BURDEN OF ANEMIA AND IRON DEFICIENCY IN INDIAN OBESE POPULATION

A Study in Patients Undergoing BMS at a Single Centre

ID:379

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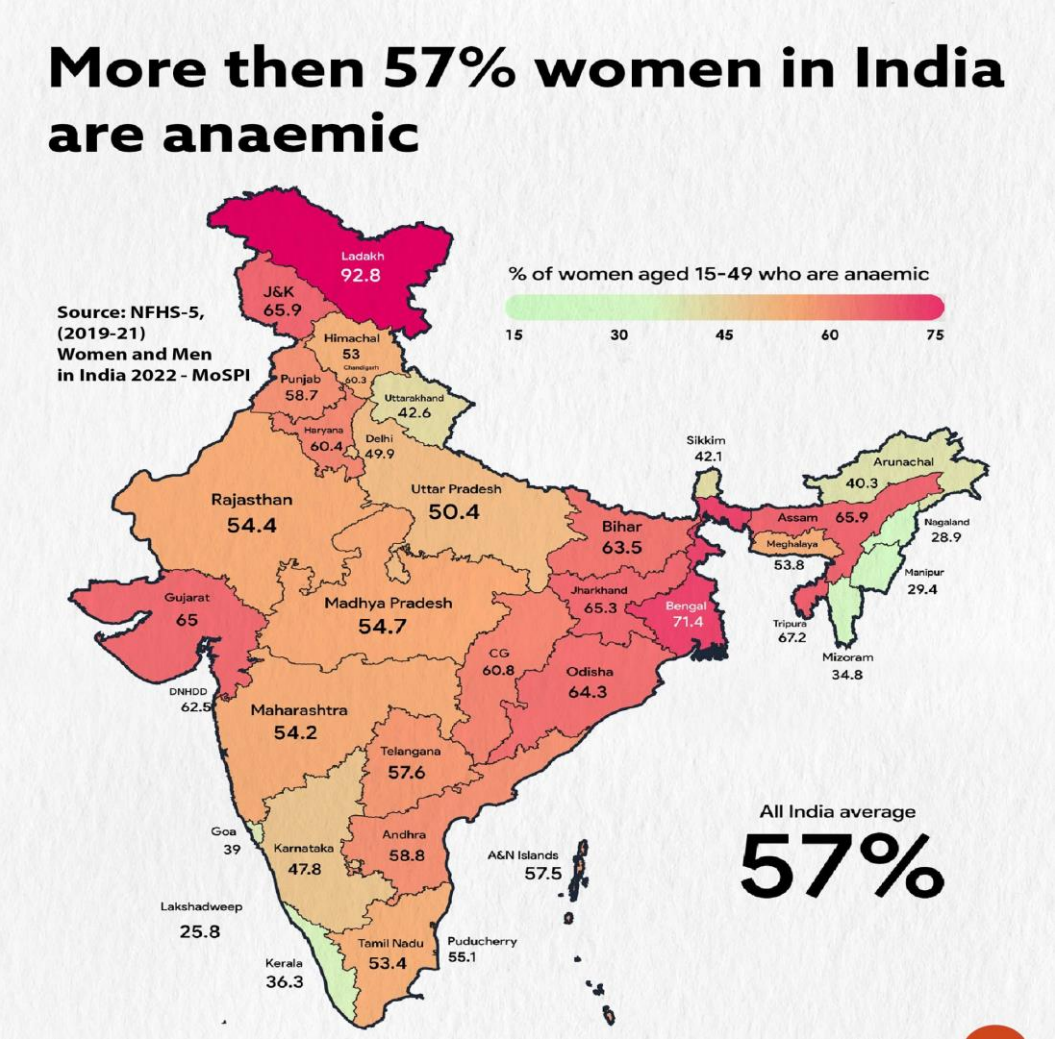
Burden of Anemia-India



- **Study Aim and Objective**

This study was undertaken to determine the Incidence of iron deficiency anemia and vitamin B12 deficiency among the Indian population who came for bariatric surgery in a tertiary care center before the bariatric surgery.

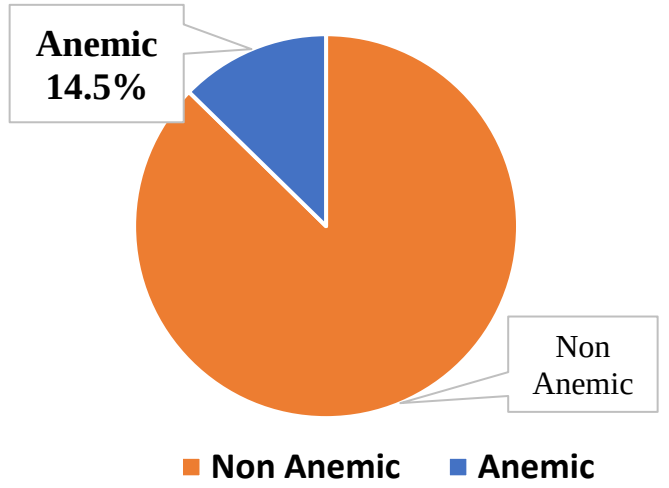
Methodology

- A total of **9141** individuals retrospective reviewed from prospectively maintained database of all patients who underwent bariatric surgery between January 1, 2020, to January. 30, 2024.
- Data reviewed age, gender, weight and co-morbidities, incidence of anemia **(Hb<11gm/dl)**, serum Iron **(Iron<35mg/dL)**, and B12 deficiency **(Vit. B12 <200pg/mL)** were reviewed and analyzed.

Patient Demographics

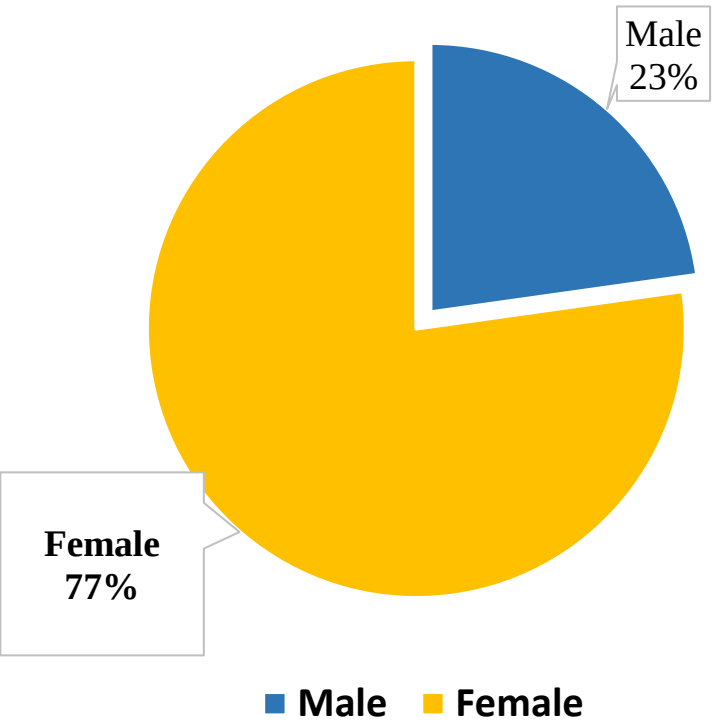
PATIENTS PROFILE (n=9141)	
Av. Age (years)	43
Height	1.64±0.1
Gender (F)	5024(54.9%)
BMI (kg/m2)	43.59 ± 8.02
Weight (Kgs)	116.91±24.50

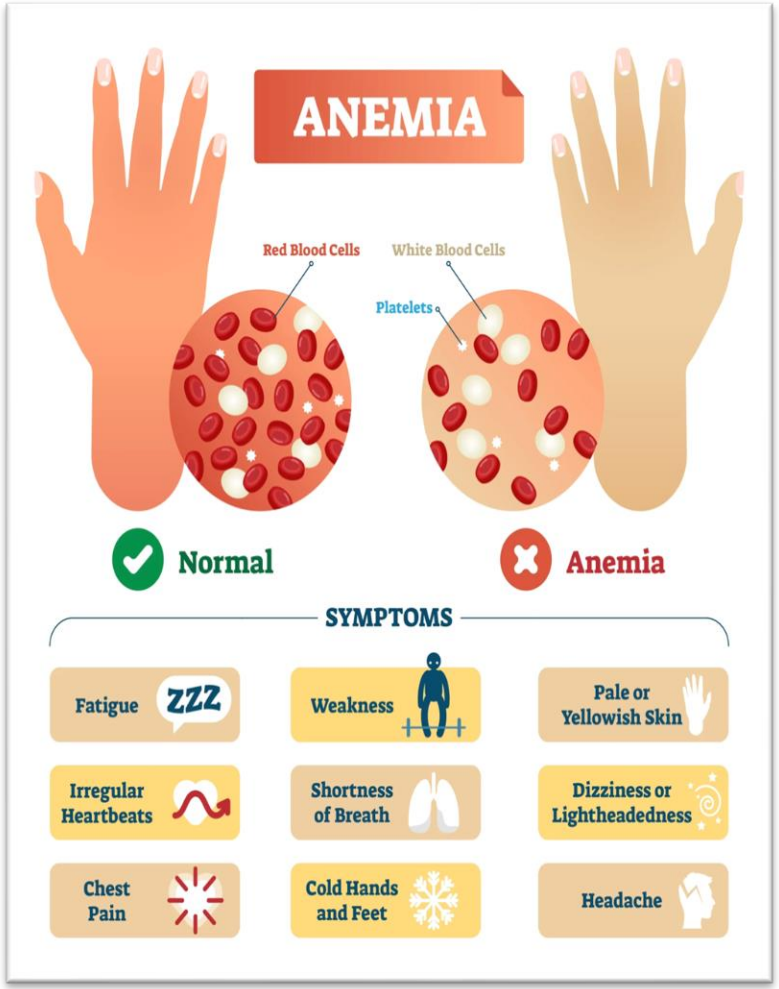
Incidence of Anemia at Our Center 1326 / 9141



Incidence of Anemia in MALE & FEMALE

Male = 302, Female = 1024





Incidence of Anemia Deficiency at Our Center According to BMI Classification

BMI Group	Anemia
Overweight (25-29.9)	5/158(3.1%)
Class I (30-34.9)	101/995(10.2%)
Class II(35-39.9)	246/2309(10.6%)
Class III(≥40)	974/5679**(17.15%)**

INCIDENCES IN ANEMIC OBESE

1326(14.5%)

Anemia+ Iron deficiency =428/1326**(32.3%)**
Male=117
Female=311

Anemia+ Vit.B12 deficiency =576/1326**(43.4%)**
Male=131
Female=445

Anemia+ Iron deficiency+ Vit.B12 deficiency =139/1326 **(10.5%)**
Male=41
Female=98

Findings

In summary, the study highlights a significant burden of Anemia, low serum iron and vitamin B12 deficiency among the obese population in India. The findings underscore the need for targeted nutritional interventions, especially for women and those with higher BMI.

Questions???

- **Why higher BMI population has more incidence of Anemia ?**
  - **The overlooked PARADOX of the coexistence of obesity and anaemia.**
  - **Nutritional Imbalance:- Consumption of Energy Dense food may be poor sources of Iron.**
  - **Low iron bioavailability in food.**
  - **Excessive use to Tea/ coffee**
  - **Obesity related Inflammation affects *hepcidin & thereby causing low Hb.***
- ***Low iron, hemoglobin and Vitamin B12 is apparent when low energy makes exercising and burning calories difficult, thus weight gain.***

Answer…..

MOHAK
BARIATRICS & ROBOTICS
WEIGHT LOSS & DIABETES SURGERY CENTRE

THANK YOU

MOHAK TEAM

We deal with various treatment options for weight loss under the guidance of Dr. Mohit Bhandari and our team is highly skillful to take care of all types of nutritional rehabilitation.

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