AWARENESS, PERCEPTION AND PREVENTION ABOUT CHRONIC OBESITY AMONG PEOPLE OF EITHER GENDER IN INDIA

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ABSTRACT

Developing countries experienced more dramatic rise in the prevalence of obesity in recent decades. The problems of obesity are higher risk of high blood pressure, heart diseases, type-2 diabetes and other diseases. Effective implementation of programs is required before obesity becomes a more widespread epidemic.

KEYWORDS: Lifestyle, Obesity, Chronic Kidney disease, co- morbidities.

INTRODUCTION

Obesity is a pathological condition in which excess body fat accumulated, leading adverse effects on health and life expectancy.[1] Pathological obesity is associated with several other diseases like heart disease, type 2 diabetes, breathing difficulties during sleep, osteoarthritis.[2]

The World Health Organization (WHO) defines over-weight and obesity as abnormal or excessive fat accumulation that presents a risk to health.[3]

Body Mass Index (BMI) measuring is an important to see whether a person's weight or body fat is considered a healthy weight for a given height. Due to obesity few health complications may develop for example fatigue, shortness of breath, back and joint pain, high levels of cholesterol or triglycerides, cardiovascular diseases, Type 2 diabetes, etc.

Obesity is one of the greatest challenges that current societies face.[4] It increases the risk of developing major risk factors for Chronic Kidney disease (CKD).[5]

MATERIALS AND METHODS

The cross-sectional study was conducted among general population in India of either gender. A pre-tested and pre-validated questionnaire via Google form was administered to the adults 18 years and above participants who agreed to take part in the study. The statistical calculation was adopted from Microsoft.

RESULTS AND DISCUSSION

Table 1: Age of the participants.

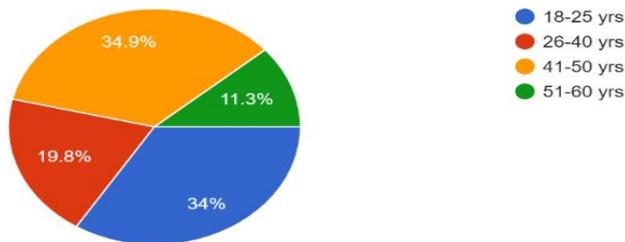| Age	No. of participants	Percentage (on %)
18-25 years	36	34%
26-40 years	21	19.8%
41-50 years	37	34.9%
51-60 years	12	11.3%

What is your age?
106 responses

Fig. 1: pie chart depicting relative distribution of participants in different ages.

Table 2: Gender distribution of participants.

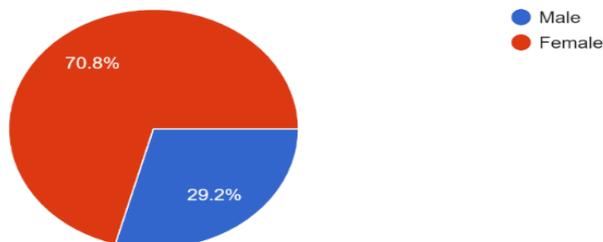| Gender	No. of participants	Percentage (in %)
Male	31	29.2%
Female	75	70.8%

What is your gender?
106 responses

Fig.2: pie chart depicting relative distribution of participants of different genders.

Table 3: Residence of participants.

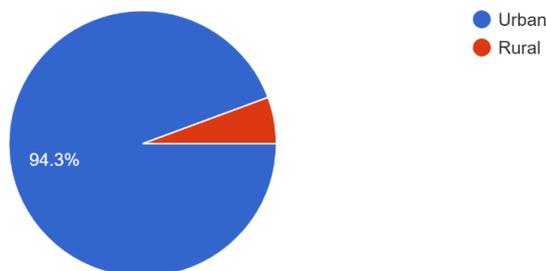| Residence	No. of participants	Percentage (in %)
Urban	100	94.3%
Rural	6	5.7%

What is your residence?
106 responses

Fig 3: pie chart depicting the relative distribution of participants of different residences.

Table 4: Occupation of participants.

Occupation	No. of participants	Percentage (in %)
Student	31	29.2%
Service	37	34.9%
Housewife	16	15.1%
Retired	1	1%
Other	21	19.8%

What is your occupation?
106 responses

- Student
- Service
- Housewife
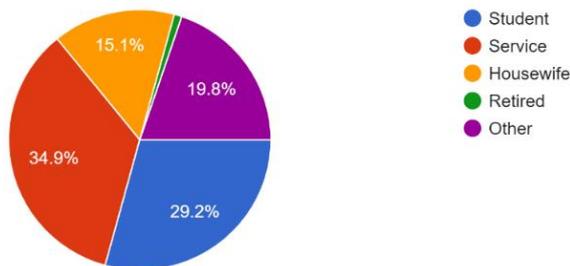- Retired
- Other

15.1%
19.8%
34.9%
29.2%

Fig. 4: pie chart depicting the relative distribution of participants of different occupations.

Table 5: Response of participants to whether they are aware about obesity.

Response	No. of participants	Percentage (in %)
Yes	100	94.3%
No	6	5.7%

Are you aware about obesity?
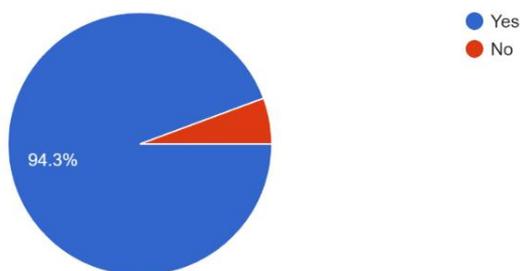106 responses

- Yes
- No

94.3%

Fig. 5: pie chart depicting the response of participants to whether they are aware about obesity.

Table 6: Response of participants to whether they are aware that obesity is on a high rise

Response	No. of participants	Percentage (in %)
Yes	103	97.2%
No	3	2.8%

Do you agree that obesity is on a high rise?
106 responses
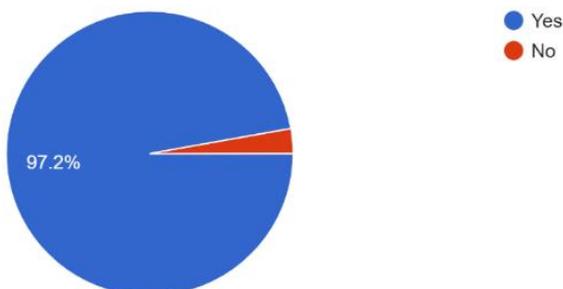
- Yes
- No

97.2%

Fig. 6: pie chart depicting the response of participants to whether they are aware that obesity is on a high rise.

Table 7: Response of participants to whether their family member is suffering from chronic obesity.

Response	No. of participants	Percentage (in %)
Yes	19	17.9%
No	87	82.1%

In your family is any member suffering from chronic obesity?
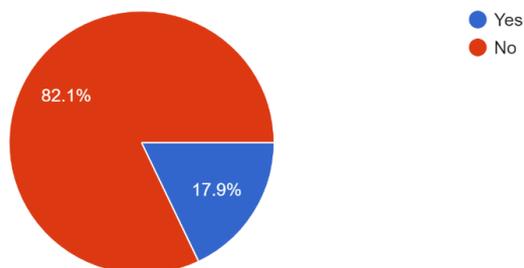106 responses

Fig.7: pie chart depicting the response of participants to whether their family member is suffering from chronic obesity.

Table 8: Response of the participants to whether they smoke.

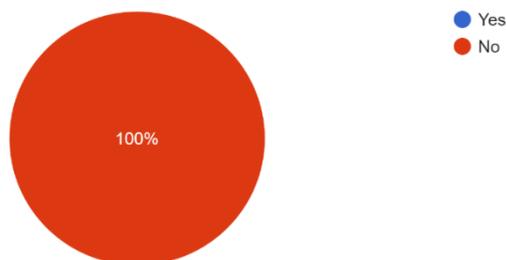| Response	No. of participants	Percentage (in %)
Yes	0	0%
No	106	100%

Do you smoke?
106 responses

Fig. 8: pie chart depicting the relative distribution of participants who smoke.

Table 9: Response of the participants to the type of food they eat.

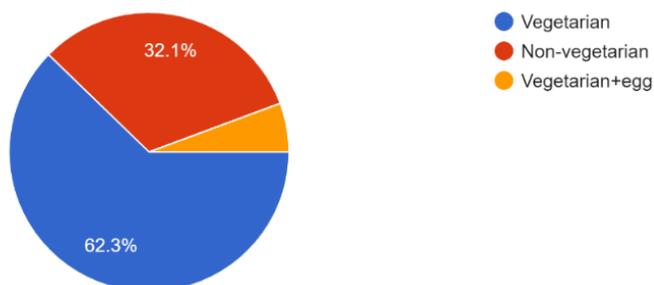| Response	No. of participants	Percentage (in %)
Vegetarian	66	62.3%
Non-vegetarian	34	32.1%
Vegetarian+egg	6	5.6%

Are you ?
106 responses

Fig. 9: pie chart depicting the relative distribution of the participants about the type of food they eat.

Table 10: Response to frequency of eating non-vegetarian food.

Response	No. of participants	Percentage (in %)
Every-day	0	0%
3 days/week	25	73.5%
Other	9	26.5%

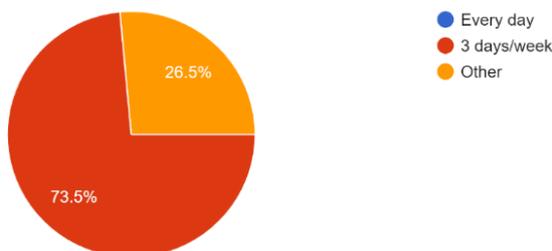If you are a non-vegetarian,you eat non-vegetarian food?
34 responses

Fig.10: pie chart depicting the relative distribution of participants about the frequency of eating non-vegetarian food.

Table 11: Response of participants to how frequently they eat food from restaurant.

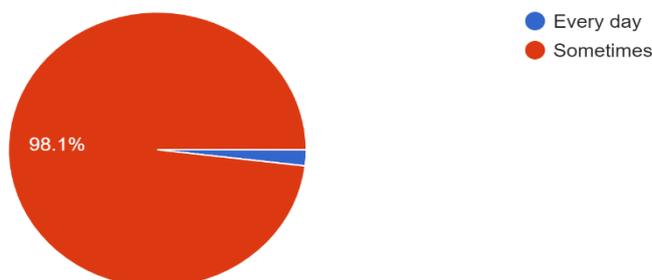| Response	No. of participants	Percentage (in %)
Every day	2	1.9%
Sometimes	104	98.1%

Do you eat food from restaurant-?
106 responses

Fig.11: pie chart depicting the response of participants to how frequently they eat food from restaurant.

Table 12: Response of participants to whether they eat sweets/ice-creams/chocolates.

Response	No. of participants	Percentage (in %)
Yes	91	85.8%
No	15	14.2%

Do you eat sweets/ice-creams/chocolates?
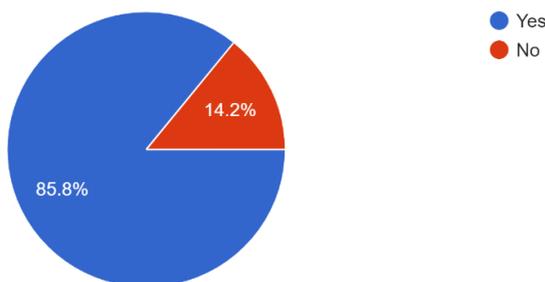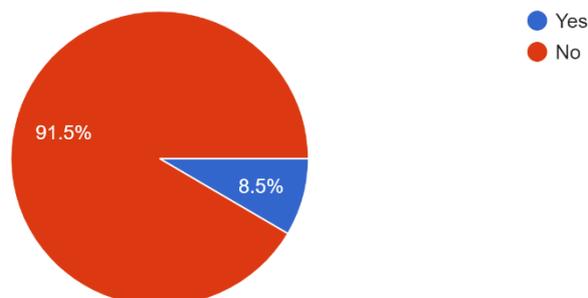106 responses

Fig. 12: pie chart depicting the relative distribution of participants who eat sweets/ice-creams/chocolates.

Table 13: Response of participants to whether they consume alcohol.

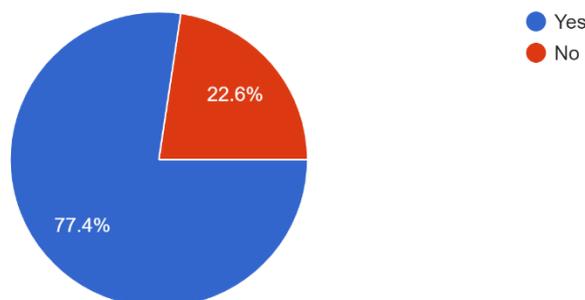| Response	No. of participants	Percentage (in %)
Yes	9	8.5%
No	97	91.5%

Do you consume alcohol?

106 responses

Fig.13: pie chart depicting the relative distribution of participants who consume alcohol.

Table 14: Response of participants to whether they exercise.

Response	No. of participants	Percentage (in %)
Yes	82	77.4%
No	24	22.6%

Do you exercise?

106 responses

Fig. 14: pie chart depicting the relative distribution of participants who exercise.

Table 15: Response of participants to how frequently they exercise.

Frequency of exercise	No. of participants	Percentage (in %)
Every-day	18	21.9%
5 days/week	37	45.1%
Once in a while	19	23.2%
Other	8	9.8%

Table 16: Awareness of causes of chronic obesity among participants.

Causes of chronic obesity	No. of participants	Percentage (in %)
Eating mindlessly	78	73.6%
Eating to relieve stress	61	57.5%
Having frequent beverages	42	39.6%
Sedentary lifestyle and sitting for long hours	84	79.2%
Less sleep hours	55	51.9%
Attending functions frequently	13	12.3%

Are you aware of the causes of chronic obesity mentioned below?[You can select more than one options]
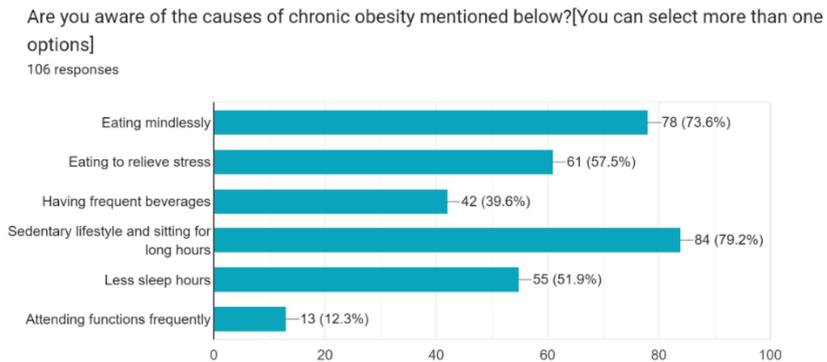106 responses

Fig. 15: graph depicting the awareness of different causes of chronic obesity among participants.

Table 17: Response of participants to whether they are aware about the consequences of chronic obesity.

Response	No. of participants	Percentage (in %)
Yes	82	77.4%
No	24	22.6%

Do you know about the consequences of chronic obesity?
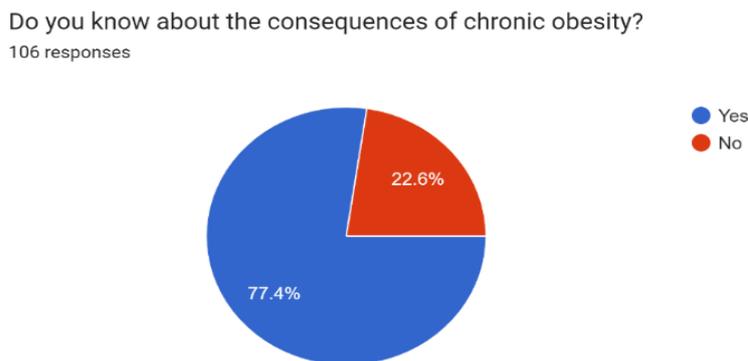106 responses

Fig.16: pie chart depicting the responses to whether the participants are aware of the consequences of chronic obesity.

Table 18: Awareness about the few diseases caused by chronic obesity among participants.

Diseases caused by chronic obesity	No. of participants	Percentage (in %)
Cardiovascular diseases (mainly heart diseases and stroke)	91	92.9%
Type 2 diabetes	77	78.6%
Arthritis	29	29.6%
cancers	19	19.4%

According to you,what are the consequences of chronic obesity?[You can select more than one option]
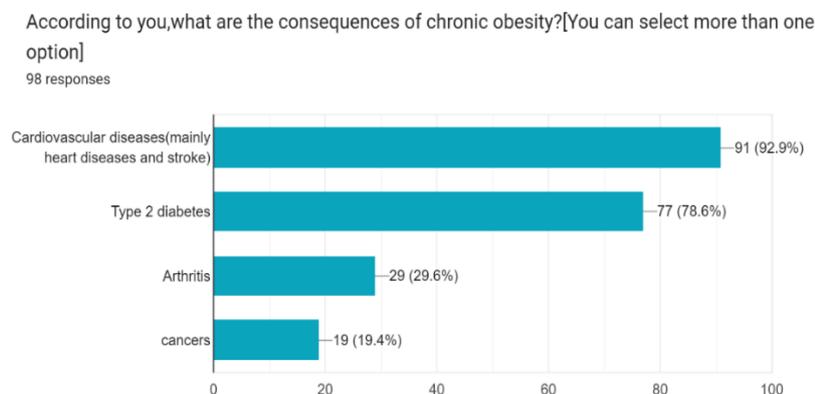98 responses

Fig.17: graph depicting the awareness of few diseases caused by chronic obesity among participants.

Total 106 participants of both male and female agreed to take part in this study. Among them 29.2% were male and 70.8% were female. Regarding the age group 34% were 18-25 years,19.8% were 26-40 years,34.9% were 41-50 years and 11.3% were from 51-60 years age group. About the awareness regarding obesity 94.3% answered yes, 97.2% participants agreed regarding rise of chronic obesity. As per Tahir Omer[6] the prevalence of obesity is drastically rising globally.

17.9% of the participants' family members suffering from chronic obesity. As per Vidhu V. Thaker[7] genetic factors influence and play a large role in the development of obesity in children, adolescents and young adults. Genetic predisposition is an essential component in the genesis of obesity.[8] Obesity is affected by varieties of factors where smoking is one of them.[9]

Among the participants 62.3% were vegetarian, 32.1% non-vegetarian.

Majority of the participants reported eating food from restaurant. Association between number of meals per day, eating fatty food and fast food with obesity.[10]

Among the participants 8.5% reported that they consume alcohol. Alcohol consumption is widely known to be associated with obesity.[11] 77.4% of the respondents reported that they do exercise .There is a positive relationship between exercise volume and weight loss outcomes.[12] Patients with obesity are at major risk for developing a range of comorbid conditions including cardiovascular disease ,gastro-intestinal disorders, type 2 diabetes joint and muscular disorders ,etc.[13]People who are obese have increased morbidity, mortality and reduced life expectancy.[14]

CONCLUSION

The global sharp rise in the prevalence of obesity has made it a critical public health issue. Managing obesity can be challenging but is achievable through restricted diet, physical activity, lifestyle modification, pharmacotherapy and sometimes surgical interventions.

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