwent minor alterations to improve flow and accommodate feedback throughout the interview process. Fresh fruit and vegetables, and a \$25 gas card were provided as gifts of appreciation to the participants.

#### **Interview Content**

Participants were asked to share their perspectives on, and personal experiences with, obesity and obesity stigma (see Appendix 1). Questions varied slightly between participant groups to account for roles and context (i.e. modified questions for participants, clinicians and community leaders). All participants were asked about their views on whether obesity is a disease, whether obesity is prioritized as a treatable condition, and specifically the negative and stigmatizing connotations of the word "obesity". Clinicians and community leaders

were also asked questions about their beliefs regarding the documentation of obesity in the medical record.

### **Data Analysis & Statistical Analysis**

Interviews were audio-recorded, transcribed, and uploaded into Dedoose Software for coding and data analysis. Each transcript was reviewed and a codebook was developed to identify themes. Theoretical saturation occurred as interviewers reviewed and reflected upon their field notes where similar themes and information were obtained. All data were deidentified prior to analysis and stored on password-protected computers. The codebook was developed using both *a priori* researcher-driven codes and inductive review of transcripts for salient concepts. This process identified 11 codes organized within five domains. Coding was performed by ABZ; a second researcher (JAB) reviewed all codes to identify discrepancies which were mitigated by a third reviewer (ECS). This approach enhances the trustworthiness of the data.(Shenton, 2004)

#### **Quantitative Data**

All participants completed a demographic survey using REDCap (http://www.project-redcap.org), a secure, web-based application platform designed for research data capture. Surveys were deployed on tablets and completed following the sessions at the research center. Study personnel were available if they had problems navigating the device. Data was collected per National Institutes of Health guidelines that could permit generalizability of the results in the future.

#### RESULTS

The study sample included 29 community-dwelling older adults, seven clinicians and four community leaders (Table 1). Mean age was 72.9±4.6, 46.7±12.1, and 64.3±8.7 years, respectively. Clinicians and community leaders had been working for 14±9.5 and 13.5±5.5 years in their respective roles. Analysis of the transcripts revealed four major themes related to the impact of stigma among older adults with obesity as outlined below:

# Theme A: Obesity diagnosis in the medical record

Clinicians largely agreed upon the necessity to document obesity in the medical record, particularly in the context of an office visit. In a medical record which is fully visible to patients, clinicians felt that this task required extra care, as it could inadvertently trigger feelings of stigma in certain individuals. Most clinicians felt it was important to place obesity in a participant's problem list as outlined by Clinician 4, "it should be in the problem list..[and] documented...but we [need to] tell the patient, "I really feel like this is a condition that we should acknowledge." You can't just drop it in the problem list,"but felt a tendency to soften the documented language. Clinician 7 stated "...if I'm going to put [obesity] on the problem list and the patient has access to their medical record, I have to think about what that means and how I'm going to communicate around that." Others used terms such as 'overweight' or 'heavy' as noted by Clinician 2, "Some of them don't like to see and be labeled as obese because of the negative press, and connotation. They are obese because they are slobs or they did not take care of their diet...It is a big issue for some patients. If you are

going by diagnosis, you have to put it in the medical record... it's something that's going to help them get coverage for. You just have to have that communication with the patient."

Others recognized the offensive term (Clinician 6) by stating "Some patients have been very offended to find obesity showing up in their visit summaries or in their problem list..." The word challenged the ability to engage with the patient, as indicated by Clinician 3, "I think that there are people for whom their body dysmorphism, their ego strength is so caught up in labels and perceptions that if you write the word obesity in their problem list that it sends them into feelings of despair and hopelessness and they can't, and it works against you."

In contrast, participants were offended or negatively impacted by the way in which obesity is documented in such encounters as in Focus Group 3 participant, "The first time I saw that turn up on my medical records, I said, 'I don't like that '. It was awful. I saw [the clinician] write it and he said, 'well, that's what it is.' [I said,] 'But I don't like it'." The term triggered negative emotions in others, including "My cardiologist used the phrase...and I still remember...he's talking into his little thing and "mark, grossly obese." I said wait a minute. I'm heavy but am I "grossly"? Am I a freak? (Focus Group 3)" Documentation had potential for backlash, resulting in impaired communication between the patient and the clinician. Older adults felt offended by the label and disagreed with the diagnosis altogether. Community leaders also believed this was a major problem for themselves noting, "I looked at my own report and said, "This doctor's full of [expletive]." The rest of the report adequately described the problem...but I was dismissive of the entire package (Leader 2)."

# Theme B: Obesity as a disease

While clinicians agreed on the need to document weight status, most reluctantly labeled obesity as a disease, preferring words such as 'risk factor, symptom, medical issue, condition, or problem' in discussions with patients. Clinician 6 noted, "Do you say it's obesity and then deal with [its ramifications], versus having milder terms such as using overweight when it's obesity." Other clinicians strongly believed the term to be medical in nature, as represented by Clinician 2, "It feels like a symptom, not a disease... because there's generally something that's led to it. It is rarely left to its own devices [nor does it] develop idiopathically. There is always a cause... but classifying it as [such] might be all semantics—but as a condition...makes sense." However, other recognized that it extended beyond the person and that it likely was multifactorial (Clinician 6) who reported, "There are plenty of people who are obese in spite of eating right and exercising, so it's not all willful misbehavior. I think there are other factors: environmental, family, social, and physical."

This was a major communication challenge as outlined by Clinician 5, "I think it's more that we have a problem bringing it up and addressing it. I think it's the elephant in the room... [and] we just tiptoe around it too much."

Some older adults were averse to recognizing obesity as a disease due to their opposition to labeling. Patient 3 felt that [obesity] "...is a serious, health-related problem. Do I think it's a disease? No, I think it's just a window-dressing label(Patient 3)." Others believed it was a risk factor. Focus Group 2 participant stated "I think it's really important to declassify some things as diseases. Just call them risk factors instead," as did Patient 1, who believed that

"when I think of somebody who's so big they can't get out of their bed, I think maybe that is a disease. I think it is a risk factor." (Patient 1)

Some supported the disease label under the belief that it may lessen societal stigma. A participant in Focus Group 2 "like(d) the concept of calling it a disease, because it takes away the stigma society has put on overweight." Other older adults supported the disease label if the BMI exceeded a given threshold. A number of older adults disagreed with their clinician's diagnosis and did not, in general, regard themselves as having obesity. Disease classification was also seen as appropriate with respect to health policy strategies allowing for increased insurance coverage and research funding and this was agreed upon by community leaders. For instance, Focus Group 2 participant suggested "If it's classified as a disease maybe insurances would be more apt to [cover treatment] and that would make a difference...that's how they tend to make decisions," as did Focus Group 5 participant, who "if (you) call(ed) it a disease means that we can bring more resources to help people, then do it. I think that's really the key is how did we get ourselves in this predicament and what can we do it get out of it." (Focus Group 5). Certain older adults recognized obesity as a disease based on a combination of determinants of health which may shift the blame for obesity off of the individual and onto factors less under one's control such as genetics, physical environment, and social environment.

# Theme C: Prioritizing obesity treatment

A consistent theme among older adults was that clinicians often give precedence to more 'immediate/acute' health issues as opposed to obesity. While older participants appreciated obesity as a serious condition, a majority did not necessarily associate obesity as a condition that could impair health as outlined by Focus Group 5 participant, "I just want to be as healthy as long as I possibly can and weight doesn't seem to fit that program at all."

Motivating behavior change is challenging if an older obese adult is not concerned that their BMI is a detrimental problem to their health that warrants specific attention. For others, the consequences of obesity in older adulthood was more proximate. Both Patient 7 and Focus Group 5 participant provided insights that included, "Aside from my back issues I don't think of myself as an obese person," and "I'd like to keep up with my wife walking, but I can't. She use to have to run to catch up with me and it's kind of switched," respectively. Fear of looming health deficits and immobility may be a strong enough motivator to prioritize a change in lifestyle and diet as indicated by Patient 2 who described, "I would never want to be the one just staying in one spot all the time. I don't want to be that way. I want to be able to do things. I got grandsons that are involved in sports and different things that I want to be a part of."

In communicating the importance of preventive action on chronic disease progression, communication of concern by clinicians might be facilitated by first focusing on immediate and impactful related health concerns such as joint pain. Clinician 1 notes, "I see it as something that I normally note and skip. As their activities of daily living decline, their ability to do what they previously did may change. Instead of adapting, or asking for help, they just kind of take that off the radar...Not necessarily top on their list." Other clinicians feel that obesity is not a major problem as reflected by Clinician's 4 comment, "'I think

people with a BMI of 32 or 33 may not see it as a problem. Perhaps those around them are more obese, or it hasn't caused them a problem yet... They might be ready to change, but they may not really see it as a big problem." Clinician 5 echoed the importance of long-term health by stating "...I think for my patients, it's the health. A lot of them want to live long and they equate gaining weight with cardiac problems like not them being able to do a lot things that they still want to do. "Community leaders all were unable to comment on this specific element of care.

# Theme D: Stigma with the word 'Obesity'

Clinicians felt that a direct communication approach using the term 'obesity' was needed; however, the terminology ultimately impeded its intended spirit of assisting patients. They expressed awareness and sensitivity to patient reactions and stigma, yet returned to the importance of a medical definition of the term as reflected by Clinician 1's quote, "... [clinicians] have this picture in mind that overweight people are...slow...breathing hard... and they need always a chair or walking with walkers. Overweight people are unhealthy people is kind of the perception. So to label themselves overweight puts them in that category. Nobody wants to be in that category." Given the inherent difficulties in the communication surrounding this stigmatized disease, the sampled clinicians often circumvented the topic for fear of appearing judgmental, offensive, or being misunderstood. Clinician 4 believes much is due to phrasing: "I'm fat. I think that's what they're hearing. And I think they're hearing a fault and guilt if I just say, "You're obese." It's all about how you phrase it." Negative perceptions were pervasive as outlined by Clinician 1: "Unhealthy. Unfit. That [patients] aren't trying hard... not quite cutting it on a health front. I think that is [a] negative connotation about the word. It's like calling them a bad word, "you are not trying, you are overweight." So they kind of see it as a failure." Community leader observations (Leader 2) suggested that older adults were not subject to bias or discrimination who noted, "We have some people who are large and I don't see anybody really giving them the business. With this group, it's pretty much accepting."

Older adults all expressed some complacency, rather than anger, as a result of using this word. One older adult mentioned, "In our generation, an obese person was a really big fat pig... not someone who is overweight or fighting a weight problem; it was just somebody who is lazy and did nothing but ate. That's the impression that you got growing up. So being labeled "obese" is almost like an insult particularly if you're trying to watch what you're eating.(Focus Group 4)" Another also viewed this word negatively by pointing out that, "I don't see anything positive about the word. I absolutely hate the word. They could call it something else." (Focus Group 3) The negativity linked with the word obesity was recognized by others who stated that "I think they [need to] find another way of doing it... unless they want to do it as an insult to someone... Obesity...that just doesn't sound right somewhere," (Focus Group 4) and "To me it comes across as a stigma. You're obese." (Focus Group 1). The term was disliked as indicated by Focus Group 4 participant: "I feel I'm overweight, I don't like the term obese," and Patient 4 who "really felt...that I was just a worthless human being because I was overweight and not an athlete...but I know that was my feeling... it's not pleasant to, to feel that." A negative sense outside the home environment where, "Most people are very fit and I look at all these fit people and they look

at me. So sometimes if [a place] is crowded, I say I'm not even going to go there for that reason. For me, weight is a stigma...I see this as a personal battle(Focus Group 3)."Others "don't like to go shopping. It would be nice not to have to buy the double XLs. Have a pant size with a three in front of it instead of a four (Focus Group 1)."

To patients, the term 'obesity' involved engendered feelings of negativity and otherness. Older adults expressed feelings of inadequacy that might act as a barrier to engaging in health promoting activities, especially if the environment caused feelings of vulnerability and shame. For instance, multiple participants reported feeling stigma while shopping for clothes. Stores may not carry their size or their size has a label or separate section that implies abnormality(Brewis, Trainer, Han, & Wutich, 2017). Participants also suggested that they experienced the word differently than younger adults, possibly as a result of media influence or past experiences(Chou, Prestin, & Kunath, 2014). They felt when they were younger, they were more focused on their attractiveness than in their senior years.

# DISCUSSION

In this qualitative evaluation using three distinct groups of informants (participants, clinicians and community leaders), key elements essential in the future care of older adults with obesity were identified that could be helpful in the development of rural, geriatric obesity interventions. A specific focus on terminology and clinician care processes appear to markedly reduce the potential for stigma experienced in the health care setting within this population.

As the physiological aspects of obesity persist into older adulthood, the results from this qualitative project suggest that the stigma of obesity and perceived weight bias persist as well. Sikorski found that even in older adults, strong negative feelings of bias on the fat phobia scale were observed (Sikorski et al., 2012). Many clinicians felt that older adults would be less affected by obesity stigma than younger adults, findings observed in focus groups of persons with obesity and those having undergone bariatric surgery (Hayden, Dixon, Dixon, Playfair, & O'Brien, 2010). However, conversations with older adults with obesity revealed a contrary perspective to those generated by physicians, potentially as a result of younger person's lack of experiences of bias and discrimination. Our findings paralleled those observed in a study of participants who felt weight-based shame and stigma in a separate community-based interview study(Lewis et al., 2010). Participants in our study did not accept the designation of obesity as a disease, and many rejected the label of "obese" outright. These findings have implications for obesity treatment for older adults. First, the AMA designation of obesity as a disease, which was expected to reduce stigma by highlighting the complex contributors to body weight and reducing focus on the simple behavioral model of obesity, may have the opposite effect in older adults who were uncomfortable with the notion that obesity was a disease. Second, participants in this sample rejected the word obesity and the label "obese" in favor of more tempered and more nuanced language. (Gray et al., 2011; Schwartz, Chambliss, Brownell, Blair, & Billington, 2003) This may protect them from some of the negative effects of stigma. However, as with any behavior change, motivation for change is a precondition to "readiness" for change. If participants do not appreciate the potential for their weight to affect their health, they are

unlikely to engage in a treatment plan or accept a diagnosis(Jung, Spahlholz, Hilbert, Riedel-Heller, & Luck-Sikorski, 2017). Reconciling these competing paradigms is an essential step to move beyond definitional differences and to help build clinician – patient partnerships to address the disease itself.

The issue of physician counseling for weight loss has the opposing forces of perceived physician weight bias by the patient and the well-established benefits of physician counseling (Christian et al., 2008; Singh et al., 2010). Thus, while counseling patients with obesity regarding strategies for weight-loss can be motivating and is associated with successful weight-loss, physicians need to be aware of perceived bias. A major challenge is that clinicians feel obesity is a behavioral issue on part of the patient and that despite counseling, patients may not pay attention to their advice. Physicians' comments seem to suggest that stigma (or body dissatisfaction) is motivating and this may be less so in older adults. Patients, in turn, often 'shut-down' due to their own inherent perceptions, may not heed to such advice, and make fewer attempts at losing weight, potentially perpetuating an unhelpful cycle to convince the patient of its importance(R. M. Puhl et al., 2016). It is unclear which may be the precipitating factor. In fact, in older adults, their persistent feeling of bias may be due to their long-term exposure to the condition, as opposed to clinician's expected response, potentially as a result of stigmatization. Such stigma is often viewed even more negatively than other stigmatized populations (e.g., felons, or those with mental illness).(Roehling, 1999) Perhaps clinicians need to adjust their framing based on dualprocess theories of human decision making and cognitive biases (Tversky 1974). Potential examples include recency or primacy effects and affective reasoning – that is, being aware that the term obesity is emotionally charging; confirm a patient's interpretation of the term obesity and what it means to them; and availability bias by discussing whether these concerns have been discussed in the past and what their experiences were. Future research could better evaluate such mechanisms.

Office-based providers often fail to prioritize obesity as a clinical issue, which may occur for multiple reasons.(Rebecca M Puhl & Chelsea A Heuer, 2009) First, increasing average BMIs worldwide are making overweight and obesity the norm, and feeding burnout related to addressing it. (Burke, Heiland, & Nadler, 2010; Robinson & Christiansen, 2014) Second, lack of adequate training in communicating about sensitive issues and participant discomfort discussing obesity prevent many providers from initiating a discussion (Kushner et al., 2017). Third, time pressure within primary care increases the temptation to not document obesity in the medical record(Aleem, Lasky, Brooks, & Batsis, 2015). This may be especially true with older adults with multiple chronic conditions or acute issues where precedence is often given to the more "immediate" issues(Brown, Thompson, Tod, & Jones, 2006). The data in this study supports the need to identify language that is non-stigmatizing but conveys the severity of obesity and chronic diseases associated with it. It was anticipated that the 2013 AMA disease classification would alleviate some of these issues and provide common language and labels that would be acceptable to participants and providers. Instead, our results suggest that language changes that followed this new policy, such as people first terminology(Wittert, Huang, & Heilbronn, 2015) (participants with obesity) that eliminates generalizations, assumptions and stereotypes by focusing on the person rather than the disability, are not being used regularly and may not be preferred by providers or participants.

Marked differences observed between clinicians felt a need to document obesity, and participants' abhorrence of using this terminology. While emerging legislation is hoping to improve reimbursement for obesity services, current reimbursements are markedly low. Use of the term 'obesity' is mandated to allow for payment of services. Alternative terms such as adiposity-based chronic disease is but one approach; not relying on specific diagnostic criteria and focusing on overall, comprehensive care of the patient may be a second(Mechanick et al., 2017).

This study has a number of limitations. The questions were asked toward the end of an interview that focused primarily on aging and wellness, and participants may have exhibited fatigue at that time. The questions' positioning was intentional due to the sensitive nature of the topic. All participants lived in and all clinician/community leaders worked in rural settings in [states]. Our conclusions may not apply to other rural or urban populations, or to participants of lower socioeconomic status. While health literacy is directly associated with the perception of stigma(Mackert, Donovan, Mabry, Guadagno, & Stout, 2014) in obesity, this study sample was of higher socioeconomic class, despite residing in a rural area. Finally, we did not evaluate social desirability or impression management with regard to obesity bias, and acknowledge that participants may tell us information they want us to hear, despite our attempts to ask individuals for their honest opinions.

Despite these limitations, the themes provide direction for future participant-centered interventions for research and clinical services for an older adult obese population. Strategies to improve patient-provider communication of weight and weight-related issues are clearly needed and must address not only the importance of documentation within the EMR, but concomitantly relay its importance in a sensitive, caring and non-judgmental manner to the older obese adult. Providers must be mindful of the different communication strategies and sensory barriers needed for an older adult population(Brooks, Ballinger, Nutbeam, & Adams, 2017). Clinical providers could consider raising the term obesity as a medical diagnosis and gauge the patient's reaction to this term before either using this term, or focus on other measures, including physical function(Tailor & Ogden, 2009). This would permit an individualized approach to care needs and treatment planning. Engaging patients in conversations around a disease with as much stigma as obesity should start from a point of empathy, helping the patient understand that obesity is not their own fault, but is multifactorial(Jastreboff et al., 2019). Lastly, advancing the science of obesity stigma, including acknowledging its terminology, has significant public health impact. Diseases often lead to policy changes which in turn can enhance local and national initiatives in disease prevention and treatment.

#### CONCLUSIONS:

Perception of stigma in older adults with obesity is evident in clinical care but was not apparent by community leaders in their settings. Awareness at the clinician level is critically needed to improve efforts of communications with older adults living with obesity afflicted with this disease.

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# **Appendix**

# Appendix 1.

## Interview guide questions

Participant Category	Questions asked
Older adults with obesity	The American Medical Association (AMA) has recently recognized obesity as a disease. What do you think of this?
	2 Some people lose weight and then regain weight, what do you think leads to this cycle?
	What are your biggest fears of being overweight, or obese?
	4 When you hear the word obesity, what do you think of?
	5 Can you describe whether you feel stigmatized?
Clinicians and Community Leaders	The American Medical Association (AMA) has recently recognized obesity as a disease. People have different opinions and responses about documentation of obesity or Body Mass Index (BMI) in the medical records, specifically problem list. Is it really an issue?
	What do you think are factors that lead to weight regain if your patients have initially lost weight?
	3 What do you think are older adults' biggest fears or consequences about being overweight or obese?
	4 When your patients hear the word obesity, what do they think of?
	5 What do you think of obesity being classified as a disease?
	6 Can you describe whether your older patients with obesity feel stigmatized? How about compared to younger patients?

# **ABBREVIATIONS**

ABCD	adiposity-based chronic diseas	
AMA	American Medical Association	
BMI	body mass index	
EMR	electronic medical record	

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# Table 1:

# Baseline Characteristics of the Cohort

Characteristic	Patients
	N=29
Demographic Information	
Age, years	72.9±4.6
Female sex, n (%)	16 (55.2)
Weight, kg	93.5±12
Medicare Insurance	27 (96.4)
Race	
White	29 (100.0)
Asian	

Values listed are mean ± standard deviation, or counts (%)

<sup>\*\*
-</sup> not shown to protect identity