

# Assessment of Knowledge, Attitude, Practice on Obesity and Associated Disorders among Young Adults

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## ABSTRACT

**Introduction:** Overweight and obesity are quickly rising in developing countries like India. **Aim:** This study was aimed at to evaluate and compare the knowledge, attitude and practices regarding Obesity among medical and non medical college students. **Material and Method:** We examined Knowledge, Attitude and Practice (KAP) on obesity among 200 medical and non-medical college students. KAP's were assessed and statistical analyses were done. **Results:** We found good and fair knowledge among medical students as compared to non medical student's population. This study also showed a high percentage poor knowledge in non medical student's population. A poor practice was also observed in overall student's population. The study also demonstrated a high level of knowledge practice gap among medical and non medical students. **Conclusion:** Not only enhanced knowledge regarding obesity is enough for prevention of this particular disorder but also development of perfect attitude and proper practice through life-style modification is required.

**Keywords:** Obesity, Young Adults, Knowledge, Attitude, Practice etc.

## INTRODUCTION

Prevention through development of self knowledge, awareness and practices has an important role in identifying and managing obesity and associated disorders. The rising level of obesity has been called the most urgent challenge to public health for the 21<sup>st</sup> century and obesity is increasing at an alarming rate throughout the world<sup>1,2</sup>. The World Health Organization has recognized the problem of obesity. The organization called for urgent action to prevent the growing epidemic of obesity, which now affects developing and developed countries the same<sup>3,4</sup>. Today it is estimated that there are more than 300 million obese individuals in the world<sup>2</sup>.

In general, obesity is associated with a greater risk of disability like type 2 diabetes mellitus, dyslipidemia, cardiovascular diseases such as hypertension, stroke and coronary heart disease, gall bladder disease, certain cancers and nonfatal conditions such as gout, osteoarthritis and infertility. Obesity also carries serious implications for mental health, mainly due to societal discrimination against fatness<sup>4-6</sup>. In India the incidence of obesity continues to increase and prevalence among adolescents varies between 10% and 30%. Obese individuals have higher rates of mortality and morbidity compared to non obese individuals<sup>7, 8</sup>. India, the second most populous country in the world currently experiencing rapid epidemiological transition. It is now evident that previously dominant under nutrition due to poverty is being rapidly replaced by obesity<sup>9</sup>. Level of knowledge regarding obesity can only help out to detect the disease condition but perfect attitude and practice can prevent the disorder as well as diminish the associate complications. As per national family health

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survey in 2007 it is reported that prevalence of obesity is 6.5% and 7.6% in males and females respectively in Chhattisgarh. However, to date, no reports on the prevalence and Knowledge, Attitude and Practice study regarding obesity and associated disorders have been mentioned among the students as representative of young population in Chhattisgarh. Here we first time present the prevalence of generalized and abdominal obesity and associated disorders and knowledge, attitude and practice among this young student population of central part of India.

## MATERIAL AND METHOD

This was a cross-sectional study done in the Dept. of Physiology, Govt. Medical College, Rajnandgaon, Chhattisgarh. Two hundred College Students were included for this study purpose. Among them 100 students were from medical college and rest from nonmedical colleges. Physically and mentally fit both Males and Females, age group of 17 to 25 years were included. Subjects suffering from hypothyroidism and any other type of metabolic/endocrine disorder were excluded.

### Ethical consideration:

This study was approved by the Ethics Committee of Government Medical College, Rajnandgaon. The details of the study were explained to the subjects and written informed consent was obtained from all subjects.

### Data collection method:

Demographic Characteristics and Knowledge, attitude, practice regarding obesity and related risk factor were reported through Questionnaire method.

### Questionnaire design:

A questionnaire was designed by researchers and validated by Clinicians. To check the questionnaire's reliability, ten subjects completed the questionnaire two times with a 1-week interval. The questionnaire had four

parts including demographic information, knowledge (12 questions), attitude (8 questions), and practice (10 questions). In case of each KAP form, the correct answers were counted and the scores were categorized in three scales of 0 to 5 (Poor), 6 to 10 (Fair) and 11 to 20 (Good).

Score	Category
0 to 5	Poor
6 to 10	Fair
11 to 20	Good

**Statistical analysis:** Statistical analyses were performed using SPSS statistical package (version 16.0). Chi-square test was used to compare proportions between two groups.

## RESULTS

### Demographic Characteristics

Out of 200 subjects 100 Medical students (45 males and 55 females), 100 non medical students (32 males and 68 females) had completed records. The mean  $\pm$  SD for age was for medical students (males  $21.73 \pm 2.19$  years and females  $20.6 \pm 1.27$ ) The mean  $\pm$  SD for age was for non medical students (males  $21.34 \pm 1.38$  years and females  $19.97 \pm 1.73$  years). Overall, there was a preponderance of Hindus (91%), followed by Sikhs (3%), Muslims (1%) and Christians (3%) and others (2%).

### Knowledge Attitude and Practices

To evaluate the KAP, the correct answers were counted in each KAP form, and the scores were categorized in three scales of 0 to 5 (Poor), 6 to 10 (Fair) and 11 to 20 (Good). (Table. 1). Table 2 has shown, Knowledge practice gap among medical and non medical students. The result shows ( $P(\chi^2 > 0.502) = 0.4784$ ) **statistically insignificant. There is no independent association between Knowledge and Practice.**

**Table 1: Knowledge, Attitude and practices of medical and non medical students**

Category	Knowledge (%)		Attitude (%)		Practices (%)	
	Medical Students	Non-Medical Students	Medical Students	Non-Medical Students	Medical Students	Non-Medical Students
Good	69	12	77	23	4	2
Fair	31	29	23	57	52	36
Poor	0	19	0	20	44	62

**Table 2: Knowledge-Practice gap among Medical and Non-Medical Students**

K-P Gap	Medical Students (%)	Non-Medical Students (%)	Total (%)
Yes	44	49	93
	<b>46.5</b>	<b>46.5</b>	
No	56	51	107
	<b>53.5</b>	<b>53.5</b>	

$\chi^2 = 0.502$ ,  $df = 1$ ,  $\chi^2/df = 0.50$ ,  $P(\chi^2 > 0.502) = 0.4784$  insignificant. Expected values are displayed in *italics*.

## DISCUSSION

Obesity is a troublesome in developed as well as developing countries. Obesity is the epidemic of the twenty first century. In India the incidence of obesity continues to increase and prevalence among adolescents varies between 10% and 30% <sup>7</sup>. We first time presented obesity associated knowledge, attitude and practice among this young student population of central part of India. We found good and fair knowledge among medical students as compared to non medical student's population. This study also showed a high percentage poor knowledge in non medical student's population. A poor practice was also observed in overall student's population. The study also demonstrated a high level of knowledge practice gap among medical and non medical students. Though 69% medical students have good knowledge about obesity but only 4% medical students have good practice. This incident indicates that knowledge should be utilized by proper practice through life style modification. A KAP study done in south India also found that in spite of good or fair knowledge the attitudes and practices of the study participants were relatively poor <sup>10</sup>.

This indicates that the large number of young population may be at a high risk of obesity and associated disorders in future. The present study reported high level of K-P gap agreed with several studies that have shown that people's knowledge, attitude and practices about obesity is incomplete and thus expresses the need for clinical awareness and supplementary training in obesity prevention. <sup>1, 10-16</sup>

## CONCLUSION

Improved knowledge regarding obesity and about the cause of this disorder are not enough to defeat against the disease. For prevention of obesity in young adult require a perfect attitude toward obesity and good practice which can be develop by inspiration, awareness and stressing the importance of lifestyle modifications. Then only self-drive will build up toward proper attitude and practice to prevent obesity from the very beginning.

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**Ethical Clearance:** Taken

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