Abstract.
Obesity is a complex medical condition characterized by an excessive accumulation of body fat, leading to adverse health outcomes. Influenced by genetic, environmental, and lifestyle factors, obesity has become a global epidemic with significant implications for physical and mental well-being. This abstract provides a brief overview of the causes, consequences, and public health challenges associated with obesity, emphasizing the importance of multifaceted interventions to address this pervasive health issue. In a world where sedentary lifestyles and unhealthy dietary habits have become the norm, obesity has emerged as a pressing global health concern. This article delves into the multifaceted issue of obesity, exploring its roots in genetics, environmental influences, and lifestyle choices. Beyond its impact on physical health, we unravel the intricate web of consequences, from increased risk of chronic diseases to the profound effects on mental well-being. As we navigate through the complexities of obesity, we seek to shed light on effective strategies for prevention and intervention, fostering a broader understanding of this weighty challenge that affects millions worldwide.
MEDECINE AND PHARMACY

Keywords:
Adiposity
Body Mass Index (BMI)
Overweight
Morbid obesity
Metabolic syndrome
Sedentary lifestyle
Dietary habits
Physical activity
Genetics
Public health
Childhood obesity
Health disparities
Obesity prevention
Bariatric surgery
Obesity-related diseases
“Every body is unique; let’s focus on health and well-being instead of conforming to societal ideals.”

**Methodology:**
In this article, we are going to use a comprehensive review and synthesis of existing literature on obesity, drawing from peer-reviewed studies, medical databases, and reputable sources.

The analysis encompasses diverse aspects of obesity, including its etiology, genetic factors, environmental influences, and the effectiveness of various interventions. Additionally, we examine epidemiological data, clinical trials, and longitudinal studies to provide a nuanced understanding of the evolving landscape of obesity.

**How diff. Org. Look OBESITY:**
- Dietary imbalance and overnutrition may lead to obesity. Obesity is defined as an excess of adipose tissue that imparts health risk; a body weight of 20% excess over ideal weight for age, sex, and height is considered a health risk.

The most widely used method to gauge obesity is body mass index (BMI) which is equal to weight in kg/height in m$^2$.
- Obesity is generally classified as a BMI equal to or greater than 30.
- These organizations use BMI thresholds to categorize individuals as underweight, normal weight, overweight, or obese.

**ETIOLOGY:**
Obesity results when caloric intake exceeds utilization. The imbalance of these two components can occur in the following situations:
1. Inadequate pushing of oneself away from the dining table causing overeating.
2. Insufficient pushing of oneself out of the chair leading to inactivity and sedentary lifestyle.
3. Genetic predisposition to develop obesity.
4. Diets largely derived from carbohydrates and fats than protein-rich diet.
5. Secondary obesity may result following a number of underlying diseases such as hypothyroidism, Cushing’s
disease, Insulinoma and hypothalamic disorders.

**SEQUELAE OF OBESITY**
Marked obesity is a serious health hazard and may predispose to a number of clinical disorders and pathological changes.

**Effects of Obesity:**
After a study on significant obese individuals we find out these disorders:
- Hyperinsulinemia
- Type 2 diabetes mellitus
- Hypertension
- Hyperlipoproteinemia
- Atherosclerosis
- Cancer

**How obesity is affecting individuals as well as Society:**
- Health Consequences
- Reduced Quality of Life
- Economic Impact
- Public Health Challenge
- Social Stigma
- Childhood Obesity
- Environmental Impact

**Measurement of Obesity:**
Obesity is commonly measured using the Body Mass Index (BMI), which is a ratio of an individual’s weight to the square of their height. The formula for BMI is:

Here’s how BMI categories are generally interpreted:

### Imperial System:

\[
\text{BMI} = \frac{703 \times \text{Weight (in pounds)}}{\text{Height}^2 \text{ (in inches)}}
\]

### Metric System:

\[
\text{BMI} = \frac{\text{Weight (in kilograms)}}{\text{Height}^2 \text{ (in meters)}}
\]
BMI Categories

| Less than 18.5 | Underweight |
| 18.5–24.9 | Normal wt. |
| 25–29.9 | Overweight |
| 30–34.9 | Obesity (Class 1) |
| 35–39.9 | Obesity (Class 2) |
| 40 or greater | Obesity (Class 3) |

Results:

<table>
<thead>
<tr>
<th>BMI Category</th>
<th>All (Men and Women)</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight</td>
<td>30.7</td>
<td>34.1</td>
<td>27.5</td>
</tr>
<tr>
<td>Obesity (including severe obesity)</td>
<td>42.4</td>
<td>43.0</td>
<td>41.9</td>
</tr>
<tr>
<td>Severe obesity</td>
<td>9.2</td>
<td>6.9</td>
<td>11.5</td>
</tr>
</tbody>
</table>

As shown in the above table

- Nearly 1 in 3 adults (30.7%) are overweight.
- More than 1 in 3 men (34.1%) and more than 1 in 4 women (27.5%) are overweight.
- More than 2 in 5 adults (42.4%) have obesity (including severe obesity).
- About 1 in 11 adults (9.2%) have severe obesity.
- The percentage of men who are overweight (34.1%) is higher than the percentage of women who are overweight (27.5%).
- The percentage of women who have severe obesity (11.5%) is higher than the percentage of men who have severe obesity (6.9%).
Risk Factors:
- GENETIC FACTORS
- POOR DIET
- LACK OF PHYSICAL ACTIVITY
- SEDENTARY LIFESTYLE
- HORMONAL IMBALANCES
- CERTAIN MEDICATIONS
- INADEQUATE SLEEP and ENVIRONMENTAL INFLUENCES.

The five most common disorder that obesity cause in day today life are
1) Diabetes
2) Heart diseases
3) Fatty liver
4) High cholesterol
5) Stroke

DESIGN
- In the survey we conducted around 160 people that includes students adults male and females both participated which helped me to complete this survey properly.
- In this survey the main focus was on the young person who get obesity problems.

<table>
<thead>
<tr>
<th>Age Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
</tr>
<tr>
<td>19-23</td>
</tr>
<tr>
<td>24-35</td>
</tr>
<tr>
<td>Above 35</td>
</tr>
</tbody>
</table>
MEDICINE AND PHARMACY

Has we know that every age have their own disorders their functions and their distributions now mainly we will discuss one by one of the disorders of obesity diagnosis of their respective ages.

**Diagnosis**

After total sample of 160 persons obesity problems are with 73 persons have following disorders.

1) Obesity problems in age between 19 to 23 are about 23 members (31.5%)

<table>
<thead>
<tr>
<th>DISEASES</th>
<th>AFFECTED PERSON’S</th>
<th>%AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td>Heart diseases</td>
<td>5</td>
<td>21.7%</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>9</td>
<td>39.1%</td>
</tr>
<tr>
<td>Fatty liver</td>
<td>2</td>
<td>8.6%</td>
</tr>
<tr>
<td>Stroke</td>
<td>4</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

2) Obesity problems in age between 24 to 35 about 31 members (43%) are affected due to obesity and cause this diseases.

<table>
<thead>
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<th>DISEASES</th>
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<td>43%</td>
</tr>
<tr>
<td>Fatty liver</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Stroke</td>
<td>3</td>
<td>7%</td>
</tr>
</tbody>
</table>

3) Age above 35 about 19 members (25.5%) are affected due to obesity and cows this diseases.

<table>
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<th>%AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>4</td>
<td>21%</td>
</tr>
<tr>
<td>Heart diseases</td>
<td>6</td>
<td>31%</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>6</td>
<td>31%</td>
</tr>
<tr>
<td>Fatty liver</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>Stroke</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>

Has we had seen a particular age distribution of obesity disorders in their particular durations of Ages now we will see what common group age percentage.
Common effects of obesity include elevated risks of heart disease, type 2 diabetes, joint issues, and mental health challenges such as depression.

Severe consequences can involve conditions like sleep apnea, high blood pressure, increased cancer risk, and a decreased overall life expectancy. Managing obesity through a healthy lifestyle is essential to prevent and alleviate these health concerns.

Preventions:
- Maintain a healthy diet
- Engage in regular physical activity
- Get sufficient sleep
- And manage stress.
- Incorporating fruits
- Vegetables and whole grains.

Into your diet while limiting sugary and high-fat foods can be beneficial. Regular exercise such as brisk walking or cycling, supports weight management.
Additionally, staying hydrated and being mindful of portion sizes contribute to overall well-being. Consulting with a healthcare professional for personalized advice is advisable.

**Conclusion:**

Obesity is a complex, multifaceted issue with far-reaching consequences. Addressing this global epidemic requires collaborative efforts at individual, community, and policy levels. By promoting healthier lifestyles, raising awareness, and implementing effective policies, we can work towards a healthier future for generations to come.

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