

Understanding Obesity: A Study of Knowledge, Attitudes, and Practices in Lesotho's Healthcare Settings

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ABSTRACT

Purpose: The study assessed knowledge, attitudes and practices of adults towards obesity in selected hospitals in Lesotho.

Design: A quantitative cross-sectional descriptive study was carried

Methods: Researchers recruited 175 adults in outpatient departments from Queen Mamohato Memorial Hospital and St. Joseph Hospital. Questionnaires were used to collect data. The convenience sampling method was used to select respondents. Mean and sample standard deviation scores were computed to determine associations among variables.

Findings: Mean and standard deviation scores revealed significant differences in the levels of knowledge, attitudes, and practices between respondents from different study settings. Respondents from Queen Mamohato Memorial Hospital attained maximum scores in attitudes ($M = 79.50$, $SD = 30.09$) and practice ($M = 33.80$, $SD = 15.81$), while those from St. Joseph Hospital showed better knowledge scores ($M = 72.20$, $SD = 16.83$).

Conclusion: Despite the satisfying knowledge and attitudes scores of adults towards obesity, their level of practice was alarmingly low.

Clinical evidence: *Obesity and its problems can be combated with sufficient education, a positive mind-set, and healthy habits. The recommendation is that national campaigns be conducted in rural areas to enhance public awareness and practices around overweight and obesity.*

Keywords: obesity; knowledge; attitudes; practices; adults.

Introduction

Obesity is defined as excessive fat deposition in the body, which can have severe implications for health. It could be due to excessive calorie consumption or diminished physical activity. Obesity prevalence, as measured by body mass index, has reached dangerously high levels in both men and women worldwide (Bray et al., 2018). Diets, commercial weight reduction programs, physical activity, and approved, peer-reviewed medications are among the programs that have been shown to be effective in helping people lose weight recently.

According to the World Health Organisation (WHO) (2021), the incidence of obesity has more than quadrupled globally between 1975 and 2016. In 2016, around 1.9 billion adults over the age of 18 were overweight, and 650 million of these adults were obese. While adult obesity rates are raising globally, those of children and adolescents are not as high. In 2020, there were 39 million obese children under the age of five, compared to over 340 million obese children and adolescents between the ages of 5 and 19 in 2016 (WHO, 2021). According to the Global Nutrition Report (2022), 30.1% of adult women and 5.9% of adult men living in Lesotho were obese in 2019. The rate of obesity worldwide is alarmingly rising, which is problematic because obesity is not only a problem in and of itself but also a risk factor for diabetes, cancer, and cardiovascular diseases. Obese people struggle socially in addition to their health. In addition to their physical issues, obese people have social challenges (Dongmo et al., 2023).

It has been established that obesity is mostly caused by overindulgence in unhealthy foods. Notwithstanding one's inherited predispositions, obesity can be avoided. A number of initiatives have been used to reduce obesity, such as health awareness campaigns and outreach that raises public knowledge of the advantages of adopting a healthier diet and changing one's behavior (Dongmo et al., 2023). Additional tactics include minimizing unhealthy diets such as refined and processed meals, choosing whole grains and other healthier foods, getting more exercise, getting better sleep, and lowering stress (Harvard School of Public Health, 2023).

Numerous other illnesses and conditions, such as kidney and cardiovascular diseases, diabetes, certain malignancies, inflammatory diseases, infertility, immune system problems, and infections, are linked to obesity. Furthermore, among patients with infectious disorders, there is a correlation between obesity, severity, and mortality. Research has demonstrated that obesity is a serious public health issue that lowers life expectancy and the quality of life associated with health. Several investigations have been carried out to exclude adult knowledge of obesity. The majority of participants in a Melinte et al. (2023) study believed that obesity was a risk factor for heart disease and diabetes, but they were unaware of other weight-related conditions. It is possible to argue that patients can lose weight most effectively by altering their lifestyle. Adoption of healthier behaviors may be significantly influenced by how obesity is seen. Some people avoid doing

any activities that reduce weight because they believe it makes them appear sick.

Lesotho stipulated the exclusion of fruits and vegetables from taxes and raised taxes on beverages with added sugar in an effort to reduce the occurrence of obesity (Adom et al., 2021). There have also been programs to promote healthy lives and health. Despite the measures being put forth to reduce obesity statistics, the number of obese people continues to rise, necessitating additional research. Therefore, the goal of this study was to assess adults' knowledge, attitudes, and behaviors (KAP) on obesity in Lesotho.

Materials and methods

Research design

This was a descriptive cross-sectional study.

Research setting

The present study was carried out in the outpatient department in three localities: Quthing government hospital (located in the rural part of Lesotho), St. Joseph's hospital (belonging to CHAL and located in the suburbs), and QMMH (a referral hospital located in the urban part of the country).

Sampling

The study population included all adults who were receiving healthcare services from the facilities at the time of this study. The sampling method in this study was based on convenience selection, and Slovan was used to sample 175 adults.

Data collection

Questionnaires were used to gather data following ethical clearance from the National University of Lesotho Institutional Review Board (IRB), the

Ministry of Health Lesotho (ID34-2023) and the management of the hospitals. The questionnaire was divided into four sections: Part A asked about patient demographics, Section B assessed knowledge, Section C assessed attitudes, and Section D assessed practices. The questionnaire was checked for validity and reliability through a pilot test with 10 individuals from each area.

Data analysis

Descriptive tests were computed in Microsoft Excel for data analysis. Mean and sample standard deviation scores were computed to determine associations among variables.

Results

Demographical data of respondents

A total of 175 adults participated in this study. The most common age group was 18 to 25 years (43.4%, $n = 76$), of which 23.7% ($n = 18$) were males and 76% ($n = 58$) were females. It can also be seen that 51% ($n = 89$) reported being single.

Knowledge of adults towards obesity

Table 1 illustrates the level of knowledge of the respondents. About 74.5% ($n = 130$) of the respondents knew about obesity. Cardiovascular illnesses and diabetes (75%, $n = 131$) were both known to respondents as possible side effects of obesity. However, social (36%, $n = 63$) and psychological factors (32%, $n = 56$) contributing to obesity were less known.

Table 1: knowledge and attitudes of respondents towards obesity

	Mean	
	YES	NO
Knowledge		
>heard of obesity	74,5	14
>heard of the following ill effects of obesity		
Cardiovascular diseases	75	13,5
Diabetes	75	13,5
Social problems	36	52,5
Psychological problems	32	56,5
>Have you ever heard about the following causes of obesity?		
Eating too much fat	80	8,5
Hormonal disorders	47,5	41
Insufficient physical activity	69,5	19
Genetic factors	40	48,5
Stress, anxiety and depression	48	40,5
High socioeconomic status	46	42,5
Attitudes		
>I believe obesity is a disease	51.0	24.2
>Normal weight is important for health	93.6	5.8
>I believe adults should maintain normal weight	98.5	2.2
>Small weight loss can produce important health benefits	94.2	6.6
>I believe obese people should lose weight	97.4	3.3
>I believe obesity is linked to inheritance and it cannot be reduced	25.2	75.4

Attitudes of respondents towards obesity

The vast majority of the respondents (93.6%, n = 164) believed that weight within an acceptable range was important for better health. In addition, the majority of the respondents believed small weight loss (98.5%, n = 172) may lead to important health benefits and that obese people must try to lose weight (97.4%, n = 170). Table 1 shows this data.

Practices of adults towards obesity

As shown in Table 2, 45.4% (n = 79) of the respondents check their body weight every one to three months. A relatively fair number (50.9%, n = 89) of the respondents eat junk food weekly, and 45.3% (n = 79) consume sweet food after meals. Less than half of the respondents actively participate in sports.

Table 2: Mean percentages of respondents' practices towards obesity

	Mean percentages (%)
How frequently do you check your body weight	
Every 1-3 months	45.4
Every 4-6 months	35.6
Every 7-9 months	3.0
Every 10-12 months	41.4
Frequency of eating junk food	
Daily	14.4
Weekly	50.9
Monthly	28.7
Frequency of eating sweets after meals	
Daily	9.5
Sometimes	33.4
Rarely	45.3
Do you have the habit of munching between meals	
Yes	53.3
No	35.8
Actively participate in sports	
Yes	40.2
Sometimes	39.0
No	14.3

Table 3: Means and standard deviation for knowledge, attitudes and practices as per hospitals

Hospital		Knowledge score	Attitude score	Practice score
Quthing	Mean	56.05	78.32	33.33
	Std. Deviation	22.731	30.872	25.621
	N	11	6	15
QMMH	Mean	64.47	79.50	33.80
	Std. Deviation	35.941	30.091	15.81
	N	11	6	15
St Joseph	Mean	72.20	71.27	32.52
	Std. Deviation	16.829	39.737	22.174
	N	11	6	15
Total	Mean	73.38	76.69	33.55
	Std. Deviation	64.242	32.016	21.099
	N	33	18	45

Association between hospital settings and respondents' knowledge, attitudes, and practices

As shown in Table 3, there was a significant difference in knowledge, attitudes, and practices among respondents from those hospitals. The respondents from St. Joseph Hospital attained a better knowledge score ($M = 72.20$, $SD = 16.83$) compared to others. Respondents from QMMH reached maximum scores on attitudes ($M = 79.50$, $SD = 30.09$) and practice ($M = 33.80$, $SD = 15.81$).

Discussion

Obesity is a global health concern that endangers adults' and children's quality of life. Furthermore, obesity is a significant risk factor for a number of chronic illnesses, including metabolic and cardiac disorders. It is possible to simply prevent obesity, but doing so requires patients to have a strong desire to lose weight. Thus, it's critical to comprehend patients' viewpoints and beliefs around obesity and weight loss. The present survey assessed the knowledge, attitudes, and practices of the adults in Lesotho toward obesity. It has been revealed that knowledge levels and attitudes among the respondents were satisfactory; despite this, their practices toward obesity were generally poor.

Knowledge and attitudes of adults towards obesity

On average, the level of knowledge among the respondents was good (73.4%). This was in accordance with the study carried by Shadid et al., (2020) in Pakistan where respondents demonstrated adequate knowledge towards obesity. Mean and standard deviation test revealed a significant difference between different study settings. The respondents from St Joseph Hospital catchment area demonstrated better level of knowledge, followed by QMMH and finally Quthing Hospital. The possible

reason could that St Joseph and QMMH are located in urban areas while Quthing is in rural areas.

Rural area often lack adequate educational resources, as a result, many people living in rural areas may not have the skills or knowledge necessary to participate in healthy behaviors. Health literacy impacts a patient's ability to understand health information and instructions from their healthcare providers. The study conducted Cameroon reported different finding, where it was discovered that the study site does not influence the levels of knowledge about obesity (Dongm et al., 2023). Their results are quiet surprising since majority of studies says otherwise.

In this study, the respondents knew what obesity is, its causes and its possible harmful effects. Cardiovascular diseases and diabetes were identified as the complications of obesity. Other literature stated similar findings although in their studies other complications of obesity such as high blood pressure, high cholesterol, joint pains/arthritis and sleep apnea, stroke and cancer were identified (Winston et al., 2014; Dongm et al., 2023). In this study, majority of the respondents (80%) pointed out that eating too much fats cause obesity followed by insufficient physical activity (69.5%). Stress, anxiety and depression, high socioeconomic status, genetic factors and hormonal disorders were less reported as causes of obesity. These outcomes are similar to Moorthy et al., (2022) who reported that additional sugars, sweets, fried foods, and stress are risk factors for weight gain.

Attitudes of adults towards obesity

The level of attitudes of the respondents was positive (76.7%). In contrast, the study conducted by Darling and Atav (2019) reported that young stu-

dent had significantly bad attitude towards obesity. In this study, youth (18-24years) had a positive attitude towards obesity. The respondents from QMMH attained highest score (79.5%) followed by Quthing. People's attitudes are often a good predictor of their behavior. A positive attitude mostly results to positive practice towards obesity. Although fair number of respondents (51%) believed that obesity is a disease, 24.2 % did not. The current study further revealed that majority of the respondents believed that normal weight is important for health (93.6%), adults should maintain normal weight (98.5%), weight loss can produce important health benefits (94.2%) and that obese people should lose weight (97.4%). The study conducted in Pakistan by Shahid et al., (2020) reported that obesity is inherited and cannot be reduced. The current study found different outcome as 75.4% of the respondents shared different sentiment.

Practices of adults towards obesity

The practice score are relatively similar reference to study site. Overall, the level of practice among the respondents was very poor (33.6%). More than half of the respondents (53.3%) had a bad practice of munching in between meals. In order to control the BMI index, the habit of overeating should be eradicated. Regular overeating can lead to irregular diet, which make it hard to maintain a healthy body. Hunger is the main motivation behind snacking, but factors like location, social environment, time of day, and food availability contribute as well. Surprisingly, some research indicated that snacking between meals does not affect weight (Bertéus et al., 2008). In this study considerable fair number of the respondents (50.9%) consumed junk foods every week. People who often like to try greasy food without proper exercise, their body fat content will increase rapidly. People should change

the habit of eating junk food, puffed food, in other words should pay attention to diet health. A very few number of the respondents participate in active sports and overall exercise was insufficient. Similar outcomes were reported by other studies (Owobi et al., 2022). Adults should strengthen physical exercise, maintain a reasonable amount of exercise every week, and maintain physical vitality.

Conclusion

Despite adults' good knowledge and positive attitudes concerning obesity, their degree of practice was shockingly low. Obesity prevention strategies include health education regarding steps to reduce obesity incidences, such as good lifestyle behaviours. Obesity and its problems can be combated with sufficient education, a positive mind-set, and healthy habits. It is strongly encouraged that national campaigns be conducted in rural areas to enhance public awareness and practices around overweight and obesity

Limitations of the study

This study did not assessment the influence of demographic variables such as highest educational qualifications, income, religion and culture, which have being shown to play a vital role in KAP towards overweight and obesity.

Abbreviations

KAP	Knowledge, attitudes and practices
WHO	World Health Organization
QMMH	Queen Mamohato Memorial Hospital
SD	Standard Deviation
M	Mean

Competing Interests

The authors declare no conflict of interest.

Authors' Contributions

Mahlelelele B.; Writing – original draft, Funding acquisition, Conceptualization, Supervision, Writing – review & editing. **Phiri LJ.;** Conceptualization, Supervision, Writing – review & editing, Formal Analysis, Software. Funding acquisition, **Takane M.;** writing – original draft , Data curation, Formal Analysis, Investigation, Methodology, Project administration, Resources, Validation, Visualization, Writing – original draft. **Noka P.M.;** writing – original draft , Data curation, Formal Analysis, Investigation, Methodology, Project administration, Resources, Validation, Visualization, Writing – original draft. **Mochekoane I.;** writing – original draft , Data curation, Formal Analysis, Investigation, Methodology, Project administration, Resources, Validation, Visualization, Writing – original draft.

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Availability of Data and Materials

The complete data set supporting the conclusions of this article is available from the corresponding author and can be accessed up on reasonable request.

Disclaimer

The opinions and views expressed in this article are those of the authors and not an official position of the institution.

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