

A Survey on the Overweight and Obesity Frequency Secondary to Unhealthy Dietary Intake among Housewives in Karachi

AMBREEN ASGHAR SAJJAD¹, SAEED AKHTER¹

¹Assistant Professor, Physiotherapy Department, Sindh Institute of Physical Medicine and Rehabilitation, Karachi
Corresponding author: Ambreen Asghar Sajjad, Email: ambreenasghar@gmail.com

ABSTRACT

Background: Overweight and obesity is a major global problem and various medical conditions have been associated with overweight and obesity such as knees osteoarthritis, heart diseases including high blood pressure, diabetes and stroke. Obesity is also associated with unhealthy dietary intake and lack of physical activity.

Objectives The objective of this survey was to find out the frequency of overweight and obesity among housewives related to inadequate and unhealthy dietary intake.

Method and Materials. 62 housewives were participated in this cross-section design study and conducted in a private sector hospital, Karachi. Body Mass Index (BMI) was taken using weighing machine (Camry Company) and height measured using a standard measuring tape. A structural interview questionnaire Performa was devised to capture information's about demographic profile and specific questions related to meals habit and unhealthy dietary intake.

Results Large percentages of housewives were obese (51.61%) and unhealthy dietary intakes was observed among housewives with consumption of red meat, sweat dishes, snacks between meals, carbonated/soft drinks and junk foods on regular basis.

Conclusion: The study findings revealed that obesity is a major problem among housewives with inadequate and unhealthy dietary intake appeared common in this study population.

Keywords: Overweight, Obesity, Housewives, unhealthy diet and Physiotherapy

INTRODUCTION

As we all know that obesity is a major health problem and it leads to many chronic diseases. In our society overweight and obesity is a growing problem due to unhealthy dietary intake, unhealthy life style, lack of physical activity, and other environmental causes. A survey was conducted with the sample size of 4428 adults; selected five regions of East Malaysia and Peninsular. This survey finding revealed that 33.6% overweight prevalence and 19.55 prevalence of obesity. Further discrete findings suggested that prevalence of obesity among females were 22.5% whilst prevalence of obesity in males were 14.1%. The same research group reported that Indian prevalence of obesity was 24.6%, Malays 23.2% and among Chinese was 8.2% and out of the 531 younger sample ; 43% was less than 30 years old in which 20% either obese or overweight. 1 A Iranian based study, researchers found obesity in Women than men.2 It has been suggested that non-communicable diseases such as heart condition, high blood pressure, Diabetes mellitus type 2 and some forms cancer of breast tissue, endometrial layer and colon have been linked with overweight and obesity as a part of risk factors.3 A study revealed that 27% and 38% prevalence of overweight and obesity respectively in studied sample population. Authors suggested that many predictors was observed to link with obesity and overweight such as irregular habit to take breakfast at home, frequent practice to eat snacks, fried type food and sweets items, low serving of vegetables and fruits per day in meals, spending time watch TV and sedentary life behavior or attitude⁴.

Body mass index (BMI) is a fundamental status of obesity classification parameters and widely used in assessment of obesity in many disciplines of practice. Authors argued that BMI has important parameter and

demonstrated to use for various purpose but that it appeared that it is now time to develop specific means of measurement for body fat mass evaluation instead of always use of BMI as standard or routine practice. They further stated that many factors or conditions may mislead BMI value such as early or childhood life, ageing factor, differences in racial origin, personnel working in civil or military force, reduction in weight with exercise or without exercise or related to physical training program.⁵ Dietary patterns seemed important dimension to understand overweight and obesity assessment and dietary intake types linked with overweight and obesity as a part of risk factor initiator 6-7 Many Asian countries have faced at epidemic level the disorder of overweight and obesity in their society and have huge financial burden in the management of obesity-linked disorders.⁸⁻⁹ It has been appearing that limited research on the topic overweight and obesity especially among housewives or women by researchers in the field of physiotherapy practice in Pakistan. There is a need to explore various aspect of overweight and obesity to obtain data at basic level which would useful to drive initiative for better management and highlight problems of overweight and obesity among community. Therefore the objective of this survey was find out frequency of overweight and obesity secondary to unhealthy dietary intake among housewives.

METHODOLOGY

Using cross-sectional study design with sample size of 62 housewives aged more than 25 years were included from a Karachi based private sector hospital and exclusions were pregnant women, employed women's, aged less than 25 years and housewives with any type of mental retardation. A structural interview questionnaire Performa was devised

to capture information's about demographic profile and specific questions related to meals habit and unhealthy dietary intake. Body Mass Index (BMI) of each participant was calculated to find out the underweight, normal, overweight or obese categories. Cut-off points of Body Mass Index for Asians were used. Consent was obtained from all participants with assurance were given to them regarding confidentiality. Weighing Machine (Camry Company) was used in this study with a standard measuring tape to measure height of the participants. The obtained data were analyzed using of SPSS version 16 for descriptive statistics. The study findings were presented in the form mean, percentages and tables.

RESULTS

Age ranges of housewives were from 25 years to 60 years; 45.16% in between 25-39 years, 51.61% in between 40-59 years and 3.22% were equal to and more than 60 years. BMI findings revealed that housewives were underweight (1.61%), normal (40.32%), overweight (6.45%) and obese (51.61%). 27.42% participants had meals daily less than 3 times, 6.45% more than 3 times whilst 66.13% had meals 3 times daily.

Table 1: Frequency of eating sweet dishes like mithai, halwa, etc. among participants (n=62)

Measure	Nos.	%
Once a day	6	9.68%
After every meal	1	1.61%
Weekly	31	50.00%
Monthly	14	22.58%
I don't eat sweet dishes	10	16.13%

Table 2: Snacking in between meals among participants (n=62)

Measure	Nos.	%
Nimkos	13	20.9%
Chips	18	29%
Samosa	26	41.9%
Pakora	19	30.64%
Other bakery items	18	29.03%
Nuggets	1	1.61%
Hot dog	0	0%
Biscuits	17	27.41%
I don't eat snacks in between my meals	23	37.09%

Table 3: Frequency of drinking carbonated drinks among participants (n=62)

Measure	Nos.	%
Daily	5	8.06%
Weekly	19	30.65%
Monthly	25	40.32%
I don't drink carbonated drinks	13	20.97%

Table 4: Frequency of eating junk food among participants (n= 62)

Measure	Nos.	%
Daily	0	0.00%
On alternate days	2	3.23%
Weekly	16	25.81%
Monthly	24	38.71%
Never	20	32.26%

Participants (61.29%) stated that they consumed red meat less than or equal to 3 times per week. Intake sweat dishes (contains high carbohydrate/sugar) was found high (table 1) among participants. Similarly, intake of snacks between meals and soft drinks were found elevated (table 2 and 3) including confirmation of intake of junk foods among participants (table 4)

Discussion

The prevalence of overweight and obesity has been increasing globally and inadequate and unhealthy dietary intake has been recognized as main cause of obesity and obesity related deaths. A closer look into dietary intake trends seems to be essential dimension in understanding the reasons which contribute to the rise in obesity frequency around the world. In this study, large percentages of housewives were obese (51.61%) and unhealthy dietary intake was observed among housewives. The majority of participants had meals 3 times per day and consumed sweat dishes, snacks between meals, carbonated/soft drinks and junk foods on regular basis. A cross-sectional study suggested that irregular meals habit was main reason of underweight women; 33.4% participants had breakfast and consumed more than one a day dairy such as yogurt, milk fruit/fruit juice whilst 61.1% obese group used had habit to have several types of food including one portion of fruit/ a cup fruit juice and revealed 6.9% of obese women had good dietary intake. Same authors found that a high level of intake of ice cream and carbonated drinks in underweight group and 24.1% of obese women group had milk or milk products with having fried and food items.¹⁰ Our study revealed that participants had red meat on regular basis. A systematic and meta-analysis findings concluded that there was a strong relationship between red meat or processed meat intake and risk of obesity and also higher BMI and waist circumference.¹² Our study indicated that participants had sweet dishes, snacks between meals, carbonated drinks and junk foods on regular interval; many studies supported these findings. Sweet dishes contain high amount of carbohydrate; although carbohydrate is the main source to provide energy in body but excessive amount of intake can thus contribute in weight gain and obesity.¹³ Junk food such as burgers and sugar-sweetened soft drinks intake on regular basis appeared to an association with larger risk of becoming obese or weight gains factor.¹⁴ There was a limitation of this study; a small sample size was chosen for this study due to lack of time. The findings of this study do offer us an insight for more elaborate studies in future regarding obesity among housewives, as well as for developing interventional strategies. In Pakistan, it is essential that researches should be conducted and the studies should be followed up with public health initiatives like awareness programs regarding physical fitness, nutrition and obesity.

CONCLUSION

The study findings revealed that obesity is a major problem among housewives with inadequate and unhealthy dietary intakes is common in this study population. The prevalence of overweight and obesity have been increased around the world; therefore national health policy makers need to look

into this matter more closely to draw clinical guidelines for patients and health care providers to manage the cases of overweight and obesity more effectively. Future studies need to explore various contributing factors of overweight and obesity by conducting interventional RCT study with genetics, cultural, environmental considerations.

REFERENCES

- 1 Mohamud WN, Musa K, Khir AS, Ismail AA, Ismail IS, Kadir KA, Kamaruddin NA, Yaacob NA, Mustafa N, Ali O, Isa SH and Bebakar WM. Prevalence of overweight and obesity among adult Malaysians: an update. *Asia Pac J Clin Nutr.* 2011;20 (1):35-41.
- 2 Navadeh S, Sajadi L, Mirzazadeh A, Asgari F, Haghazali M. Housewives obesity determinant factors in Iran; national survey - stepwise approach to surveillance. *Iran J Public Health.* 2011; 40(2):87-95. Epub 2011 Jun 30.
- 3 Ebbeling CB, Pawlak DB, Ludwig DS. Childhood obesity: public-health crisis, common sense cure. *Lancet*, 360 (2002), pp. 473-482
- 4 Hassan NE ,Wahba SA , El-Masry SA , Elhamid ERA, Boseila SAW, Ahmed NH and Ibrahim TS. Eating Habits and Lifestyles among a Sample of Obese Working Egyptian Women. *Open Access Maced J Med Sci.* 2015 Mar 15;3(1):12-
- 5 Prentice AM, Jebb SA. Beyond body mass index. *Obes Rev.* 2001 Aug; 2(3):141-7.
- 6 Min MU, Li-Fa XU,* Dong HU, Jing WU, and Ming-Jie BAI. Dietary Patterns and Overweight/Obesity: A Review Article. *Iran J Public Health.* 2017 Jul; 46(7): 869–876.
- 7 Winkvist A, Hultén B, Kim JL, Johansson I, Torén K, Brisman J, and Forslund HB. Dietary intake, leisure time activities and obesity among adolescents in Western Sweden: a cross-sectional stud. *Nutr J.* 2016; 15: 41.
- 8 Ramachandran A and Chamukuttan Snehalatha..Rising Burden of Obesity in Asia. *J Obes.* 2010; 2010: 868573.
- 9 Yoon KH, Lee JH, Kim JW, Cho JH, Choi YH, Ko SH, Zimmet P and Ho-Son HY. Epidemic obesity and type 2 diabetes in Asia. *Lancet.* 2006 Nov 11;368 (9548):1681-8.
- 10 Keun-Hee Chung, Kyung-Ok Shin, Jin-A Yoon, and Kyung Soon Choi. Study on the obesity and nutrition status of housewives in Seoul and Kyunggi area. *Nutr Res Pract.* 2011 Apr; 5(2): 140–149.
- 11 Ledoux TA, Hingle MD, Baranowski T. Relationship of fruit and vegetable intake with adiposity: a systematic review. *Obes Rev.* 2011 May;12(5):e143-50
- 12 Rouhani MH, Salehi-Abargouei A, Surkan PJ, Azadbakht L. Is there a relationship between red or processed meat intake and obesity? A systematic review and meta-analysis of observational studies. *Obes Rev.* 2014 Sep;15(9):740
- 13 van Dam RM, Seidell JC. Carbohydrate intake and obesity. *Eur J Clin Nutr.* 2007 Dec; 61Suppl 1:S75-99
- 14 Boggs DA, Rosenberg L, Coogan PF, Makambi KH, Adams-Campbell LL, Palmer JR. Restaurant foods, sugar-sweetened soft drinks, and obesity risk among young African American women. *Ethn Dis.* 2013 Autumn;23 (4):445-51.