A study on prevalence of obesity

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Abstract
Obesity has become a major health problem in worldwide including India. Obesity is a state of excess adipose tissues mass it is one of the most common medical disorders.

Aim of the study: To assess the prevalence of central and general obesity in adults.

Materials and Methods: In our study we have examined 770 subjects. Out of these 770 minimum age in 20 years and minimum age is 60 years. This study is conducted during the year June 2016 and May 2017. We have measured the height and weight according to the WHO guidelines by trained paramedical persons. BMI is calculated accordingly.

Results: Overweight, BMI is between 23 – 24.9 Kg/m^2 is seen in 14.5% of subjects. Obesity is seen in 2.8%. Subjects according to our study obesity are more in female than males. Prevalence of obesity is maximum in 40 – 50 years age group (48.5%) and minimum in 20 – 30 years age group (8.5%). Based on BMI out of 770 subjects 518 subjects are having normal BMI, 118 subjects were having overweight and 19 subjects are obese.

Conclusion: The prevalence of overweight and obesity is slowly increasing in India especially is in young adults because of urbanization, Dietary factors, Watching TV, Using smartphones, so there is need to be intensive by social activists parents, teachers, NGO and private agencies and govt. agencies to increase the awareness programs and implement different activities to decreases the prevalence of obesity.

Keywords: Overweight, obesity, BMI, complications

Introduction
Obesity in defined as excess adipose tissue mass. Calculated in BMI (Wt/Ht^2) in Kg/M^2. Excess body fat can also measure by double energy X-ray absorption meters, waist circumference etc. BMI of 30 is most commonly used as threshold for obesity is both men and women [1].

Extreme obesity BMI>40 has also increased and affects 4.7% of population.
Adipose tissues are composed of the lipid storing adipose cell and adipose mess increases by enlargement of adipose cells through lipid deposition [2].
The complications of obesity includes diabetes mellitus, hypertension, coronary artery obsesses, osteoarthritic and metabolic syndrome, increasing prevalence of obesity in due urbanization, Sedentary life style, decreased physical activity by watching TV’s, using smartphones, irregular eating habits etc [3].

Materials and methods
In our study we have examined 770 subjects with the age group between 20 years and 60 years both males and females. We have calculate the height and weight by trained persons according to WHO guidelines we have enquired about increase habits, dietary habits, sleep pattern, addictions like smoking, alcoholism and occupational details.
Aim of the study: to access the obesity in adults and to educate them how to overcome the problem.

Results
Results shown in percentage of adults with BMI, with specification ranges are – normal BMI under 24.9; over wt. BMI 25-29.9; obesity BMI of 304, extreme obesity. According to our study (67.27%). Subjects had BMI<24.9 which is considered as normal weight and 118 subjects were having BMI between 25-29.9 that is over weight (15.32%) and 19 were obese BMI in more than 30 (2.46%)
Age incidence
Depending on age maximum prevalence of obesity is seen in 40-50 years age group 48% in males 36% in females minimum percentage of obesity in minimum age group is 20-30yrs in males. 9.8% in females 8.5%.

<table>
<thead>
<tr>
<th>Age</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-50 years</td>
<td>48%</td>
<td>36%</td>
</tr>
<tr>
<td>20-30 years</td>
<td>9.80%</td>
<td>8.50%</td>
</tr>
</tbody>
</table>

**Age Distribution**

<table>
<thead>
<tr>
<th>Classification Based on BMI</th>
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</thead>
<tbody>
<tr>
<td><strong>BMI classification</strong></td>
</tr>
<tr>
<td>Pre-Obese</td>
</tr>
<tr>
<td>Over weight</td>
</tr>
<tr>
<td>Obese</td>
</tr>
</tbody>
</table>

**Discussion**
Obesity in one of to most important public health problem in world wide. According WHO study one sin adult in obese. According to study conducted by WHO 2.75 million deaths occurs due to obesity every year worldwide. Discuss like diabetes metabolic, hypertension coronary artery disease, dyslipidemias are associated with obesity [4, 5, 6] several studies across India shows, there is increase prevalence of obesity in India [8]. Obesity is classified as of general obesity and central obesity. Obesity most commonly measure by BMI (Wt/Ht²) (Kg/M²). BMI correlated with body fats. Adipose tissue is composed of lipid storing adipose cell. And adipose mass increases by enlargement of adipose cell through lipid deposition. Body fat can also be measure by waist circumference skin fold thickness etc. India having 125 crores population and 2nd most highest population after china several studies from different parts of India showed an increased prevalence of obesity. Most of these studies have been from urban India. These different studies of obesity have been followed several methods and until now, there has been no nationality approved study till date on the prevalence of obesity in India.

**Conclusion**
The prevalence of overweight and obesity in slowly increasing in India, may be due increased urbanization, sedentary life style, irregular food habits, economic burden will be more on the country if the prevalence is increases continually. So there is need for intervention of government agencies and NGO’s to educate the students, teachers, different sections of public to decrease the prevalence of obesity.

**References**
3. Bason RB. Telling pts. They are one weight or obese an insult. r. ricItarc, nter. ent;cn kr. 28:171(4):321.