Impact of Malnutrition in Adults

Dr Anumiita Pathakk¹, Tneema Pathak²

¹Food and Nutrition, Yogic Diets, Gurgaon, India, Anumiitapathakk@gmail.com
²Student Kolleg, university of Hamburg, Hamburg, Germany, tneemapathak44@gmail.com

Abstract - Malnutrition refers to deficiencies, excess or imbalances in persons intake of energy and or nutrients. The term malnutrition addresses various forms as undernutrition, specific nutrients deficiencies and overnutrition. In adult’s malnutrition is a constant problem in India. Generally faced by the vulnerable and affluent groups of population. Malnutrition is quite prevalent in adults’ group in India. Malnutrition is not simply caused by lack or excess of foods but some other factors such as malabsorption, wrong timings, stress and social pressure. An adult may seem healthy but in fact may be malnourished. Malnutrition is more complex in adults a web of physical, emotional and psychological problems.

Keywords— Malnutrition, Adults, Malabsorption

Introduction

Malnutrition refers to deficiencies, excesses, or imbalances in a person’s intake of energy and or nutrients. The term malnutrition addresses various forms:

- Undernutrition; which includes muscles wasting, stunning and underweight.
- Micronutrient; related malnutrition (a lack/ excess of important vitamins and minerals). Overweight, obesity and lifestyle diet related diseases.

W.H.O

Malnutrition is a constant problem in India. Generally faced by the vulnerable group and the affluent group of the population. The term malnutrition implies imperfect nourishment, occurring when the demands of the body for certain nutrients are not met. In adults the main cause of malnutrition is increased or decreased in food intake often in combination with disease.

Therefore, malnutrition is quite prevalent in adults. According to National health policy 2017 among adults, 23% of women and 20% of men are considered undernourished in India. On the other hand, 21% of women and 19% of men are overweight or obese. The simultaneous occurrence of over nutrition and undernutrition indicates that adults in India are suffering from a dual burden of malnutrition.

Malnutrition is not simply caused by lack or excess of foods but also some other factors such as malabsorption, wrong timings, stress and social pressure. An adult may seem healthy but in fact may be malnourished. In fact, malnutrition is more complex, a web of physical, emotional, and psychological problem.

It is a great challenge to identify people who appear well nourished but they are not. It is estimated that about 85% of adults suffer from malnutrition. The main cause is low or high levels of protein and energy along with other nutrients.

Different types of malnutrition seen in adults are:

1. Long standing:
   It is seen in those people who have a long gap between nutritional deficiency and its clinical sign appear.
2. Sudden:
   In some people medical or social stress swift over poor nutrition. Quick action is needed at this time.
3. Recurrent:
   In some people malnutrition is recurrent accompanied by a weakening resistance to disease. For these people monitoring and support must follow.
Causes of malnutrition in adults:
There are factors which are responsible for the risk of malnutrition in adults/
These factors are categorized as primary and secondary causes in adults.

**Primary causes:**
1. Ignorance
2. Social isolations
3. Physical disabilities
4. Mental health
5. Poverty
6. Depression
7. Iatrogenic disorders

**Secondary causes:**
1. Impaired appetite
2. Masticatory inefficiency
3. Malabsorption
4. Alcoholism
5. Drugs
6. Increased requirements
7. Smoking
8. Alcoholism

The aim of the study was to compute the outcome of malnourished adults receiving a less nutritious diet. As severe depletion of protein is associated with impaired digestion, reduced muscles mass and sarcopenia. Chronic energy deficiency is also the cause of malnutrition.

Changing lifestyle have led to an increasing incidence of clinical disorders such as obesity and hypertension etc.

**Methodology:**
The study was first done on 100 adult male and female between the age group of 35 years to 55 years at Gurgaon city. The samples were selected on purposive random based household and hospitals.

The study was first randomized by its checking malnutrition in a clinical setting with control group. Criteria of assessment of the malnutrition in adults:
- Adults who ate poorly.
- Adults with chronic disease.
- Hospitalizations.
- Depression.
- Alcoholism
- Mastication frailties.
- Medications
- Diet restrictions due to medical reason.

**Screening tools:**
1. BMI was calculated to find the deficiency and weight loss.
2. Nutritional status was assessed in adult to diagnose malnourished adults. Assessed by on the basis of dietary intake and they were interviewed for nutritional knowledge.
3. Adults were also screened for their physical signs which are indicative of malnutrition.
4. Serum albumin of the adult was also checked.

**Results and discussions:**
The study covered approximately 100 male and female adults. Out of which 35 males and 65 females were observed for malnutrition. The average found to be between 40 to 55 years. Out of 100 adults 30% adults were malnourished as their BMI is underweight category, while 70% were overweight.

Study shows adult with low BMI were easily exhausted and had low energy levels.

Overweight adults were associated with an increased prevalence of cardiovascular risk factors such as hypertension, diabetes mellitus and also major risk of gallstones and osteoarthritis.
The observation of the study showed that adults were weak and suffered with infection. Due to malnutrition if immune system of adults also weakness which increase the risk of serious infection and also mental confusion was observed in few adults.

Gastroenterologist and dietician indicate that early intervention is necessary with malnourished adults. As they say that the significant impact of malnutrition is confirmed by the length of hospital stay and readmission.

Early intervention with a dietician was also necessary in these adults as it reduces the length of hospital stay and health cost. The mild and moderate cases of malnutrition were treated by giving energy and protein rich foods such as yogurt, eggs, fresh fruits, cereals, beans, pulses etc.

### Results

| Table 1: % Adult who had there BMI for underweight |
|---|---|---|
| Moderate | 1.4% | 22.7% |
| Mild | 1.75% | 16.2% |
| severe | 0.7% | 3.2% |

(11 male and 19 female were underweight)

| Table 2: Adult who had there BMI for overweight |
|---|---|---|
| Male | Female |
| Grade I | 4.9% | 16.25% |
| Grade II | 6.3% | 22.75% |
| Grade III | 0.7% | 3.25% |

(25 Male and 45 Female were Overweight)

| Table 3: Number of male and female suffering from chronic diseases |
|---|---|---|
| Clinical disorders | Male | Female |
| osteoarthritis | 10 | 40 |
| Hypertension | 20 | 10 |
| Diabetes mellitus | 05 | 15 |

### Discussions

The malnutrition in adults can be prevented by proper nutrition education, and counselling.

Malnourished patients should consult dietician as early as possible.

Adult malnutrition associated with major clinical disorder should be taken care along with adult obesity. Underweight adult should take care for chronic illness.

Adults should avoid frequent snack consumption.

Take less intake of salt, sugar, fat and refined flours.

Intake of fiber is must.

Include calcium rich foods in your diet.

Daily 30 minutes physical exercise is quintessential.

### References