

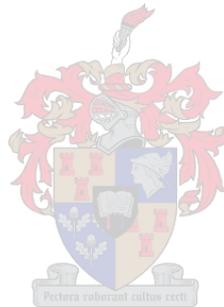
**BELIEFS AND ATTITUDES TO OBESITY, ITS RISK FACTORS AND  
CONSEQUENCES IN A XHOSA COMMUNITY: A QUALITATIVE STUDY.**

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Declaration

I, the undersigned, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree. I also declare that ethical approval for the study was obtained from the Health Research Ethics Committee of Stellenbosch University (Reference number: **S11/11/039**).

Signature: ..... Date: 3<sup>rd</sup> August, 2012.

## **Abstract**

### **Background:**

The issue of obesity is an important one because in some communities obesity is perceived in many ways such that it is not recognised as a problem as typified by the black community of Khayelitsha with high levels of obesity and associated diseases but low levels of concern and recognition of the problem. This study aimed to explore this by trying to understand how people think and feel about their obesity in a peri-urban Xhosa community, with a view to improving interventions that will reduce the burden of disease related to overweight and obesity as well as with prevention programmes targeted at obesity as a risk factor.

### **Methods:**

A qualitative study was carried out using recorded interviews of 8 purposively selected subjects who are long term Xhosa-speaking residents, 18 years and older, with BMI more than 30 and no Diabetes, Hypertension or Osteoarthritis at Nolungile CHC, Khayelitsha, a peri-urban black community in Cape Town, South Africa.

### **Results:**

Interviewed subjects identified various dietary factors for their obesity. These include overeating widely available fatty diets from street vendors, with a perception that cheap food is fatty food. They also attributed their obesity to other factors like poverty and clearly expressed that it is expensive to eat healthily. Other reasons given are a sedentary habit, fear of embarrassment, safety issues and a poor support system regarding exercise.

Respondents also differ in their behaviours towards their obesity but generally accept their obesity. Furthermore, they experienced various effects of their obesity. Other than being viewed as affluent and in good health by the community, respondents are aware of effects like compromised daily activities, associated chronic illnesses, dressing difficulties, aging and other negative effects.

### **Conclusions:**

A few concepts, in agreement with previous linked studies were identified in relation to the Burden of disease, diet, exercise, socio-economic and perception issues. However, the effects of environmental influence on perceptions and behaviour regarding exercise and diet were found. This seemed to indicate an evolving culture in transition.

Based on these understandings, health intervention should be directed at addressing such local beliefs and behaviour at the community level, with a need for control of environmental factors. Further studies regarding weight loss was suggested.

## Background

Chronic diseases are an important component of the burden of disease in South Africa.<sup>1,2</sup> Many of these chronic diseases have obesity as a common risk factor.<sup>1</sup> There also seems to be less awareness of the diseases associated with obesity among black South Africans.<sup>3</sup>

Obesity itself is a consequence of risky behaviours such as inactivity, unhealthy diets etc.<sup>3-6</sup> It may be amplified by societal factors, and is becoming an epidemic.<sup>7-9</sup> However, obesity is not always perceived as a health risk by people and may even be seen positively.<sup>1,10-13</sup>

Obesity is a problem with increasing prevalence globally,<sup>1,14-16</sup> with excess body weight linked to many chronic diseases and cancers.<sup>1,17-19</sup> Also, the problem of awareness of obesity exists in the community with one-third of women in the Free State, South Africa, viewing the overweight body as the ideal.<sup>11-13</sup> With improving income, there is more weight gain in blacks than in whites. More research is also needed as regards the predisposition of blacks to obesity.<sup>10,20,21</sup>

Urbanization leading to consumption of a more obesogenic diet is a major cause of obesity in many communities in South Africa.<sup>11,22</sup> In traditional societies, a direct relationship between obesity and socio-economic status exists. The inverse is the case in modern societies.<sup>20,23</sup> The more urban a setting is, the more unhealthy lifestyles are and the higher the risk for chronic diseases.<sup>7</sup> A study conducted in Khayelitsha, Cape Town, emphasized a high prevalence of obesity among urban black females in South Africa, even among female health workers. This seemed to be influenced by socio-cultural, behavioural, and environmental factors like dignity, respect, health and wealth attached to the big body regarding diet, exercise and weight loss.<sup>24</sup>

In terms of food security, poorer households have lesser access to food, spend less money on food and consume fewer food items, compared to their richer counterparts hence the need for government to implement measures to improve the high level of this insecurity.<sup>4,25</sup>

Also, healthier food choices are generally more expensive than commonly consumed foods, and moderately priced healthy foods with good sources of energy are less desirable. Therefore education on the importance of healthy diet is not only important but also how to make such a diet affordable. Government intervention by manipulating food prices will be a more effective strategy.<sup>26</sup> Body perceptions and poor knowledge about the health risk associated with obesity in many South African communities is a major cause of obesity, with diverse cultural differences seen amongst blacks and whites.<sup>11,12,20</sup> Many African women perceive the overweight body to be in good health with no negative social pressure to motivate weight loss. Such perception will complicate or may prevent effective health promotion strategies.<sup>13</sup> In the United States, ethnic specific standards are used to assess weight. Black females are more overweight and are less likely to see it as a problem compared to white females.<sup>27</sup>

While working as a medical officer at Nolungile Clinic in Khayelitsha, Cape Town, South Africa, I came across a lot of overweight and obese patients (both with and without chronic

illnesses) who did not seem to be worried or concerned about their weight. . Health promotion aimed at changing behaviour and reducing obesity needs to be informed by an understanding of local beliefs and attitudes. This study will seek to understand the beliefs and attitudes and underlying behaviours of obese individuals in one specific peri-urban Xhosa speaking community.

## Methods

A qualitative study method was used. Ethics approval was obtained from the University of Stellenbosch (HREC number: S11/11/039) and permission to use the health facility was granted by the Department of Health, Cape Town. A doctor at the clinic and a medical student conducted open-ended, exploratory, in-depth interviews with criterion-sampled purposively selected patients. Patient selection was carried out by two nurses at Nolungile Community Health Centre in Khayelitsha, a peri-urban black setting serving middle to low-class people with various medical conditions including chronic illnesses. Interviewed subjects were 18 years and older (in order to explore their range of different experiences), with BMI greater than 30 (obesity is defined by this value at the clinic). They were Xhosa-speaking (for good quality interviews and validity), long term residents (resident in Khayelitsha for at least 5 years) and did not have Diabetes, Hypertension or Osteoarthritis. Patients with these co-morbidities were excluded as such patients may have been educated previously by the clinic on the association between obesity and their chronic illnesses, which might have influenced their true feelings about their obesity. Written consent was obtained from all the subjects before their interviews.

Interviews were conducted in Xhosa. It was difficult for one interviewer (the doctor) to conduct interviews after hours, hence the need for a second interviewer (the medical student) who was available at all times. Both interviewers were of Xhosa origin and were fluent in Xhosa. In addition to previous formal training on consultation and communication skills with patients involving open questions, verbal and non-verbal cues, reflective listening and clarification in medical school, both interviewers had practice sessions at the clinic on how to conduct qualitative interviews.

Interviews were digitally audio-taped. The setting, each respondent's name, age, sex and BMI value were documented. Interviews were transcribed verbatim and the Xhosa was then translated to English by 2 professional transcribers. Each primary document was saved with a unique number code on a personal computer which can only be accessed by me.

The following open-ended interview guide was used as an aid to explore respondents' views and ideas regarding obesity (defined as obesity or very big body or fat) in the community and their personal obesity:

- Opening question: "Many people in Khayelitsha are thought to be obese. Health workers are often concerned about this, but community members do not always agree with them. What do you think about this issue of obesity in Khayelitsha?"

- What is your understanding of obesity?
- What are some of the positive things about being obese in this community?
- What are some of the negative things about being obese in this community?
- What do you think about your own obesity and how does it make you feel?
- What effect has your obesity had on your life?
- What is your opinion on exercise and diet as regards obesity?

A total of 8 interviews were conducted. Seven females and one male were interviewed because fewer males met the selection criteria and were unwilling to be interviewed even when given the option of a convenient time. Of the 8 interviews, 5 were done within the clinic setting and the other 3 in a neutral environment outside the clinic. This is because some of the subjects were only willing to have the interviews done at specific times and locations outside the clinic. Interviews lasted for 20 to 30 minutes.

Interviewed subjects were between 21 and 38 years with BMI values ranging from 33 to 43 (most had BMIs of 36 and above). Two respondents were low income earners while the other six were unemployed.

## **Analysis**

Analysis of data was done simultaneously along with interviews inductively using grounded theory as opposed to the planned Framework approach as I wanted to obtain categories and themes as they emerge from the data.<sup>28</sup> Reading and re-reading of data was done several times for familiarization. Data was also read literally, interpretively and reflexively with points of interest like comments, feelings, and behaviour identified. The data was then coded using ATLAS.ti software. As data collection progressed, associated points of interest were then developed into categories, and these categories were linked to form four themes.

After completing 8 interviews, it was decided the saturation point has been reached as no new issue or theme for clarification was emerging.

## **Results**

The four themes formed are:

1. Dietary factors
2. Other factors
3. Acceptance of obesity

#### 4. Effects of being obese

The participants gave many reasons for obesity – these have been grouped into:

**DIETARY FACTORS** - Respondents attributed obesity in Khayelitsha to many factors related to their diet:

**We eat whatever is cheap:**

'Yes, I agree sister that we are obese. We are obese. We can deny it. Most of us are obese. I don't know, maybe it's our diet. Maybe it's because we don't exercise, but we are obese. I agree. There are reasons for our obesity. Sometimes we don't get the right diet, because we can't afford it, so we end up eating whatever we get that is cheap. Because you don't have anything, so that is one of the reasons for our obesity'.

**Stalls sell fatty food:**

'I can say it's cheap.....Everywhere here they are selling fat stuff like fat cakes and braai meat'.

'People from here eat fatty foods. You would turn this corner, people are queuing for pork. You turn the other corner it is tripe, especially if you go Shoprite. Let me not mention Shoprite. You see their chicken is not right, it is fatty. You would always see them queuing for meat. These are other things that cause obesity here in Khayelitsha.....'

**Overeating:** Respondents attributed obesity in Khayelitsha to excessive eating. They also think it is natural to overeat:

'I sometimes think that for some people, it is natural. They are born to eat. Other thing that I can think about is over-eating, eating fatty foods.....Here, in Khayelitsha, there are lots of stalls. Most of the time, it is meat that you find in them. That is why some people are fat'.

'It is overeating that makes you to be this fat. And over-sleeping. Those are the only things that make us obese....'.

'.....we don't eat right. For example, one would eat starch and starch, rice and potatoes. So, the way we eat, makes it difficult to lose weight'.

'.....now I am a married man. My wife cooks for me but I am accused of eating a lot and I don't stress about nonsense'

**OTHER FACTORS-** Other reasons given for their obesity:

**Lack of exercise, sedentary lifestyle and laziness:** This has been attributed by subjects to

normal lifestyle of Khayelitsha residents and exercise not being a priority to most people:

'Yes, because they do nothing. For example, you can see how big I am. When I was still studying, I was not like this, because I used to wake up in the morning and go to school, and come back. Sometimes I would do some exercises. But now I just sit at home. That is why I am like this'.

'.....it could be because of the life style and unemployed. So, I don't see anyone exercising. We are just having our own life style'.

'I am not into exercising at all. Based on diet, I don't have money to afford such stuff and as a person who like chocolate and biscuits.....'

'The problem is, I am lazy, things like gym are not for me'.

'the gym issue it's not a priority to me, I don't even bother to think about it'.

'To be honest with you, I am lazy because if you want something you can make time for it.....but can be much motivated if I can get partner'.

'I haven't started exercising....I work night shift. I leave at 6, and come back at 7. I don't have time'.

'I don't work on Sunday and Tuesdays but there is no place to gym here in the community'.

**Poverty and unemployment as a cause:** Respondents describe that poverty and unemployment are also responsible for obesity:

'I can say that it is caused by poverty. Many people don't know what they should eat, so a person just eats whatever is in front of her'.

' Poverty, and secondly we don't have gymnasiums that we can use, because we don't have money like rich people'.

'I am talking about gymnasiums. They are scarce, like Virgin Active. One must have transport and the monthly fee'.

'.....it is very difficult because we are self- employed. So, even if I want to eat those leaves, and eat healthy foods, I can't, because I can't afford to buy them. So, I end up eating anything, because of the situation'.

**Poor support system:** An unsafe neighbourhood, lack of information by community members on obesity and absence of exercise facilities were also mentioned:

'In the suburbs there is no stress people can take a walk any time and here is not safe cars can hit you and be robbed any time. If we can have a gymnasium and people given advice about the red meat they like there most'.

'.....they don't have enough information, they just heard it over posters, magazines and over the television but there is no follow-up about that from the relevant stakeholders. If they can be volunteers who can teach them about obesity and how it affects their lives, what kind of damage the fats causes you....warning about the meat which they like the most.....'

'.....gymnasiums are scarce, and when a person goes to the street to train, it is not safe in Khayelitsha.....because they are scared of things like rape. So, it is things like those that people think about. Because they are scared, you can't walk to the gym as a girl'.

**Fear of shame and embarrassment:** As expressed by female respondents regarding culture and exercise:

'.....as a Xhosa woman, Mrs So and so, there is something that makes me shy, if people can see me in the streets, running, wearing a track suit.... culture plays a big role because I am afraid of what people will say about me, you are even scared of what people will say when they look at you'.

'I am ashamed. Some people will ask so many question of why running now at later stage?'

**Familial/ genetic belief:** a respondent linked her personal obesity to familial and constitutional reasons:

'All of us are obese in my family. So, they say that it's in the genes, because everyone is over-weight. So, I can't be slim. So, they just say you resemble your mother with everything'.

**Nice body shape:** A woman is shapely when obese:

'I don't see anything right except for the fact that you being seen as someone with curves.....Yes. According to Xhosa culture, it is said that a lady should have curves'.

**ACCEPTANCE:** The participants also mentioned issues around their individual behaviours with respect to their obesity:

**Accepts and no action-seeking behaviour:**

'I have lost hope and told myself that I am old'.

'I accept my obesity..... I accept the way I am, because I'm myself'.

'.....but it's not nice when some people remind you of your weight using words 'why are you fat like a woman but you are man'? That becomes a problem and my problem is to start exercising because I come out of work late but if I can get a motivation from somebody it can be easy'.

'I haven't considered diet yet.....I was thinking of gym.....My wife used you mention 'Herbex' that fight with the fats'.

'For me, it is natural. For others, it is because they are happy'.

'This has never affect me was just saying it in general .My body is not a problem because my weight is 100 and while I wish 80 something'.

'No shame, I don't feel bad. I'm fine with the way I am, and I don't like to be thin because you don't look presentable sometimes. I accept the way I am. I fine. I am not worried about my body, because most of the times I can do things on my own'.

'Health wise, I'm fine. I don't have high blood pressure or diabetes. I am just God's creation. But I sometimes see others struggling. But as for me, nothing is bothering me. I am still fine'.

'All of us are obese in my family. So, they say that it's in the genes, because everyone is over-weight. So, I can't be slim. So, they just say you resemble your mother with everything'.

### **Accepts and seeking solution:**

'I use Hlasela Amafutha Herbex (attacks the fat), tea bags and a medication'.

'.....Hlasel' Amafutha. I try to eat the right food, but I don't lose weight'.

'I can see some change. I was more obese than this, but now some of the things I couldn't do before, but I can now'.

'....Yes. I exercise and limit the quantity of food that I eat, because I used to love eating'.

**EFFECTS OF BEING OBESE:** Participants also spoke of both positive and negative effects of being obese when they were asked:

### **POSITIVE**

**Healthy looking:** According to respondents, a common notion in the community is that obese people are seen to be energetic and healthy looking:

'one thing positive about it to be healthy and not having any illnesses .Some can't walk even a long distance'.

'the others thought I have energy because of my weight'.

'Yes, a fat person looks healthy'.

'I can say that a fat person is not always suspected to have diseases, for example..... if you become thin again, people suspect that you have diseases, like HIV. People go around talking about you behind your back. And then you don't know about that. So, for a fat person, you are not just suspected to have diseases'.

**Impression of affluence:** The big person is seen as wealthy by the community:

'They thought he is Mr everything?.....Big belly like millionaire'.

'They normally say that if you are fat, people like taxi drivers, are said to be rich, yet that that is not the case. For example, I'm fat like a rich person, but I'm not'.

## **NEGATIVE**

**Medically-related:** A host of chronic illnesses and other conditions have been attributed to obesity by respondents. This includes Hypertension, Diabetes, shortness of breath (asthma-like symptoms), Sweating and mental health issues:

'.....my mother complains about chest problems, high blood pressure and diabetes.....it is caused by eating too fatty foods, and that she is too much over-weight'.

'.....things happen like high blood pressure which is uncontrollable. People they are naive about obesity because there is lack of information from the community about it'.

'Things like high blood pressure and chest problems'.

'.....people are stressing about short breath that makes them not to walk a long distance. When it's hot you become lazy and sweat'.

'.....it affects you at work.....You do less when, and get tired quickly when you are over-weight, you breathe heavily'.

**Social implications:**

'People always reject snoring people especially in churches. Your wife will.....complain about your snoring also'.

'.....people they don't like fat people and you can end up alone because they don't want to be associated with you. For example: when slim friends going to a party and you coming along also but you will be embarrassed because of your body shape'.

**Low self esteem:**

'So this affects your confidence and your self esteem?....Yes'.

'It affects it because you can't have self-confidence, and self esteem'.

'.....They don't want them....most obese people have a low self-esteem, because when a person looks at herself in the mirror, she sees that she is not presentable, she is fearful'.

**Compromised daily activities:** Another common issue to obese people according to respondents is generalized fatigue and inability to do their normal daily chores:

'....not healthy at all of always complaining about sore body and being tired also. A friend will ask you to go to mall but you make excuse of being tired.....just always tired'.

'.....I can't walk properly, I can't even kneel with one knee, and there is just nothing I can do'.

'.....it is not easy to walk when it's hot and if you have to, you must walk slowly and you can't be active in your work'

'I become tired like nobody's business.....'

'.....it affects you when you have to walk, very slowly and become tired soon'.

'There are a lot of things that we cannot do on our own, because you become tired easily.....'

'.....mother does my laundry sometimes, or she would ask someone to do our laundry, because I am lazy, and feel like sleeping all the time'.

'One doesn't get clothes of one's size, you can't walk a long distance like a slender person. Or even run because it is wrong to be fat. You sweat'.

**Age:** Looking older than your years:

'I become worried for those young ones who look like grannies. It won't be understandable when she is telling her age because of obesity.....'

'....I am being teased also 'lose weight because you look like an old man while young'.

'.....a fat person looks like an old lady, you look old quickly. Growing old is a bad thing.....they look at me they say I don't look my age. Yet slender people who are of my age look younger than me....'

**Dressing:** Struggle to look good in clothes:

'.....age is a huge problem because you look old..... clothes are the issue also.....when you go to the shop nothing suits you.....when you wish to enter a beauty competition, no chance for you at all only slender people can enter'.

'I am a kind of a person that likes to look sexy, but I can't, because of obesity. So, most my clothes don't fit me'.

'I think of losing weight and get rid of this weight, because I don't feel good. I feel shy sometimes, to wear something tight.....'

**Job opportunities:** Employability:

'.....it's not easy to get a job all prefers a slim person'.

'.....it affects me, because in many work places, it is not easy, and they don't hire an obese person like me, because they judge you as a person who can't be able to run around, because of your weight'.

'There is no other job that I can get and that I can qualify for..,

'.....in places like restaurants fat people are being turned away from the gate'.

**Negative feelings:** This reflects bad feelings by respondents. Respondents experienced ridicule and discrimination. One person feared being confronted by discussion of his/her obesity and another feared that she would never be loved due to her obesity.

'.....because of my overweight people will laugh at me'.

'They call you names and discriminate you, and that is not a good thing'.

'.....you don't look presentable when you are obese.....they call names, comparing you with some inhumane things. So, you end up being stressed when.....So you wish you were slim, so that you can get a boyfriend that will love you. It seems as if when you are obese, no one will love you'.

'It affects me because I am not happy. I am not well with it. I am worried because, maybe I am going to meet with a person who is going to talk about my obesity'.

'.....when you are overweight, you are made fun of even in the street.....people call you names like "fatty boom-boom", and that is not right'.

**Discussion:**

**Key findings**

One major concept is the perception that cheap food is fatty food. Respondents repeatedly mentioned that they cannot afford the "expensive right diets".

There is a clear attitude of over-eating fatty diets like fat cakes, pork, barbecues, tripe ( from beef and lamb), supplied by many vendors and stalls, while foods like fruits and vegetables are less consumed in Khayelitsha. This attitude of overeating was also linked to nature and happiness in many people. Respondents admitted a knowledge gap regarding diet and obesity.

In addition to the above, respondents identified lack of exercise due to personal and societal factors, poverty, lack of motivation, fear of ridicule and poor support system as responsible factors for their obesity.

There is also a general acceptance of obesity among respondents in differing ways. While some have thought of or attempted losing weight, others have accepted the way they are. Furthermore, they clearly experienced many negative effects of their obesity regarding social implications, medical and mental health issues, job opportunities, aging and dressing.

### **Findings in relation to the literature**

Comparing the results and the above concepts to previous related studies, lots of similarities and few differences can be seen.

On the burden of disease when compared to the study by Joubert et al,<sup>1</sup> this is supported by the findings where respondents acknowledged that obesity is common and recognised its association with some chronic diseases. Specifically mentioned chronic illnesses by respondents are Hypertension and Diabetes. Issues like low self esteem, lack of confidence and sadness were also mentioned. However, respondents did not link cancers or Ischaemic diseases to obesity. As with the Bourne et al<sup>3</sup> and Puaone et al<sup>24</sup> studies, these respondents seemed to indicate that obesity in South African black population is caused by an increase in the consumption of an unhealthy fatty diet, but in addition it also shows that there is the culture of overeating whatever is cheap and available in Khayelitsha as well. One respondent views a healthy diet as “those expensive leaves” while another admitted she does not like eating them. This shows that there could be preference for certain foods over others. It is interesting to note that even in the face of acclaimed hunger and poverty, obesity exists in this environment, suggesting other factors like the environment and culture do play a big role. Respondents pointed out the sale of fatty foods everywhere in Khayelitsha, supported by the presence of informal roadside food vendors and other unhealthy food stores (one respondent mentioned one of the large supermarket chain stores) as a factor. This is in support of the findings by Chopra<sup>4</sup> that the obesogenic environment needs to be challenged especially regarding the creation and marketing of unhealthy diets. The existence of such stores makes one to wonder if the demand for fatty diets in this community is a responsible factor.

Respondents also identified specific reasons for lack of exercise in Khayelitsha e.g. while one respondent felt that it would be unacceptable for a married Xhosa woman to run on the street, others felt prohibited by crime and traffic on the roads, a result which underlines the findings by Armstrong<sup>5</sup> on the need to address lifestyle issues. Such societal factors e.g. unsafe neighbourhood for exercise and the easy availability of fatty foods are in keeping with the study on urbanization by Steyn et al.<sup>7</sup> In addition, respondents see the gym as a safe place for exercise but are limited by access and inability to afford enrolment, and a need for friends or group motivation for exercise. Also, age seemed to be a limiting factor considered by respondents regarding exercise. .

In terms of socio-economic status and obesity, the perception by respondents that it is difficult to eat healthily or enrol in a gym because they are poor does not really agree with the study by Bateman<sup>20</sup> on black women being at major risk for obesity-related diseases which found that more weight is gained by blacks as income and socio-economic status improves

due to widespread perceptions among these women that they are underweight. Respondents were unemployed or belong to low income class but do not see themselves as underweight and expressed that they would be able to eat better and enrol in gyms if they were richer. This could be due to the possibility of a culture in transition.

Perception-wise, the findings agree with separate studies by Ndlovo<sup>11</sup> and Venter<sup>12</sup> that perceptions of the obese body is a problem in most South African communities with no social pressure to motivate weight loss. Respondents expressed that a “lady should have curves” according to Xhosa culture, but also paradoxically expressed that “only slim women will have boyfriends, be loved and get better jobs.” Also, even though they are viewed as being healthy and rich by the community, respondents know that they are not. Again, this could imply a culture in transition.

In addition, they have experienced many negative effects of their obesity like struggling to look good in clothes, social isolation, looking older than their years and lack of employment as many employers prefer slim and more active people.

In support of the study by Mvo et al,<sup>13</sup> the community views the big body as a form of defence especially in males. Such perceptions can make it difficult to control weight in obese males and may complicate effective health promotion strategies.

### **Strengths and limitations**

Conducting interviews in Xhosa, even though beneficial to the subjects (their first language), needed to be translated to English by professional translators. The translation may be a limitation which I was unable to comment on.

Also, having one male available for interviewing was a limitation in terms of eliciting the male viewpoint.

### **Implications of the research and recommendations**

Even though socio-economic factors were identified by respondents for their condition, the effects of culture and societal beliefs regarding exercise and diet cannot be over-emphasised. Attention needs to be paid to discouraging overeating and unhealthy eating habits while encouraging exercise when managing obesity in this community. The reflections from the interviews suggest that people are responding to their environment rather than consciously choosing. Work needs to be done to explore the potential of mobilising the community to seek ways of accessing healthier food options.

As suggested by Chopra et al on the epidemic of over-nutrition<sup>4</sup> and also by the health of the nation study by Armstrong et al,<sup>5</sup> there is need to make the best choices from the available options regarding exercise and diet<sup>29-31</sup> in this community.

Patients must be made to understand that they don't have to be rich to eat healthily. The perception that cheap food is fatty food also needs to be changed e.g. education that foods like meat, chicken etc may not be necessarily be cheaper than some other healthy foods. They need to be educated on cheap, available foods with low fat contents like fruits, vegetables, , beans etc, and be advised to change their cooking methods e.g. stop frying foods with fat, or

consume other substitutes for fatty meals e.g. eating Tuna fish instead of fatty meat, eat lean meat, trim fat from meat and remove skin from chicken before cooking etc. This can be in the form of regular community health talks by health workers in the community or at the clinics. It is interesting that people are doing things even without being diagnosed with the complications of obesity. One respondent was pleased with her functioning and herself after weight loss, while others have attempted using the herbal remedy “Amafutha herbex” without successful weight loss. Such individuals can be volunteers or used as motivators in the community for weight loss. Policy makers especially at the District Health level need to engage community members to take responsibility for their health by working with other health workers. As suggested by one participant, health educators can recruit volunteers in the community to form a support group for obese subjects and actively encourage members to engage in exercise and help overcome the psychological and other negative effects associated with their condition, in addition to reinforcing any positive attitude to losing weight. According to respondents, obese people want a safe place and period for exercise. This can be carried out during work hours and in daylight when it is quiet. They are also afraid of ridicule during exercise. Support groups and the community can be mobilised to provide a different venue for the obese away from the prying eyes of other members of the community. Further study is needed to look at obesity in this community from a different perspective. For instance, those with strong family history of obesity but who are not obese can be investigated. Also, people in the community who are actively engaged in or have successfully kept their weights/ BMI within normal limits can be investigated by looking at what motivates them and how they have been able to achieve this.

## **Conclusion**

A few concepts were identified by this study of the experience of obese individuals. These concepts agree with previous studies on obesity, but additionally some new concepts came from this data. Cultural beliefs and perceptions on diet and exercise make weight loss support programmes difficult to design in ways that meet the patient needs. This is largely influenced by environmental factors.

The opinions of respondents points to that of a culture in transition.

Since obesity is believed to be due to overeating cheap and fatty food with a lack of exercise and environmental influences, interventions should be directed at addressing these beliefs and attitudes, with a need to change the environment. Further studies regarding diet and weight loss are suggested.

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