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Patients' acceptance of obesity as a chronic disease: a qualitative study in Lebanon

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ABSTRACT

Objective This study explores patients' acceptance of obesity as a chronic disease.

Design Cross-sectional, qualitative study using semistructured phone interviews.

Setting The study was conducted in specialty and primary care clinics from a single central tertiary hospital in Lebanon. Recruitment took place between February and March 2021.

Participants and methods 25 adult patients with overweight or obesity were interviewed and the interviews were analysed thematically.

Results Four themes emerged: (1) patients' knowledge and awareness of obesity are based on their own experience; (2) there is ambivalence or conditional acceptance of obesity as a chronic disease; and patients with overweight or obesity perceived (3) that the role of physicians in obesity management is related to complications and (4) that obesity management is as simple as eating less and exercising more.

Conclusions The study shows the studied population's ambivalence in accepting obesity as a chronic disease. Individuals with overweight or obesity considered the role of the healthcare professional in obesity conditional on morbid obesity and the presence of medical complications of obesity. Findings of this study advocate for educational campaigns about the nature of obesity as a chronic disease and the role of healthcare professionals in obesity management.

Strengths and limitations of this study

- A strength of this study is its qualitative design, which allows for an exploration of the population's acceptance and experience using participants' own words and expressions.
- The sample was selected from various specialty clinics, including primary and bariatric surgery clinics.
- One limitation of this study is that it was conducted among patients rather than the general population and participants were recruited from a limited geographical setting.

INTRODUCTION

Once considered a problem only in high-income countries, overweight and obesity are now dramatically rising in low-income and middle-income countries, particularly in urban settings, causing financial burden to governments and health institutions, costing trillions of dollars each year.[1–3] Obesity is a significant public health hazard and a major risk factor for several chronic diseases such as type 2 diabetes, cardiovascular disease, hyperlipidaemia, hypertension, stroke, breast and colon cancer, sleep apnoea, degenerative arthritis, and others.[4] Nevertheless, the approach to obesity has moved from a health public hazard and lifestyle problem to a disease process.[5] In June 2013, the American Medical Association House of Delegates voted to recognise obesity as a chronic disease requiring treatment and prevention efforts.[1 5] Later, several other health professional organisations recognised obesity as a disease process, including the American Association of Clinical Endocrinologists, the American Academy of Family Physicians, the American College of Cardiology, the Endocrine Society, the Obesity Society, the WHO, the Food and Drug Administration, and the National Institutes of Health.[6]

Although obesity is recognised as a chronic disease and that most physicians have a positive attitude towards obesity as a chronic illness,[7] most clinicians are reactive, waiting for patients to initiate a talk about obesity[8 9] and will not decide to treat obesity.[10 11] Many patients believe that obesity is a disease in general[12 13] and a chronic disease in particular,[14] yet they still consider that management of obesity is an individual responsibility[14 15] and is dependent on their willpower.[12] Patients evaluated obesity similar to diabetes, hypertension and smoking in terms of the necessity for professional care, but when questioned about individual responsibility they rated obesity similarly to smoking.[15] Patients' assumption that obesity is a choice, fuelled by a simple treatment plan to eat less and exercise more, contributes to

the social stigma of obesity, drives the obesity epidemic and thwarts any attempts to improve obesity management strategies.[16] Many physicians frequently advise healthy eating habits and physical activity when addressing obesity management with patients.[12 14] Many physicians perceive that it is difficult for patients with obesity to lose weight despite being supported.[17]

Advancing the dialogue about obesity as a chronic disease, the Obesity Society emphasised the importance of changing the public's image of obesity from a lifestyle choice towards a chronic disease paradigm.[18] Understanding the importance of the individual in one's health and having the knowledge and ability to manage a chronic condition are critical components of the chronic care approach.[19] Few studies have explored the public perception of obesity as a chronic disease using quantitative methods[12–14] and none exists in the Arab region. Therefore, this qualitative study aims to understand better and explore the population's acceptance and knowledge of obesity as a chronic disease.

METHODS

Study design

This is a qualitative cross-sectional study using individual phone interviews.

Patient and public involvement

Neither the patients nor the public were involved in research design.

Setting and recruitment process

Adult patients with overweight or obesity were recruited from a tertiary hospital, the American University of Beirut Medical Center, Lebanon. The participants were recruited at the triage area at the family medicine clinics and four specialty clinics (bariatric surgery clinic, endocrinology clinic, pulmonary medicine clinic and cardiovascular clinics) between February and March 2021.

During the clinical assessment, the triage nurse approached eligible patients and enquired about their willingness to participate in the study. Eligible participants were to be at least 18 years old, be overweight or obese with body mass index (BMI) ≥25 kg/m^2, and speak Arabic well. Patients with documented dementia or Alzheimer's disease in their medical records were automatically excluded from the study. If a patient agreed to participate, the nurse shared their contact information with the research team, who called them and gave a brief study overview. The interviewer assessed the decisional capacity of those who agreed to participate and were above 60 years old by asking them a three-item questionnaire regarding (1) the purpose of the study, (2) the risks and (3) the benefits. Informed consent was obtained verbally from eligible participants. The participants also received the same informed consent document via WhatsApp.

Patients were purposefully selected to satisfy the following diversities: (1) different age groups and genders, (2) having different BMIs and (3) being representative of all the clinics' physicians. Patients were approached until interviewers could not find any new responses, indicating that the interviews had reached saturation.

Interview process

The personal investigator (JA) or research assistant (NA) led the interviews, which followed an interview guide (online supplemental appendix A) developed by the research team based on a literature review. The interviews were conducted in Arabic, the country's native tongue. The following semistructured, open-ended questions were included in the interview guide: (1) patient demographics (age, gender, place of residence, marital status, number of kids, level of education, height and weight); (2) patients' perceptions of obesity and overweight as definitions and assessment tools; (3) patients' attitude towards obesity as a chronic disease and how it compares with other chronic diseases; (4) patients' knowledge of obesity's causes, symptoms, complications and treatment options; (5) patients' concerns regarding seeking medical help and following up with their physician for obesity; and (6) patients' final acceptance of obesity as a chronic disease after the discussion.

The interviewer ensured that the participant was not driving and was in a private location. Each participant was interviewed individually over the phone with speaker mode turned on. A recording of the conversation was made so that the data could be transcribed and retrieved for analysis. The interviews lasted 15–25 min each. Participants were given a link to an instructional brochure about obesity in English or Arabic at the end of each interview, depending on their preference.

Data analysis

All the interviews were audio-recorded, transcribed in Arabic and de-identified using a serial number, with participants identified by gender and age. The interviewer documented a summary note at the end of each interview reflecting their impression of the content. This summary was also included in the analysis. Using thematic analysis, two researchers (JA and NA) independently read the transcripts and manually generated codes based on reported behaviours, attitudes or emotions. The researchers went through the data, which were organised by clinic, and assigned detailed codes. The codes were then classified into categories independently by each researcher using a chronic disease framework.[20] The two authors compared the categories iteratively until they reached an agreement on common categories. The authors then met several times to review the codes and categories, interpret the data and identify patterns that led to the current themes. The researchers also discussed their perspectives on obesity as a chronic disease and the importance of remaining objective when interpreting the data.

Table 1 Demographics of participants

		Total (N=25) n (%)
Age (years)	19–49	16 (64)
	50–64	7 (28)
	≥65	2 (8)
Body mass index	25–29.9	8 (32)
	30–39.9	15 (60)
	≥40	2 (8)
Gender	Female	13 (52)
Residence	Urban	20 (80)
Marital status	Single	5 (20)
	Married	18 (72)
	Divorced	2 (8)
Level of education	Elementary	1 (4)
	High school	7 (28)
	University/vocational	17 (68)

RESULTS

A total of 25 interviews were conducted, including 5 in family medicine, 5 in bariatric surgery, 6 in endocrinology, 4 in pulmonary and 5 in cardiovascular clinics. The demographics of the patients are shown in table 1. The patients' age ranged from 19 to 82 years (median 39 years, IQR 31.5–59.5) and 48% were female. Most of the participants (72%) were married and lived in urban areas (80%). Two-thirds (68%) had a university degree. Participants' BMI ranged from 25–29.9 kg/m^2 (30%) to 30–39.9 kg/m^2 (60%) and >40 kg/m^2 (10%). The analysis of the interviews revealed four themes: (1) patients' knowledge and awareness of obesity are based on their own experience; (2) there is ambivalence or conditional acceptance of obesity as a chronic disease; and patients with overweight and obesity perceived (3) the role of physicians in obesity management as related to complications and (4) that obesity management is as simple as eating less and exercising more. Online supplemental appendix B contain selected quotes.

Patients' knowledge and awareness of obesity are based on their own experience

When asked to define obesity, participants provided a variety of definitions rather than basic knowledge of BMI. (1) Obesity was defined as a disease that affects health and leads to chronic complications and symptoms. (2) Obesity was defined in terms of psychological impact such as burden, 'screwing your life' and tiredness. (3) Some participants defined obesity as being satisfied with one's body image rather than a number on a scale. (4) Many participants defined obesity in terms of body image, huge or large size, or 'obese belly'. (5) Others defined obesity as simply overeating. Furthermore, participants defined obesity based on their personal experiences. For example, if they were experiencing medical complications, they might define obesity as a disease or a risk factor for disease. If participants were concerned about their physical appearance, they defined obesity as an unfavourable body image, too much body fat and too big. Even when asked about BMI, they had no idea what it meant; answers were hazy primarily and based on what they remembered from high school or their dietitian or physician. Furthermore, the complications and symptoms they described were based either on their own experiences or the experiences of their relatives and friends, demonstrating a clear lack of knowledge about obesity. This was observed among all five clinic participants.

There is ambivalence or conditional acceptance regarding obesity as a chronic disease

Ten participants (40%) agreed that obesity is a chronic disease and provided reasons embedded in professional organisations' definition of obesity as a chronic disease. They classified it as a chronic disease because it is a multifactorial disease with genetic causes, causes other chronic diseases and health complications, is associated with medical symptoms, has a negative impact on one's life, may necessitate the use of medications for an extended period, and may result in death. Three participants (12%) categorically rejected the idea of obesity as a chronic disease because it is treatable and does not necessitate the use of long-term medications. It was regarded as a personal responsibility to control diet and exercise. One participant thought the term 'chronic disease' was offensive and disrespectful to patients with obesity because obesity is a personal choice rather than a disease.

Twelve participants (48%) expressed ambivalence or conditional acceptance of obesity as a chronic disease. The ambivalence stems from the conflict between accepting it as a disease with symptoms and complications on one end and the need for control and solutions on the other end. Some assert that it is a lifelong disease unless one has a strong will and act. Some were aware of the long-term state of obesity due to their experience with the yoyo effect, long years of treatment, the need to monitor diet constantly and the difficulty of getting rid of it. Others considered obesity to be a disease only when (1) it begins to cause medical problems, as some patients with obesity are healthy; (2) it began at a young age; (3) it is morbid obesity; and (4) it is caused by a medical condition such as thyroid or insulin resistance. Few participants accepted obesity as a chronic disease and that it is not as severe or serious as other chronic diseases like diabetes or hypertension. Following the interview, three participants (12%) changed their minds and considered obesity a chronic disease.

Acceptance of obesity as a chronic disease varied among patients from various specialty clinics. Patients at the bariatric specialty clinic, for example, considered obesity to be a disease but not a chronic condition because it is treatable with surgery considered a cure from obesity. They no longer consider themselves to be people with obesity. Obesity is not a chronic disease, according to

most participants of the family medicine clinic, but rather a personal responsibility. Patients in the endocrinology clinic were more accepting of obesity as a disease because they were on weight loss medications and they associated obesity with insulin resistance. We did not find any pattern in obesity acceptance among age, gender or BMI.

Acceptance of obesity as a chronic disease can be influenced by physician acceptance, societal and cultural norms, and media awareness. Some participants discussed cultural taboos and the society's lack of acceptance of the concept. One participant stated that while obesity is recognised as a disease in the immediate circles, the culture is not prepared to confront the fact. Another participant noted that if the medical community declares obesity a chronic disease, he will accept it.

Patients with overweight or obesity perceived that the role of physicians in obesity management is related to complications

The dietitian's role in managing obesity was very definite among the participants. Following up with a dietitian regularly is highly beneficial. The physician's role was less clear and was mostly concerned with the medical complications of obesity and ensuring that obesity is not due to a medical cause. Few participants mentioned the physician's role in supervision and general counselling about barriers and motivation. Physicians become necessary only when morbid obesity is out of control or when complications and symptoms have developed. However, the participants remained sceptical about the role of physicians in weight loss. They reported that it is ultimately up to the individual to control one's diet and exercise despite medical advice. Two participants reported being subjected to 'fat shaming' from their physicians at every visit. Their physicians always blamed them for their inability to control their weight. One elderly participant claimed that she had to switch doctors more than three times before feeling comfortable. Another preferred to seek help from a doctor who had personally struggled with obesity and weight loss because she believed he would share his patients' difficulties with them and never judge them.

Patients with overweight or obesity perceived management of obesity as simple as eating less and exercising more

Almost all participants mentioned that eating less and exercising more is the treatment for obesity. When asked about the management plan, the first treatment options that came to mind were diet, exercise and lifestyle changes. Diet regulations varied among participants, ranging from restricting calorie intake of a specific food category such as fat or carbohydrates to eating a well-balanced diet that included all types of food but in smaller amounts. Regardless of their age, all participants emphasised the importance of incorporating physical activity into their daily routines to live a better and healthier lifestyle and manage obesity or overweight. Even those who had previously tried weight loss medications did not prefer medication use for weight loss. The participants were more aware of over-the-counter drugs/herbal products than medically approved weight loss medications. Many believed that the latter medications would have a negative impact on their health in the long run. When asked about surgical treatment options, bariatric surgery was regarded as a last resort. Even those who underwent bariatric surgery stated that it was their final treatment option after exhausting other management options. All patients agreed that bariatric surgeries have a lot of side effects too, some of which can be fatal. They all agreed that, while the results of surgeries were perfect and quick, they still needed to monitor their food intake and follow up with their physicians, knowing that weight gain was still a possibility at any time. Nonetheless, participants considered obesity management to be their responsibility, even if physicians provided advice, as they must put it into action at the end of the day.

DISCUSSION

There is still a debate about whether obesity should be classified as a chronic disease in the medical community. This debate is mirrored in this qualitative study which explored patients' acceptance of obesity as a chronic disease. To the best of our knowledge, no study in the literature has addressed the acceptance of obesity as a chronic disease in the general population or the Middle East area in particular, except Caterson *et al*,[14] who used an online survey to identify international perceptions, attitudes, behaviours and barriers to effective obesity care among people with obesity and healthcare professionals. The themes identified in this study revealed mixed knowledge and inclination towards obesity as a chronic disease. Only 40% of the patients accepted that obesity is a chronic disease. The rest thought it was a less severe chronic disease, a disease but not a chronic one, or not a disease at all but rather a personal choice. Most of the patients defined obesity based on their own experiences, and their knowledge of BMI was insufficient to recall the equation. Almost all patients were aware of the causes, symptoms, complications and treatment options for obesity. Most participants, even those who had undergone bariatric surgery, agreed that it is the last option to consider as a treatment choice. When asked about the role of healthcare professionals in the management plan, responses ranged from complete agreement to conditional acceptance to seek their assistance.

Over the last decade, several organisations and societies have issued statements on obesity as a disease, beginning with the Obesity Society in 2008.[21] Yet the debate continues whether obesity is a 'disease/chronic disease' or simply a socially unacceptable behaviour indicating a lack of willpower. Although most participants (88%) agreed that obesity is a disease, there was some ambivalence or conditional acceptance of obesity as a chronic disease. Caterson *et al*[14] discovered similar results, revealing that 68% of patients with obesity accepted obesity as a chronic disease. Even though they were all

listing the characteristics of chronic disease, they all believed that obesity was not classified the same way as other chronic diseases such as diabetes and hypertension. One possible explanation is their lack of knowledge of a clear definition of obesity based on BMI. Most participants defined obesity by their experiences, overeating and how they look. Another explanation is that most of the patients in this study considered eating less and exercising more is the main MANAGEMENT of obesity or overweight. Obesity is caused by a genetic predisposition and specific pathophysiological changes and is not solely the result of a poor lifestyle.[22] Notably, three participants agreed that obesity is a chronic disease by the end of the study interviews. This highlights the importance of health education and the beneficial effects of health literacy in the era of chronic disease, mainly when patients were more likely to define overweight and obesity based on their own experiences. We believe that social media and inperson awareness campaigns will have a tangible impact on acceptance of obesity as a chronic disease, and consequently on obesity rates, morbidity and mortality among our population.

Being classified as a chronic disease, management of obesity should follow the traditional disease model by the existing healthcare system. However, the inadequacy of health professionals' training and low self-confidence in managing obesity, the negative cultural views of obesity and the inadequacy of financing (ie, health insurance) mechanisms have made physicians hesitant to approach and manage patients with obesity.[8 22–24] This is consistent with patients' attitude in this study, who did not value the role of healthcare professionals in obesity management unless complications occurred. Patients were primarily concerned with diet and rarely mentioned or agreed on the critical role of pharmacotherapy even though behaviour change, pharmacotherapy and bariatric surgery are commonly used to treat obesity. Similarly, all agreed that surgery should be considered the last option for weight loss after all other treatment plans have failed due to its unfavourable side effects, even among the patients who underwent bariatric surgery. This will leave many persons struggling on their own, shouldering the burden of weight loss while waiting for the physician to start the conversation. Few patients in this study expressed concern about stigmatisation and discrimination by healthcare professionals. Similar results have been found in the literature,[14 25] indicating that healthcare professionals' attitude towards obesity is biased and skewed. Many physicians believe that obesity is simply the result of a lack of self-control by patients and that it is solely the patient's responsibility to manage obesity.[26 27] Perhaps, it is time to raise awareness among physicians as well. All physicians do not need to be involved in all aspects of obesity management. They should at the very least diagnose obesity, initiate the conversation and advise patients about treatment options.

Strength and limitations

A strength of this study is that it is a qualitative study, which allows for an indepth exploration of the population's acceptance and knowledge of obesity as a chronic disease using participants' own words and expressions. One limitation of this study is that it was conducted on patients rather than the general population. It was conducted at a single healthcare centre in Lebanon, leading to selection bias. Patients presenting to the hospital are more likely to have diseases and may accept obesity as a disease if they have complications. Therefore, we attempted to diversify the recruitment clinics to include primary care, obesity clinic, endocrinology clinic and other clinics related to obesity complications, such as pulmonary and cardiology clinics. As a result of the subjectivity of the data obtained, the results of the interviews are not generalisable. They are less representative of the general population, taking into consideration the heterogeneous sample.

CONCLUSION

This study demonstrates the ambivalence in accepting obesity as a chronic disease related to complications and symptoms, preferring the ability to control and eliminate obesity. As a result, the healthcare professional's role in obesity treatment was conditional based on morbid obesity and the presence of medical complications or medical causes of obesity, as perceived by patients with obesity or overweight. The findings of this study advocate for educational campaigns about the nature of obesity as a chronic disease and the role of various healthcare professionals or obesity treatment programmes in treating obesity in ways other than eating less and exercising more.

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Data availability statement All data relevant to the study are included in the article or uploaded as supplementary information.

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