Original Research Paper

Nursing

EXPLORATORY STUDY ON FACTORS CONTRIBUTING TO OBESITY AMONG WOMEN IN A SELECTED SETTING AT MANGALURU

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ABSTRACT An exploratory research design conducted on 383 women who are visiting in all outpatient departments and wards, between the age group of 20 – 60 years by purposive sampling method in a selected setting at Mangaluru. The main aim of the study was to assess the obesity and identify the factors contributing to obesity among women.The finding in this present study shows that majority of the subjects were in the age group of 21 – 30 years (36%), 85% of women are married and 100% of women are non vegetarian. Majority of the data revealed that 81 % of women are obese and 13% of women are overweight. There was a significant association between factors contributing to obesity with selected demographic variables.

KEYWORDS : Body mass index; obesity; women; factors

Introduction

Obesity is a complex, multi factorial disorder characterized by an excess of adipose tissue to an extent that health may be adversely affected. It involves complex interactions between genetics, metabolism and appetite regulations on the one hand and food availability, behavior, physical activity and cultural factors on the other. Prevalence of overweight and obesity is increasing worldwide at an alarming rate, affecting children and adults alike in both developed and developing countries. Women generally have higher rates of obesity than men do.(Cinar, B., & Murtomaa, H.2008) The World Health Organization (2002) states that "obesity is a condition of abnormal or excessive fat accumulation in adipose tissue to the extent that the health may be impaired". (Chung, K. H.,2011)

Indian specific criteria for overweight (BMI> 23), obesity (BMI ≥ 25) and abdominal obesity (WC≥90 cm in men and ≥80 cm in women) have found the prevalence rates among Asian Indians exceeding those in the US population. The age-standardized prevalence of generalized obesity in South India was 46% (women: 47%; men: 43%) compared to 35% in the US.(Martinez-Gonzalez, M. A.,1999)

According to Koon prevalence rates of overweight and obesity in India are 12.8 and 10.3 percent respectively. Diet, eating pattern, physical inactivity, sedentary lifestyles, environmental factors, alcohol consumption and psychological factors contribute to obesity. This global epidemic is related to increased mortality and morbidity rates with excess body fat being a significant risk factor for a number of chronic disorders such as CVD, gout, gall stones, kidney disease and arthritis. (Fernald, L. C. 2007)

Objectives of the study

1. To assess the obesity among women.
2. To identify factors contributing to obesity among women.
3. To find the association of factors contributing to obesity among women with the selected demographic variables.

Materials and methods

The research approach used by the investigator for this study was quantitative approach. Based on the purpose of study, research approach and variables to be studied, an exploratory research design was selected for the study. Samples comprised of 310 women who fulfilled the inclusion criteria and purposive sampling technique was used for the selection of women. The present study was conducted in all outpatient departments and wards of Father Muller Medical College Hospital at Mangaluru, scheduled from 6th of March 2017 to 1st of April 2017.The data collected was analyzed and interpreted using descriptive and inferential statistics.

Results

Description of baseline characteristics

Among 383 participants, majority of the subjects i.e. 97 subjects are studied till primary school (25%), 81% subjects were having ≤ 20,000 rupees in monthly income, 43% subjects having 2 children's, 100% subjects were non vegetarians, 94% subjects were belongs to nuclear family, 54% subjects not having family history of obesity, 80% subjects were not enrolled for any weight reduction program, 72% subjects were not taking any drugs, 52% subjects were not sleeping during leisure time and 71% subjects not having any stress in a day.

Majority of the subjects were in the age group of 21 – 30 years that is 139 (36%), 48% subjects belongs to Christianity, 85% subjects were married and 57% subjects were doing household works.

Section 2:- **Assessment of obesity among women**

Table 1: Frequency and percentage distribution of subjects to assess the obesity among women (BMI and waist circumference)

N = 383

According to Asian criteria

Sl No	Category	BMI		Waist circumference	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
1.	Obese(BMI ≥ 25, WC ≥ 80cm)	310	81	310	81
2.	Overweight (BMI 23 – 24, WC<79 -75cm)	50	13	50	13
3.	Normal weight (BMI 18 – 24, WC<74 -70cm)	23	6	23	6
4.	Under weight (BMI< 18, WC <70cm)	0	0	0	0

The data on table 1 Asian criteria shows that 81% of women are obese.

Section 3 : Identifying the factors contributing to obesity among women was analyzed by using frequency and percentage

Table 2 : Mean, Standard deviation and Mean percentage of factors contributing to obesity among women

n= 310

Sl No	Area Maximum	Possible score	Range	Mean ± standard deviation	Mean percentage (M%)
1.	Dietary habits	85	30 – 65	49.67 ± 7.12	58.3%
2.	Physical activity	45	11 – 33	22.2 ± 3.57	49.3%

The data on table 2 shows that mean ± standard deviation for dietary habits and physical activity are 49.67 ± 7.12 and 22.2 ± 3.57

Association between factors contributing to obesity among women with the selected demographic variables (dietary habits)

There was a significant association between factors contributing to obesity with selected demographic variables (dietary pattern and physical activity)

Discussion

Majority of the subjects were in the age group of 21 – 30 that is 139 (36%), 61 (16%) in the age group of 51 – 60 years and 59 in the age group of 41 – 50 years. These findings are contradictory to the findings of an NHMS prevalence study conducted in Malaysia, where a higher prevalence of higher obesity were recorded among 40 – 49 years (Martinez – Gonzalez 1999). Majority of the subjects were not having any disease like diabetes mellitus and hypertension. Only 107 (28%) were having diabetes mellitus and hypertension in present study. These findings are supported by the study conducted in PHCC, where 88.7% were type 2 diabetics (Al- Malki 2003)

The present study showed in Asian criteria 310 (81%) of women are obese and 50 (13%) were overweight. And the data showed in WHO criteria 38 (10%) of women are obese and 270 (70%) are overweight. These findings are contradictory to the national survey carried out in Spain where 40 % of women were obese and a study conducted in Daquq district in Iran 23.8% were obese (Soumya GR 2007)

The present study showed that 58.3% of dietary habits and 49.3% of physical activity are the factors contributing to obesity among women. This study is congruent to the findings of a study on national survey carried out in Spain 50% of dietary habits and 22% of physical activity are the contributing factors to obesity (Lia CH 2007)

The present study depicts that majority of the subjects like monthly income in rupees, education, stress in a day are associated with obesity. In this study it reveals that there is a significant association of factors contributing to obesity with selected demographic variables. The present study shows that most of the women are obese, because of their wrong life style practice.

Conclusion

Nursing students should be educated by conducting CNE programmes related to obesity and its consequences. Nursing curriculum also must have this topic so that the students are prepared for educating the community people. Students should be exposed to the community people who have this problem of obesity which will enable the students to impart their knowledge so that they can reduce the morbidity and mortality associated with obesity.

Bibliography
1. Al-Malki, J. S., Al-Jaser, M. H., & Warsy, A. S. (2003). Overweight and obesity in Saudi females of childbearing age. International Journal of Obesity, 27(1), 134.
2. Cinar, B., & Murtomaa, H. (2008). Clustering of obesity and dental health with lifestyle factors among Turkish and Finnish pre-adolescents. Obesity facts, 1(4), 196-202.
3. Chung, K. H., Shin, K. O., Yoon, J. A., & Choi, K. S. (2011). Study on the obesity and nutrition status of housewives in Seoul and Kyunggi area. Nutrition research and practice, 5(2), 140-149.
4. Fernald, L. C. (2007). Socio-economic status and body mass index in low-income Mexican adults. Social science & medicine, 64(10), 2030-2042.
5. Martinez-Gonzalez, M. A., Martin-Almendros, M. I. S., Gibney, M. J., Kearney, J. M., & Martínez, J. A. (1999). Perceptions about body weight and weight reduction in Spain. Public health nutrition, 2(4), 557-563.
6. Sowmya, G. R., & Puttaraj, S. (2007). Nutrient intake and energy balance of adult women. Stud Home Comm Sci, 1, 31-37.