

# KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING OBESITY AMONG PATIENTS, AT AGA KHAN UNIVERSITY HOSPITAL, KARACHI

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**Background:** Obesity is a major public health problem and responsible for significant morbidity and mortality among our patients. It is important to study the knowledge, attitude and practices with regard to obesity among patients, in order to devise interventional strategies. **Methods:** Patients visiting the out-patient clinics of Aga Khan University Hospital, Karachi, were included in the study. The interview was questionnaire-based and recorded the demographic profile of the patients and questions relevant to the objective of the study. The ethical requirements for the study were met. SPSS computer software was used for data management. A hundred patients were surveyed. **Results:** Women (55%) were more than men (45%), under 39 years (73%), married (55%), with graduate or more education (65%), in private service (44%) and housewives (19%). A substantial number of respondents (75%) understood the meaning of obesity and considered it a major health problem (90%). More respondents felt the need to reduce weight (52%), despite the fact that lesser number considered themselves to be overweight or obese (34%). A majority of the respondents did exercise (59%) but a minority did it more than five times a week (17%) and more than 30 minutes on each occasion (31%). A substantial proportion of the respondents stated their preference for oily food (34%), sweets (34%), fried food (40%), red meat (21%), fast food (37%), butter, cheese and cream (31%). **Conclusions:** We have found a significant level of understanding about obesity among our patients. Physical exercise and dietary measures to control body weight are lacking despite the desire to have appropriate body weight. There is a need and we strongly recommend patient education programs to control obesity.

**Keywords:** Obesity, Bodyweight, Physical exercise, Diet

## INTRODUCTION

Obesity is a growing problem due to the rapid adoption of a modernized lifestyle that results in increased carbohydrate and fat-rich dietary intake, reduced physical activity and extended life expectancy.<sup>1,2,3</sup>

Obesity predisposes individuals to potentially serious health problems. The prevalence of dyslipidaemia, hypertension and diabetes mellitus are significantly increased in overweight and obese groups.<sup>4</sup> Overweight and obesity accounts for a significant number of avoidable cases of cancers<sup>5</sup>. Concerns regarding body-image among those who are obese,<sup>6</sup> lead to low self-esteem and behavioral problems.

In Pakistan, social and environmental changes are occurring rapidly, resulting in lifestyles that incorporates the use of high energy density diets, and reduced physical activity.<sup>7</sup> Such changes in lifestyle are resulting in a higher prevalence of overweight and obese patients in the country.

It has been suggested that deficiencies exist with regard to knowledge, beliefs, attitudes, and behaviors in relation to weight control.<sup>8</sup> Such deficiencies could serve as barriers in the control of obesity among our patients. We therefore, established a need to study the knowledge, attitude and practice regarding obesity among patients.

## MATERIALS AND METHODS

Out-Patients visiting the Aga Khan University Hospital, Karachi were surveyed. The Aga Khan University Hospital is private facility offering primary, secondary and tertiary level services.

The interview was questionnaire-based and recorded the demographic profile of the patients in addition to the questions relevant to the objective of the study. Patients sitting in the waiting area were requested to participate, after the study objective was explained. Written informed and voluntary consent was taken and confidentiality assurance was provided to those who agreed to participate in the study. SPSS computer software was used for data management.

## RESULTS

A hundred patients were surveyed. Women (55%) were more than men (45%), under 39 years (73%), married (55%), with graduate or more education (65%), in private service (44%) and housewives (19%). (Table-1)

A substantial number of respondents (75%) understood the meaning of obesity and considered it a major health problem (90%). More respondents felt the need to reduce weight (52%), despite the fact that lesser number considered themselves to be overweight or obese (34%). A majority of the respondents did exercise (59%) but a minority did it more than five times a week (17%) and more than 30 minutes on each occasion (31%). A substantial proportion of the respondents stated their preference for oily food(34%), sweets(34%), fried food(40%), red meat(21%), fast food(37%), butter, cheese and cream(31%)( table-2).

Table-1: Demographic profile of the study population (n=100)

PARAMETER	PERCENTAGE
<b><u>SEX:</u></b>	
Males	45
Females	55
<b><u>Mean Age (In years)</u></b>	
<39	73
40-59	21
>60	06
<b><u>Marital Status:</u></b>	
Married	55
Single	44
Divorced	01
<b><u>Educational Status:</u></b>	
Illiterate	02
Middle	01

Matriculation	17
Intermediate	15
Graduate	51
Post-graduate	14
<b><u>Occupational Status:</u></b>	
Private service	44
Government service	06
Laborers	03
Housewives	19
Unemployed	05
Retired	23

Patient responses on dietary measures to reduce body weight included “no oil in the diet”, “eat more vegetables”, “eat less sweets”, “eat more fruits” and “eat less rice”, in 68%, 59%, 54%, 50%, and 28% respectively (table-3).

Thirty seven percent respondents were overweight or obese while twenty one percent had a high Waist-Hip ratio (table-4).

Body Mass Index (BMI) and Waist-Hip ratios of the respondents are listed in table-4.

## DISCUSSION

The majority of patients were young, married women, well educated and housewives or in private service. The study population is therefore not representative of the general population. However, the findings of the study do offer us an insight for more elaborate studies in future as well as for developing interventional strategies. It is gratifying to note that a majority of the respondents not only understand the meaning of obesity, but also consider it a major health problem.

Table-2: Obesity related knowledge, attitude & practice among patients (n=100)

Knowledge, attitude & practice	Yes	No	Don't know
	%	%	%
Understand meaning of “Obesity”	75	25	--
Consider oneself Overweight or obese	34	66	--
Feel need to lose weight	52	48	--

Obesity is a serious health problem?	90	02	08
Do you Exercise?	59	41	--
Exercise >5 times/week	17	83	--
Exercise > 30 minutes each time	31	69	--
<i>Preference for:</i>	-	-	-
Oily food	34	66	--
Sweets	34	66	--
Fried food	40	60	--
Red meat	21	79	--
Fast food	37	63	--
Butter, cheese & cream	31	69	--

**Table – 3: Patient perception on dietary measures to reduce body weight( n=100 )**

Measure	Nos	Measure	Nos
No oil in the diet	68	Eat more vegetable	59
Eat less sweets	54	Eat more fruits	50
Eat less rice	28	Eat No fried foods	26
Eat less meat	24	Avoid soft drinks	23
Avoid fruit juices	22	Drink lots of water	21
Eat less food	20	Eat less potatoes	17
Eat boiled food	12	Don't eat butter	11
Eat wheat bread	08	Eat less eggs	07
Don't eat ice creams	05	Avoid spicy foods	05
Eat beans	04	Drink tea	04

Total responses= 468

**Table – 4: Body mass index (BMI) & waist hip ratio ( n=100 )**

Measurement	Number (Percent)	
	Women	Men
<b>Body Mass Index (BMI)</b>		
<20 (Underweight)	15	09
<25 (Normal weight)	19	20
25-30 (Overweight)	15	15

30-35 (Obese)	06	--
>35 (Severely Obese)	--	01
<b>Waist hip ratio*</b>		
Normal	36	43
High	19	02

\*High Waist hip ratio (if > 0.85 for women & 1.0 for men)

It is again gratifying to note that more respondents feel the need to reduce weight (52%), despite the fact that lesser number consider themselves to be overweight or obese(34%). There is evidence to suggest that those wishing not to be obese, follow a more healthier lifestyle<sup>9</sup>, indicating an underlying motivation to control body weight.

A majority of the respondents exercise (59%) but a minority does it more than five times a week (17%) and more than 30 minutes on each occasion (31%). It has been shown that reduced levels of physical activity play a predominant role in the development of obesity<sup>10</sup>.

There is a need not only to make public understand why physical exercise is required but also to educate them in the need to exercise for appropriate duration and at the optimum frequency. A substantial proportion of the respondents have stated their preference for oily food, sweets, fried food, red meat, fast food, butter, cheese and cream.

Such eating preferences go a long way in the development and propagation of overweight and obesity among patients. There is evidence to suggest that reductions in the intakes of fat and sugars lead to body weight control and prevents overweight and obesity<sup>11</sup>.

Therefore the role of appropriate dietary measures to control bodyweight is extremely important. It is heartening to note that the majority of the respondents believe that a diet to reduce body weight should have no oils, more vegetables and fruits, less sweets, and less of rice and fried foods. If such belief could be changed into practice than body weight control for the masses will be an achievable target.

## CONCLUSIONS

We have better understanding about obesity and its importance as a health problem among our patients. Physical exercise and dietary measures to control body weight are lacking despite the desire to have appropriate body weight. There is a need and we strongly recommend patient education programs for the control of obesity among our patients.

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