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Research Article

Weight Reduction for Overweight and Obese Adults: Challenges Experienced In a Nigerian Community

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ABSTRACT

Prevalence of overweight and obesity in low/medium income countries is on the increase with associated co-morbidities. This qualitative study was carried out to explore various challenges and barriers experienced by overweight and obese individuals in a sub-Saharan Africa setting. Focus group discussions were conducted in 13 census enumeration areas with a purposive sample size of 83 overweight and obese individuals. The data collected was subjected to thematic analysis after going through rigorous transcriptions from the tape recorder. The three main emerging themes were lack of knowledge about the need to reduce weight and health consequences of overweight, lack of money for consultation and dietary regimen as well as lack of support and motivation from immediate family and friends. This study was able to explore various challenges that impair weight reduction among overweight and obese persons from a low income country. These challenges need to be seriously considered if the increasing tide in the prevalence of overweight and obesity is to be reduced and checked.

Keywords: Challenges, overweight, obesity, motivation, knowledge, support

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INTRODUCTION

Overweight and obesity are associated with a series of health, social and psychological constraints. It has been estimated that about 2.1 billion people are overweight globally, of which 37% of men and 38% of women had body mass index (BMI) greater than 25kgm² according to 2013 Global Burden of Disease Study (Ng et al, 2014). Recent report from the World Health Organisation (WHO, 2015) shows that individuals residing in WHO's South East Asian and Africa regions were at the risk of dying from non-communicable diseases (South East Asia=25%, Africa=21%) between the ages of 30 and 70 years. The global increase in the prevalence of overweight and obesity witness in high-income countries is also present in low/middle-income countries of sub-Saharan Africa, which calls for the need to evolve better strategies for overweight and obesity prevention and management. In a recent systematic review of literatures between 2004 and 2010 to access the relationship between socioeconomic status (SES) and measured overweight and obesity in developing countries, Dinsa, Goryakin, Fumagalli and Suhrcke (2012) reported that overall obesity ranged from 3 to 30% for men and from 1 to 50% in women in developing countries. Among Nigerian

adults, it was reported that the prevalence rates of overweight and obesity were 25.1% and 17.3% respectively (Akindele, Phillips and Igumbor, 2016). It has been estimated that 20-50% of urban residents in Africa were either overweight or obese (Kamadjeu, Edwards, Atanga, Kiawi, Unwin et al, 2006; Sodjinou, Agueh, Fayomi & Delisle, 2008) and by 2025 three quarters of obese individuals will come from low/medium income countries (WHO, 2005). Among the reasons adduced for increase in the prevalence of overweight and obesity in economically disadvantaged sub-Saharan African countries include acculturation, urbanisation and reduced physical activity.

In addition to other factors influencing overweight and obesity increase, cultural factors that encourage or promote it should not be ignored. Illness is shaped by cultural factors governing perception, labelling, explanation, and valuation of the discomforting experiences (Kleinman, Eisenberg, & Good, 1978). Health behaviours are bound strongly with culture and any intervention must, in itself, be culturally and linguistically appropriate and cultural preferences may influence engagement with different recreational activities and food choices and also the nature of social support networks, essential for promoting health behaviour change,

may also be different (Maynard, Baker, Rawlins, Anderson & Harding, 2009). Compared to the Western focus on the individual, relational and family-orientated, non-Western traditions may influence the relevance and uptake of health promotion messages (Kreuter, Lukwago, Bucholtz, Clark & Sanders-Thompson, 2003). For instance, studies have shown that African American women have a larger body size, are less likely to perceive themselves to be overweight/obese and are more likely to be satisfied with being overweight or obese (DiLillo, Gore, Jones, Balentine, & West, 2004; Fitzgibbon, Blackman, & Avellone, 2000). The ultimate goal is to reduce or stop the advancement of prevalence of overweight and obesity the success of which depends on a thorough understanding of the factors (personal, cultural, environmental) that influence increase in body weight.

Sub-Sahara African and other low/middle-income countries need to come up with steps to reduce the rising tide in the prevalence of overweight and obesity thereby reducing associated health hazards. The WHO (2000) advises that to achieve an optimal health, the median BMI for adult populations should be in the range 21–23 kg/m², while the goal for individuals should be to maintain a BMI in the range 18.5–24.9 kg/m². Achieving an optimal health requires healthcare system designs not only to curb acute and communicable diseases menace, as seen in most low income countries, but also suited for prevention and control of chronic and non-communicable diseases (NCDs). We need a combination of effective clinical services to treat obesity and policies, systems, and environmental changes that prevent obesity and sustain weight loss to reduce obesity globally (Dietz et al, 2015).

Success in weight reduction depends on the presence of weight reduction enabling environment, and positive interaction and cooperation of everybody who are in contact with overweight and obese individuals. Few of the extrinsic weight reduction vitiating factors (on the part of physician) that have been identified in the literatures include inadequate physician training, negative attitudes toward obese individuals, inadequate reimbursement, and perceived futility of potential conservations (Loureiro & Nayga, 2006; Ferrante, Piasecki, Ohman-Strickland and Crabtree, 2009). In a sample of community women, Johnson et al, (1990) reported lack of time for exercise indulgent and participation as the most significant factor and lack of willpower and time constraints as the most frequently reported obstacles to weight management by overweight and obese subjects. Obesity treatment seeking individuals do present infinite issues regarding the weight reduction as well as the challenges and barriers that undermine and impair their weight reduction efforts. It is important and helpful for the physicians and obese individuals to identify and recognise those potentials barriers for effective weight management. Also, inputs of overweight and obese individuals on the challenges and barriers experienced that undermine treatment interventions will go a long way to reduce the prevalence of overweight and obesity. Few studies have explored various challenges that make weight reduction difficult among obese individuals in sub-Saharan Africa bearing in mind that successful weight management is determined by factors that differ across cultures, affiliations and groups (Ajzen & Fishbein, 1980). This study was carried

out to explore the challenges that discourage and undermine weight reduction by overweight and obese Nigerians using a qualitative research design.

MATERIALS AND METHODS

Research Setting: This was part of a larger cross sectional study carried out in an attempt to design a culturally appropriate intervention for overweight and obese adult Nigerians in which fifteen (15) enumeration areas of Alimosho Local Government Area of Lagos State, Nigeria, were used as research settings. The participants were overweight and obese individuals who consented to participate and residing in the enumeration areas. In order to arrive at 15 enumeration areas, we employed the World Health Organisation (2004) guidelines for conducting community surveys to randomly select five of the eleven (11) political wards in Alimosho local government. Three census enumeration areas (EAs) were also randomly selected in each of the five chosen political wards. Houses with odd numbers in each of the enumeration areas were selected for participation in the study. Permission and ethical clearance was obtained from the University of the Western Cape Research Ethics Committee (12/9/15) and Lagos State University Health Research and Ethics Committee (LREC/10/06/261).

Participants: All individuals with BMI ≥ 25 kg/m² identified in a quantitative study to establish the prevalence of overweight and obesity (results discussed elsewhere), were invited to participate in focus group discussions. Eighty three (83) participants consented and participated after the detailed of the study were thoroughly explained and their demographic characteristics are summarised in table 1.

Data Collection Procedure: Overweight and obese individuals were invited to participate in a focus group discussion for each enumeration area. Mobile numbers of those who agreed and consented to participate were written down in a log book during the first phase of this study. Focus group discussions (FGD) were carried on Saturdays so as to enable civil servants to participate. Each of the participants was reminded through SMS and phone calls on Fridays, i.e. a day before FGD. Focus group discussions were done in suitable venues with minimal noise in each of the enumeration areas. A total number of 131 overweight/obese subjects were invited for FGD out of which 83 (63.36%) attended the discussion in thirteen enumeration areas. A minimum of six(6) subjects participated in each of the focus group discussions. The total number of female participants was 43 (51.81%) and male 40 (48.19%) with an age range between 18 and 71 years. Participants in two (2) of the fifteen (15) enumeration areas did not turn up. Consent form: community member (English) and consent form: community member (Yoruba) were administered on each member. The researcher was the moderator while the research assistant served as assistant moderator whose function was to take notes and operate tape recorder. For overweight/obese individuals, questions for FGD were divided into engagement questions, exploration questions and exit questions.

What are the challenges facing the overweight and obese individuals towards weight reduction?

Exit question: are there anything you would like to add to barriers and challenges of overweight and obesity?

Data Analysis: Various steps taken in analysing qualitative data is vital in enshrining credibility of the data collected. Data source triangulation method was employed because data collection was from different type of groups in order to gain multiple perspectives and validation of the data collected (Carter, Bryant-Lukosius, DiCenso, Blythe and Neville, 2014). The analysis of the focus group discussions and interviews started with the transcription of information from the audio-tape recordings to produce a manuscript. A comparison was then made with the notes taken during the discussions, to verify accuracy. The discussions held with overweight/obese persons were transcribed and translated to English and then sent to an academic specialist in Yoruba language for back translation into Yoruba language. This was achieved using variance of Brislin method which involves rounds of forward and backward translation of the transcribed document from the Yoruba language to English language until an acceptable rendition was achieved (Brislin, 1970). The final transcripts were read through several times by the researcher, with emphasis on the emergence from the ideas of themes. Notes were made throughout the reading of the transcripts. Thus, data were coded in themes, followed by the creation of broad categories of emerging themes which fit together. The analysis was done by reading through the transcripts, again and again, making as many headings as necessary to describe all aspects of the content. In addition, grouping of the themes into broader categories was done in order to reduce the number of themes or small categories. For instance, very similar headings were conflated to come up with one. However, thorough searching for categories that have internal convergence and external divergence was done to make sure that the categories are internally consistent but distinct from one another (Marshall & Rossman, 1995). After the derivation of themes, an independent researcher was asked to read through the transcripts and generated themes, thus increasing the validity and reliability of the categorising. Lists from the researcher and independent researcher were then compared.

RESULTS

Demographic details of the participants are shown in Table 1 below. About 39.8% of the participants completed secondary schools while 10.8% did not attend formal school. Regarding marital status, about 84.3% were married while 15.7% were single. Descriptive analysis of their employment status shows that 97.6% were gainfully employed

The qualitative results are presented in the forms of emerging themes regarding challenging that undermine weight reduction steps among overweight and obese Nigerians as written below.

Emerging Themes

- Lack of knowledge about the need to reduce weight and health consequences of being overweight
- Lack of money for consultation and dietary regimen

- Lack of support and motivation from immediate family and friends

Table 1:
Demographic Details of Overweight and Obese Individuals

	Male n (%)	Female n (%)	Total n (%)
Educational Status			
No formal schooling	4 (10)	5 (11.6)	9 (10.8)
Primary school completed ^a	4 (10)	7 (16.3)	11 (13.3)
Secondary school completed	14 (35)	19 (44.2)	33 (39.8)
Tertiary education completed ^b	18 (45)	12 (27.9)	30 (36.1)
Employment Status			
Employed	39 (97.5)	42 (97.7)	81 (97.6)
Unemployed ^c	0 (0)	1 (2.3)	1 (1.2)
Pensioner	1 (2.5)	0 (0)	1 (1.2)
MARITAL STATUS			
Single ^a	7 (17.5)	6 (14)	13 (15.7)
Married	33(82.5)	37 (86)	70 (84.3)

^aincomplete and completed primary school

^b completed 1st degree and postgraduate

^c students, volunteers and unemployed

^a never married, divorced, widowed

Lack of knowledge: A lack of knowledge about the need to reduce weight and the associated health consequences of overweight and obesity was reported by our respondents regarding weight reduction. The failures of the government in making people aware of the health consequences of overweight and obesity are also reported (Box 1).

Box 1:

Lack of knowledge about the need to reduce weight and health consequences of being overweight

Yea, I agree with her. I think the lack of knowledge about the need to reduce weight is another challenge because we believed that being big (overweight) is a sign of good living ah ahah. But thank you guys for the health talks- P2 (Ajegule –Ilo).

You see I expected the government to broadcast on radio and TV all what we have been speaking about so as to enable us to have knowledge about overweight-P6 (Ijgun).

My own challenge is the lack of knowledge about the need for me to reduce my weight. I thought it was a good sign to be big (overweight). But I have been learning about it of recent which is helping me. Most Nigerian men prefer their wives to be a bit more robust/big in order to show that wives are being taken care of you know ah ahahah. I think a health talk like this would surely help but not everybody is here to listen to you. May be jingles on the radio would help or what do you think?- P8 (Ikoton).

I didn't know I am overweight otherwise I would have done something about it. I thought being big like me is a sign of good living. It shows that I am properly taking care of by my husband. So, ...emm....I think lack of knowledge about the consequences of overweight is my own problem that I have regarding weight reduction-P3 (Meiran).

You know our government is not serious about the issue of overweight and obesity but they are serious about malaria and HIV/AIDS-P6 (Abule-Egba).

My own challenges are lack of money and knowledge about the reason why I should lose weight. I thought being an overweight person is a sign of affluence but that has changed now. I eat what I can afford. I do not have money to see dieticians or buy those items I need for weight reduction-P3 (Mosan).

Lack of Money for Consultation and Purchasing Dietary Regimen

The need to have affordable healthcare system was highlighted by the majority of the respondents regarding their financial inability to consult overweight and obesity reduction experts as well as the cost of purchasing weight reduction items (box 2).

Box 2:

Lack of Money for Consultation and Dietary Regimen

.....also fruits are expensive in the city here which makes it difficult for one to buy. I cannot afford the cost of buying the fruits and vegetables that I need to supplement the quantity of food I am reducing-P2 (Baruwa).

Few of the challenges I have is on the cost of the diet regimen dieticians usually prescribed. Most of the diets are usually expensive. Aside from that, cost of consulting them is expensive too-P1 (Akinogun).

You pay heavily to exercise in hotels which I cannot afford. Also, cost of consulting a dietician is much as well as the cost of getting the necessary diet regimen-P6 (Abule-Egba)

Yea... there are challenges. Mine are time and money. Time to do the exercise and money to get the vegetables and fruits I need to supplement the quantity of food I reduced. You know fruits are expensive for no good reasons-P4 (Idimu)

I eat what I can afford. I do not have money to see dieticians or buy those items I need for weight reduction-P3 (Mosan)

Box 3: Lack of support and motivation from immediate family and friends

My own problem is lack of motivation from people who surround me. They do not encourage me to lose weight.....keep saying my weight makes me beautiful, you know....emem...at the expense of my health. My husband is not even bothered about my weight at all...it is funny (smile)-P2 (Baruwa).

Another problem I have that I do not want people to be laughing at me while exercising. You know our people the way they think-P1 (Alagbado).

Sincerely.....emem ...I love exercise but people would laugh at you when you are exercising. They would not mind their own business-P2 (Ikotun)

Personally, I do not have support from my wife. She prefers to feed me with unhealthy foods that are not good for my health. Though she eats it too but she does not bother because she is not overweight like me. Another problem I have that I do not want people to be laughing at me while exercising. You know our people the way they think. Those are the two problems I have now-P1 (Alagbado)

The only problem I can think of is the will to follow the necessary steps for weight reduction. I would have done better if we were to be in a group. That would have been encouraging us to do few things-P6 (Idimu)

Lack of support and motivation from immediate family and friends

Box 3 shows the consensus regarding lack of support and motivation from friend and family. Family members and friend adduced cosmetic reasons for the excess weight as well as non-availability of group exercise participation.

DISCUSSION

This study provides qualitative insights about various challenges encountered by overweight and obese African adults towards weight reduction. Among the reported challenges by the FGD participants included, lack of knowledge about the need to reduce weight and health consequences of being overweight and obese, lack of money for consultation and dietary regimen, and lack of support and motivation from immediate family and friends. Proffering solutions to these highlighted challenges will go a long way to motivate weight reduction and reduces health consequences of overweight and obesity. Early identification and management of treatment barriers can save resources and increase the prospect of long-term success, thereby protecting the patient from the emotional and physical consequences of weight cycling (Foster, Sarwer & Wadden, 1997). The fact that these challenges and barriers to weight reduction were emanated directly from overweight and obese individuals lends credit to the importance and usefulness of this study.

The inequality of health affects people of different races and positive health practices/healthy lifestyle is achieved by the level of education and knowledge possess by the individuals. In essence, education proffers adequate knowledge to the people about healthy practices and improves their understanding of the relationships between health behaviour and health outcomes (Kenkel, 1991). Lack of knowledge about the need to reduce weight was reported as one of the barriers to weight reduction among our participants during FGD. In a sample of obese, treatment-seeking white American adults, lack of knowledge was reported and identified as a barrier to healthful eating to achieve weight reduction (Welsh, 2012). Limited knowledge to shop and/or prepare healthful food was also reported by college students as challenges to weight reduction (Greaney et al., 2009). While examining the barriers to weight management among Emirati women, Ali, Bernsen and Baynouna (2009) reported that low awareness about the health consequences of overweight and obesity was one of the main reasons for poor weight reduction efforts as most of the women do not consider excess weight as a health problem.

The outcome of our study is consistent with previous findings that most of the overweight and obese individuals are unable to afford the costs of purchasing dietary regimen for weight reduction and consultation. While looking at weight changes in young adults, Nikolaou, Hankey and Lean (2014) reported that their participants responded that “the budget had an impact on eating, as in their view that ‘healthy food’ costs more than ‘unhealthy food’ and this is also seen among adults (Kearney & McElhone, 1999). It was also reported in another study that “high monetary costs associated with healthful behaviours, specifically that a lack of money and limited

budgets make it difficult to join an off-campus fitness centre and/or pay the fees associated with on-campus facilities” (Greaney et al, 2009). In order to positively reduce and manage the progressive increase in overweight and obesity prevalence, treatment options and interventions should be made affordable and accessible for overweight and obese individuals, especially in low/medium income countries.

Overweight and obese individuals in our study reported lack of motivation and support from immediate family and friends as one of the challenges/barriers towards weight reduction. Using dietary for weight reduction, lack of motivation was one of the most common barriers to healthful eating among Australian young women (Andajani-Sutjahjo, Ball, Warren, Inglis & Crawford, 2004). Furthermore, lack of motivation and lack of support from family or friends were among the most important barriers when it comes to the use of physical activity to reduce weight among middle-aged Chinese (Sit, Kerr & Wong, 2008) and among physically inactive Australians (Booth, Bauman, Owen & Bore, 1997). In a recent study by Sharifi et al, (2013), lack of interest and motivations to be physically active was reported as the most important item of “internal barriers” towards weight reduction among overweight and obese Iranian women. Although, few studies found no association between weight reduction and motivation (Edell, Edington, Herd, O’Brien & Witkin, 1987) many studies do report that higher pre-treatment motivation is associated with greater weight loss and it might be one of the most important aspect in weight control (Teixeira et al., 2004).

One of the strengths of our study is in the fact that the challenges and barriers that undermine weight reduction were reported by overweight and obese individuals not by healthcare professionals. Also, the environments under which the FGDs were carried did not allow under reporting of challenges experienced by the participants. We have been able to expunge information using FGD from overweight and obese individuals regarding their challenges and barrier to effective weight reduction, which would help in weight management by healthcare professionals, especially in low/medium income countries. However, further studies are needed to determine challenges and barriers, by overweight and obese managers in sub-Saharan Africa.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research authorship, and/or publication of this article

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