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A PROSPECTIVE OBSERVATIONAL STUDY ON MEDICAL REASONS FOR OBESITY

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ABSTRACT

Obesity is a complex and multifactorial disease, influenced by a combination of genetic, environmental, and medical factors. While lifestyle choices are often cited as the primary cause of obesity, various medical conditions and medications can also contribute to weight gain and obesity. This review aims to summarize the current understanding of medical reasons for obesity, including genetic disorders, endocrine conditions, psychiatric medications, and other medical conditions.

KEYWORDS: Obesity, PCOD, Hereditary.

INTRODUCTION

Obesity is a growing public health concern, affecting millions worldwide. While diet and exercise are crucial factors, medical reasons for obesity are often overlooked. Understanding these factors is essential for developing effective treatment strategies and improving patient outcomes. But when your body has too much extra fat, it can change the way it functions. These changes are progressive, can worsen over time, and they can lead to adverse health effects.

TYPES OF OBESITY

- Class I obesity: BMI 30 to <35 kg/m².
- Class II obesity: BMI 35 to <40 kg/m².
- Class III obesity: BMI 40+ kg/m².

CAUSES OF OBESITY

- Lack of physical activity.
- Unhealthy eating behaviors.
- Not getting enough good-quality sleep.
- High amounts of stress.
- Health conditions.
- Genetics.
- Medicines.
- Your environment

GENETIC DISORDERS

1. Prader-Willi Syndrome: A genetic disorder characterized by insatiable hunger, leading to excessive eating and obesity.
2. Bardet-Biedl Syndrome: A rare genetic disorder associated with obesity, insulin resistance, and metabolic dysfunction.
3. Leptin Deficiency: A rare genetic disorder causing impaired satiety and hunger regulation, leading to obesity.

ENDOCRINE CONDITIONS

1. Hypothyroidism: An underactive thyroid gland, leading to decreased metabolism and weight gain.
2. Cushing's Syndrome: A hormonal disorder causing excess cortisol production, leading to weight gain and obesity.
3. Polycystic Ovary Syndrome (PCOS): A hormonal disorder affecting women, associated with insulin resistance, weight gain, and obesity.

PSYCHIATRIC MEDICATIONS

1. Antipsychotics: Certain medications used to treat psychiatric conditions, such as olanzapine and clozapine, can cause significant weight gain.
2. Antidepressants: Selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs) can lead to weight gain in some individuals.

OTHER MEDICAL CONDITIONS

Sleep Apnea: A sleep disorder associated with obesity, insulin resistance, and metabolic dysfunction.

METABOLIC DISORDERS

Conditions like metabolic syndrome, mitochondrial dysfunction, and other metabolic disorders can affect how the body processes energy and lead to weight gain.

INFLAMMATORY CONDITIONS
- Chronic inflammation in the body, such as with arthritis, can increase the risk of obesity.
- Inflammation can affect hormone regulation, including insulin, leptin, and cortisol, leading to metabolic changes that contribute to weight gain.
- Chronic inflammation can lead to increased levels of pro-inflammatory cytokines, which can disrupt metabolic function and promote fat storage
- Certain medications used to treat inflammatory conditions, such as steroids, can increase appetite and lead to weight gain.
- Chronic inflammation can alter metabolic pathways, leading to increased fat storage and weight gain.

NEUROLOGICAL DISORDERS
Certain conditions, like Prader-Willi syndrome, Bardet-Biedl syndrome, and Alström syndrome, can affect hunger and satiety hormones, leading to obesity.

MENTAL HEALTH CONDITIONS
Depression, anxiety, and other mental health conditions can lead to emotional eating and weight gain.

GASTROINTESTINAL DISORDERS
Conditions like irritable bowel syndrome (IBS), small intestine bacterial overgrowth (SIBO), and gastroesophageal reflux disease (GERD) can affect digestion and lead to weight gain.

AGE RELATED FACTORS
Age-related obesity refers to the tendency for people to gain weight and body fat as they age. This can be attributed to various factors, including. Age-related obesity increases the risk of various health issues, including:

1. Type 2 diabetes
2. Cardiovascular disease
3. High blood pressure
4. Osteoarthritis
5. Certain cancers

Prevention and management strategies include:
1. Regular exercise
2. Healthy diet
3. Stress management
4. Sufficient sleep
5. Monitoring and managing chronic health conditions

Early intervention and adopting healthy lifestyle habits can help mitigate age-related obesity and related health risks.

RESULT AND DISCUSSION
Medical reasons for obesity are diverse and complex, highlighting the need for a comprehensive approach to diagnosis and treatment. Healthcare professionals should consider these factors when developing weight management plans, ensuring personalized and effective care.

Based upon our study conducted on the students of The Dale View College of Pharmacy and Research Centre by using KAP questionnaire it is found that many medicated reasons also contribute being obese.

Based On Batch

Batch	Frequency	Percent
BPHARM	12	48.0
DPHARM	6	24.0
PHARM D	7	28.0
Total	**25**	**100.0**
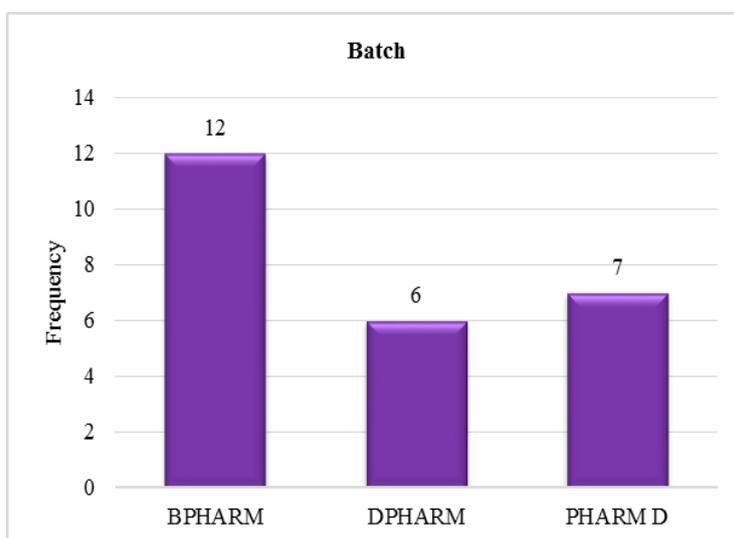
Based On Gender

Gender	Frequency	Percent
Female	22	88.0
Male	3	12.0
Total	**25**	**100.0**
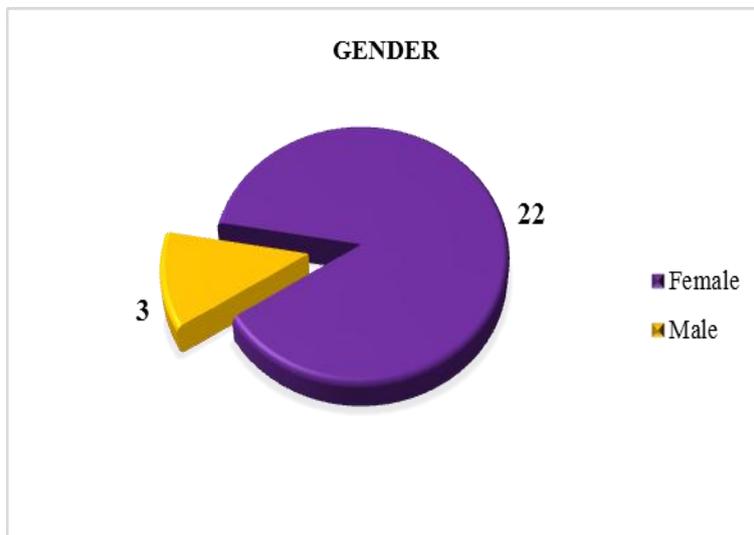
Based On Age

Age	Frequency	Percent
BELOW 23	14	56.0
23 & ABOVE	11	44.0
Total	**25**	**100.0**
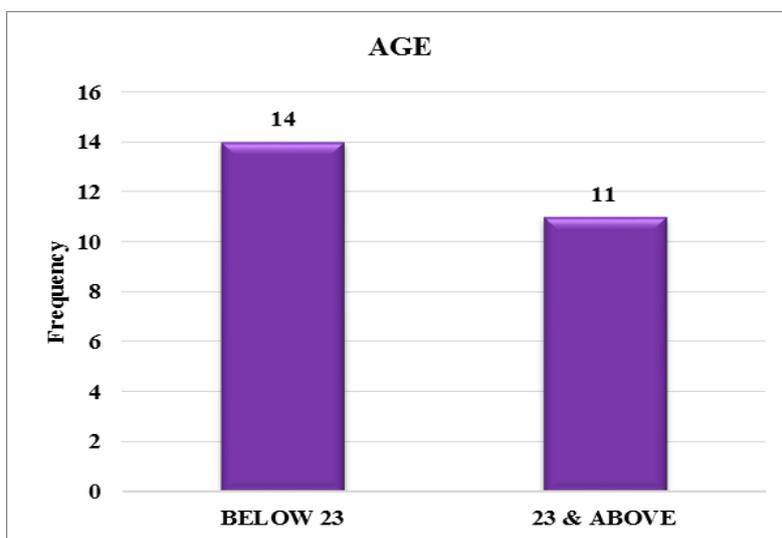
Based On Height

Height	Frequency	Percent
<160CM	14	56.0
160CM-165CM	6	24.0
>165CM	5	20.0
Total	**25**	**100.0**
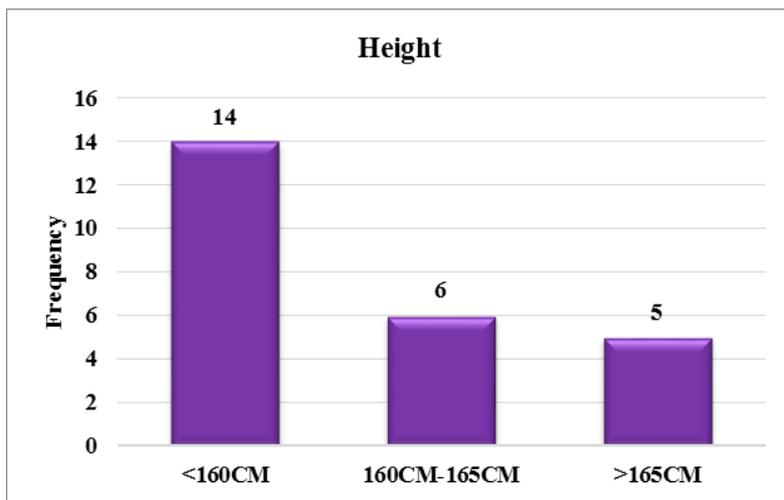
Height

Based On Weight

Weight	Frequency	Percent
<75KG	6	24.0
75KG-85KG	10	40.0
>85KG	9	36.0
Total	**25**	**100.0**

Weight
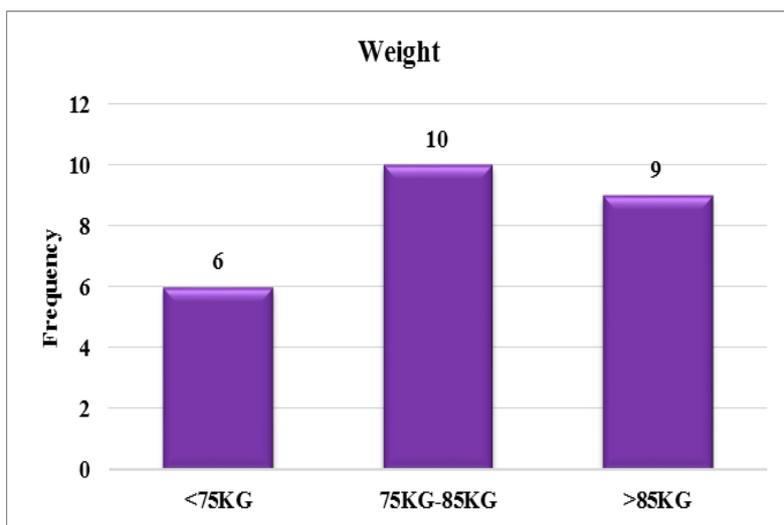
DO YOU THINK OBESITY IS A DISEASE?

DO YOU THINK OBESITY IS A DISEASE?	Frequency	Percent
NO	8	32.0
YES	17	68.0
Total	**25**	**100.0**

DO YOU THINK OBESITY IS A DISEASE?
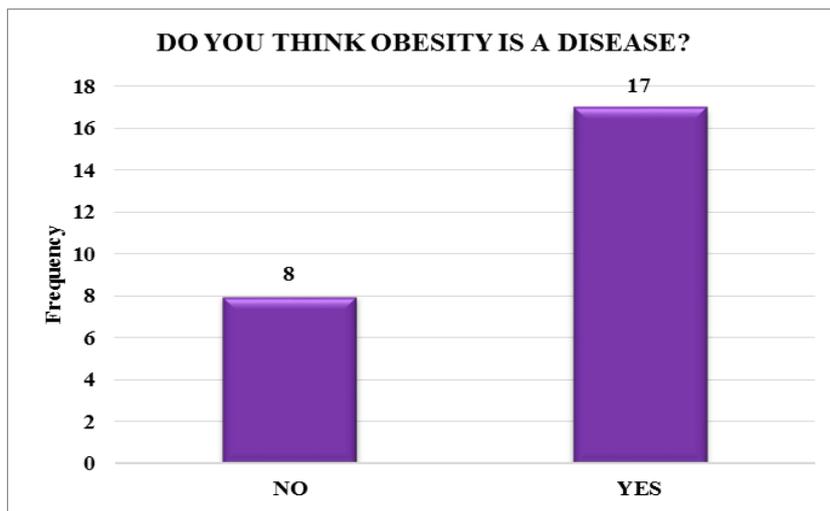
WHAT ARE THE HEALTH PROBLEMS THAT CAN OCCUR WHEN A PERSON IS OBESE?

WHAT ARE THE HEALTH PROBLEMS THAT CAN OCCUR WHEN A PERSON IS OBESE?	Frequency	Percent
INCREASED RISK OF CHRONIC CONDITIONS(BP,DIABETES)	15	60.0
OTHERS-HORMONAL IMBALANCE	4	16.0
OTHERS-LIFESTYLE	1	4.0
OTHERS-PCOD	2	8.0
REDUCED QUALITY OF LIFE	3	12.0
Total	**25**	**100.0**

WHAT ARE THE HEALTH PROBLEMS THAT CAN OCCUR WHEN A PERSON IS OBESE?
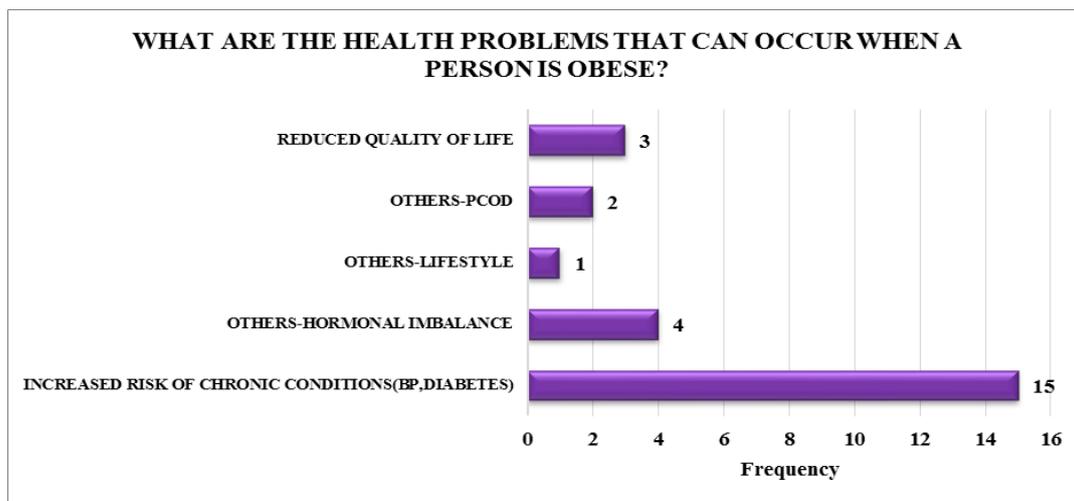
CONCLUSION
Obesity is a multifaceted disease, influenced by various medical factors. Substantial literature has emerged to show that overweight and obesity are major causes of co-morbidities, including type II diabetes, cardiovascular diseases, various cancers and other health problems, which can lead to further morbidity and mortality.

Recognition is increasing that overweight and obesity are not only problems of individuals, but also societywide problems of populations. Acting on this recognition will require multifaceted, population-based changes in the socioenvironmental variables that influence energy intake and expenditure. There exist both a pressing need to act on the problem of obesity and a large gap between the type and amount of evidence needed to act and the type and amount of evidence available to meet that need. A new framework is necessary to assist researchers and a broad community of decision makers in generating, identifying, and evaluating the best evidence available and in summarizing it for use in decision making.

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