IRON DEFICIENCY ANAEMIA

A PUBLIC HEALTH BURDEN

ABOUT IRON

IRON HAS MANY FUNCTIONS:

- Synthesis of haemoglobin in red blood cells
- Formation of myoglobin in muscles
- Mitochondrial function & energy metabolism
- Immune function
- Neurotransmitter synthesis, myelination of neurons & signalling
- Formation of collagen

EPIDEMIOLOGY

Iron deficiency is very common especially in women of childbearing age, pre-school children, the elderly, endurance athletes, chronic kidney disease, heart failure, chronic inflammatory disorders, people with bleeding disorders, cancer and surgical patients.

1 IN 3 PEOPLE ARE ANAEMIC

CONSEQUENCES OF IRON DEFICIENCY

IRON DEFICIENCY HAS DETRIMENTAL CONSEQUENCES

PREGNANT WOMEN

Mother:
- Chronic placental insufficiency
- Increased morbidity & mortality after PPH
- Increased risk of donor transfusion

Fetus:
- Increased risk of Miscarriage / Low birth weight
- Pre- term delivery

Neonate:
- Delayed growth & development
- Behavioral problems

CHILDREN <5 YEARS OLD

- Delayed motor & cognitive development
- Decreased cognitive performance

CHRONIC KIDNEY DISEASE (STAGE 3-5)

2-3 fold increase risk of:
- Pre-dialysis mortality
- Development of end stage renal disease

CANCER / HAEMATOLOGICAL MALIGNANCIES

- Worsened pre-existing anaemia
- Jeopardized treatment

ENDURANCE ATHLETES

- Reduced both physical and mental performance

FOLLOWING CHILDBIRTH

- Reduced milk production / shorter lactation periods
- Increased risk of post-partum depression / emotional instability

ELDERLY >60 YEARS

- Cognitive impairment
- Falls

SURGERY

Pre-op anaemia:
- Increased 30-day morbidity & mortality
- Longer duration of hospitalisation
- Higher rate of re-admissions

Post-op anaemia:
- Higher rate of infections
- Poor recovery
- Increased length of hospital-stay
- Increased mortality

HEART FAILURE

- Increased risk of disease progression
- Increased cardiovascular mortality

ACROSS ALL GROUPS

- Reduced immune response
- Reduced physical performance
- Reduced Quality of Life

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