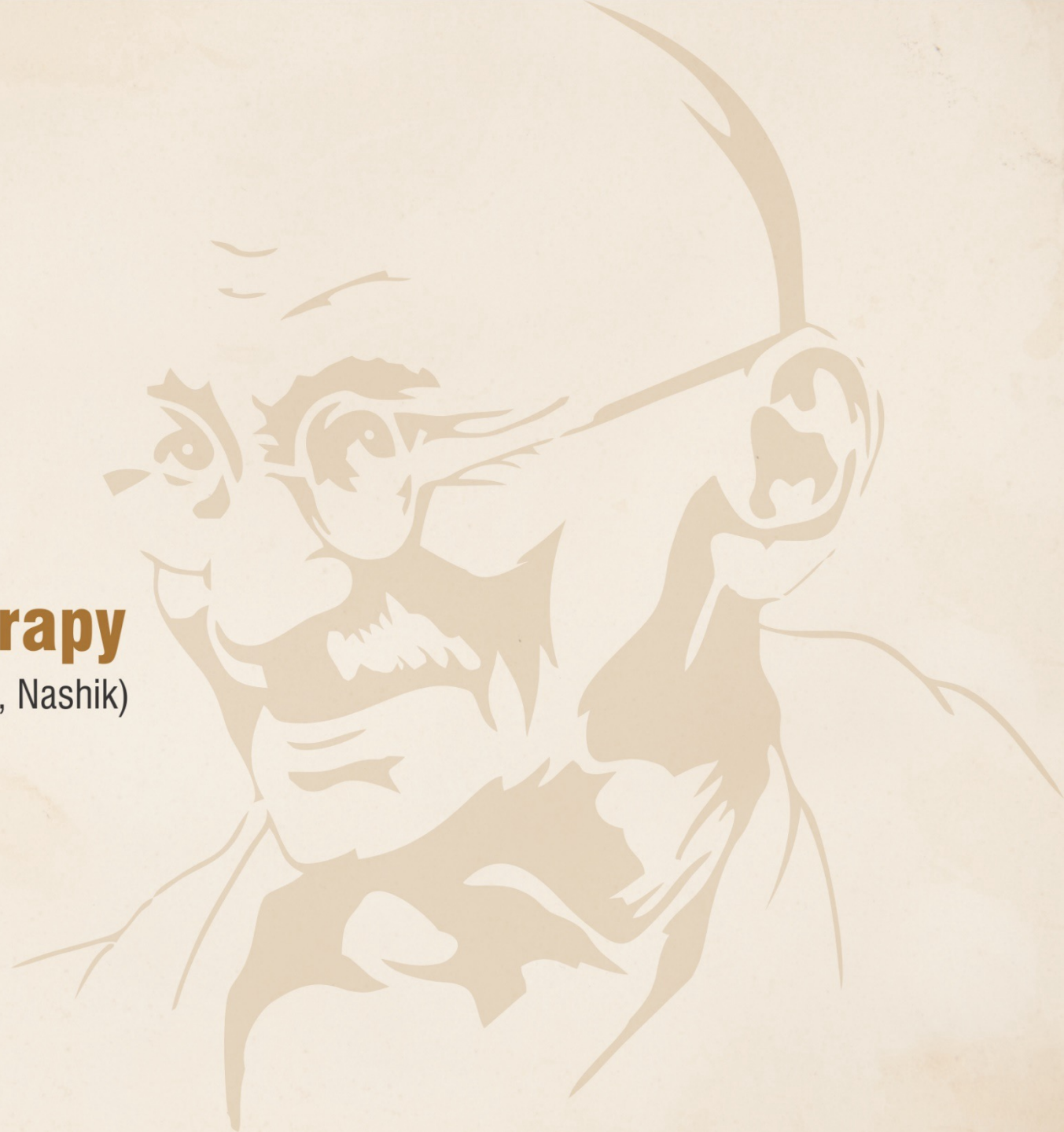




MAHATMA GANDHI MISSION

# MGM Institute of Physiotherapy

Chh. Sambhaji Nagar, Maharashtra (Affiliated to MUHS, Nashik)



# GENERAL CONCEPTS & DETERMINANTS OF DISEASE

**Dr Srilatha Girish**  
**Associate Professor**



# OBJECTIVES



By the end of the session students will be able to

- Concept of disease
- Causation of disease
- Determinants of disease





# REFERENCES

1. Park's Textbook of Preventive & Social Medicine - K. Park
2. Textbook of Preventive & Social Medicine - P.K. Mahajan & M.C. Gupta



# TERMINOLOGIES

- WHO defines only health: Disease many shades (inapparent-severe, sudden-gradual)
- Terminologies
  - Disease: Physiological/Psychological dysfunction
  - Illness: Subjective state of person who feels aware of not being well
  - Sickness: State of social dysfunction



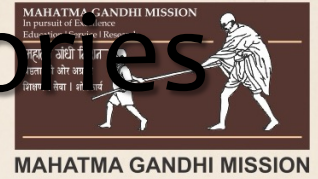
# CONCEPT OF CAUSATION- Models/Theories

Germ Theory

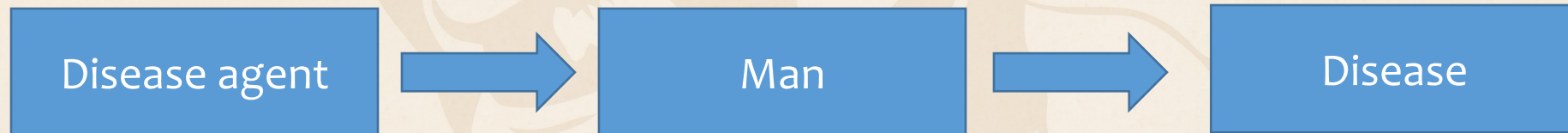
Epidemiological Triad

# CONCEPT OF CAUSATION- Models/Theories

## Germ Theory



- 19<sup>th</sup>-early 20<sup>th</sup> century
- Shift from empirical causes (bad air) to microbes as sole responsible
- One sided view of disease causation: One to one b/w casual agent & disease











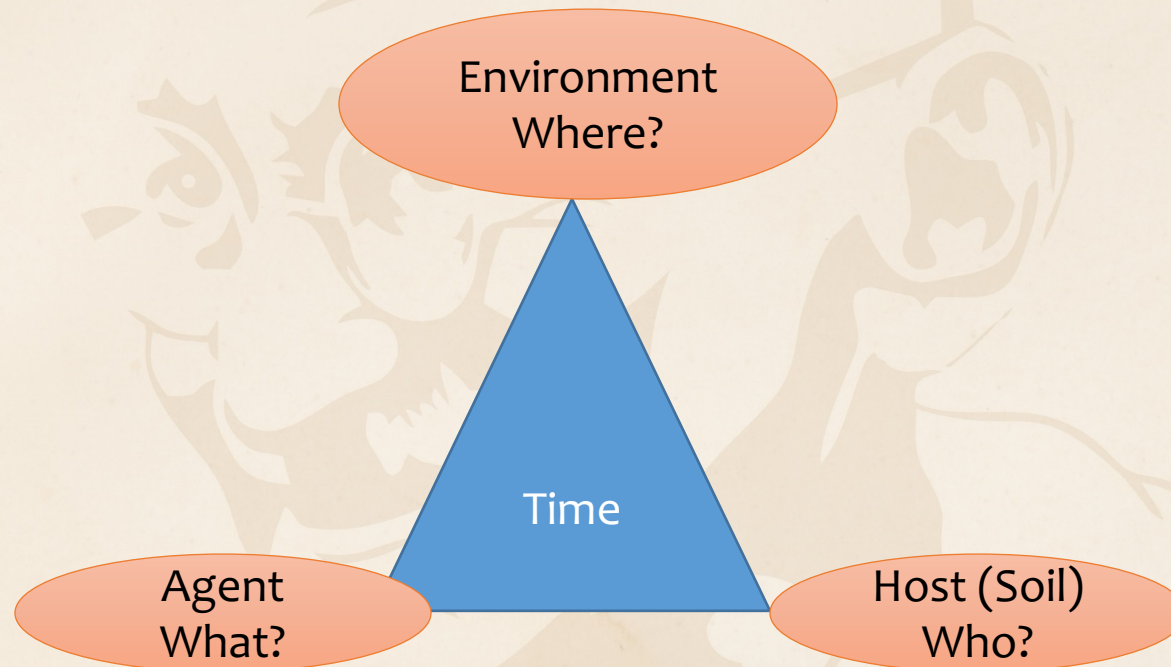
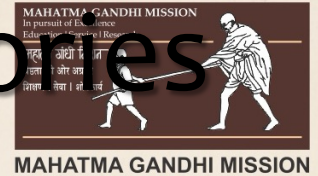




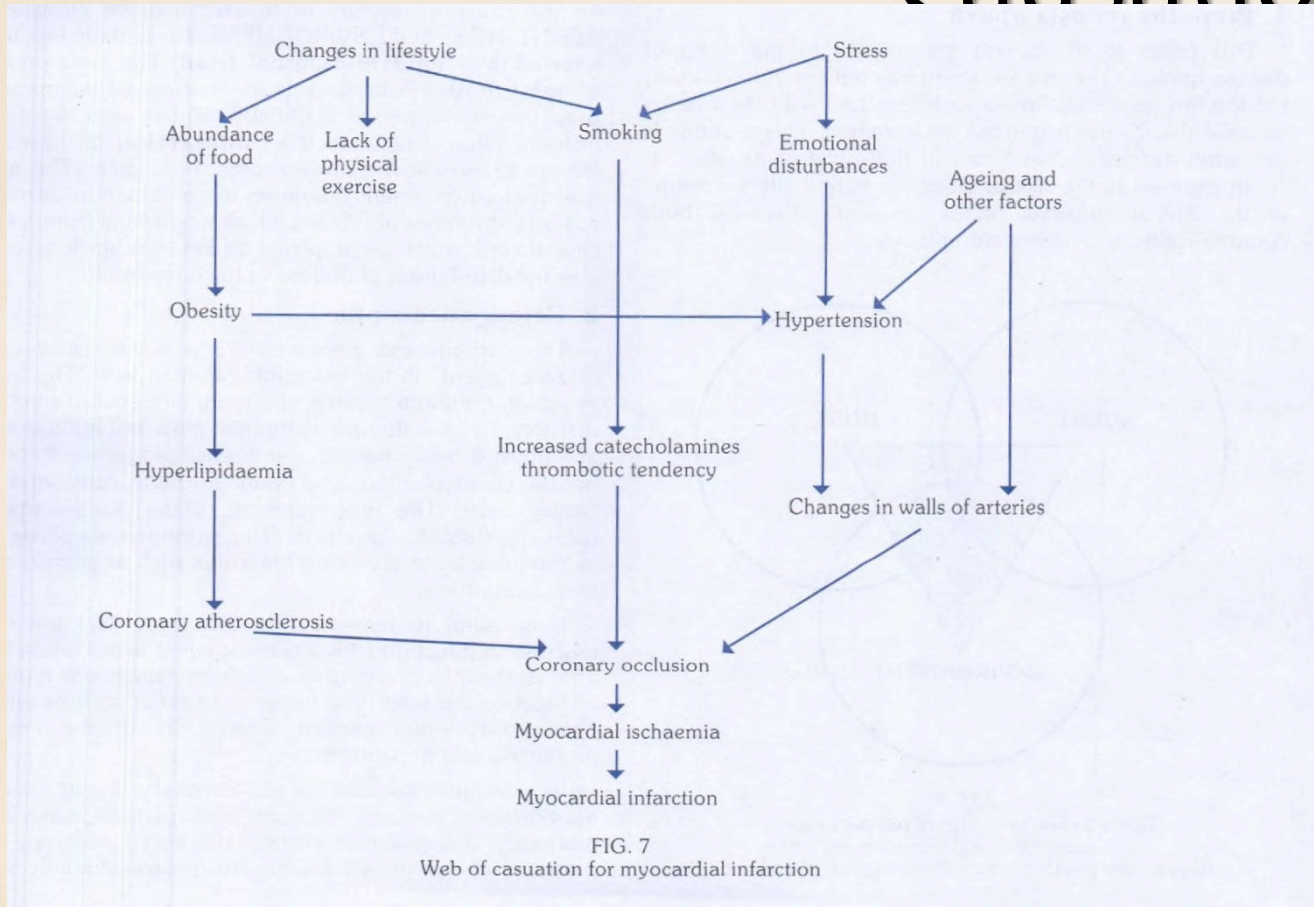


# CONCEPT OF CAUSATION- Models/Theories

## Epidemiological Triad



# CONCEPT OF CAUSATION- Web of Causation



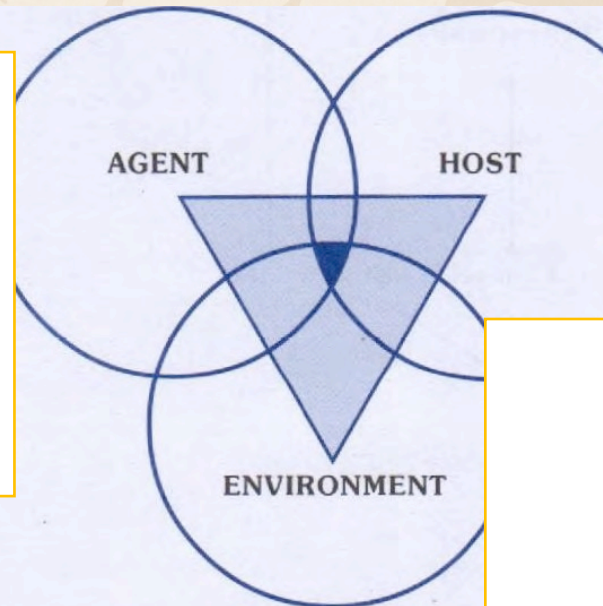
- Considers all predisposing factors & their complex interaction--- Chronic diseases when disease agent is not known



# NATURAL HISTORY OF DISEASE- Pre-pathogenesis Phase

- Period preliminary to onset of disease
- Disease agent has not yet entered man, but the factors which favor its interaction with human host are already existing in environment.
- Referred to as "man in the midst of disease" or "man exposed to the disease"
- Causative factors

Biological  
Nutrient  
Physical  
Chemical  
Mechanical  
Absence or insufficiency  
of factors



Physical  
Biological  
Psychological

Physical  
Biological  
Psychological

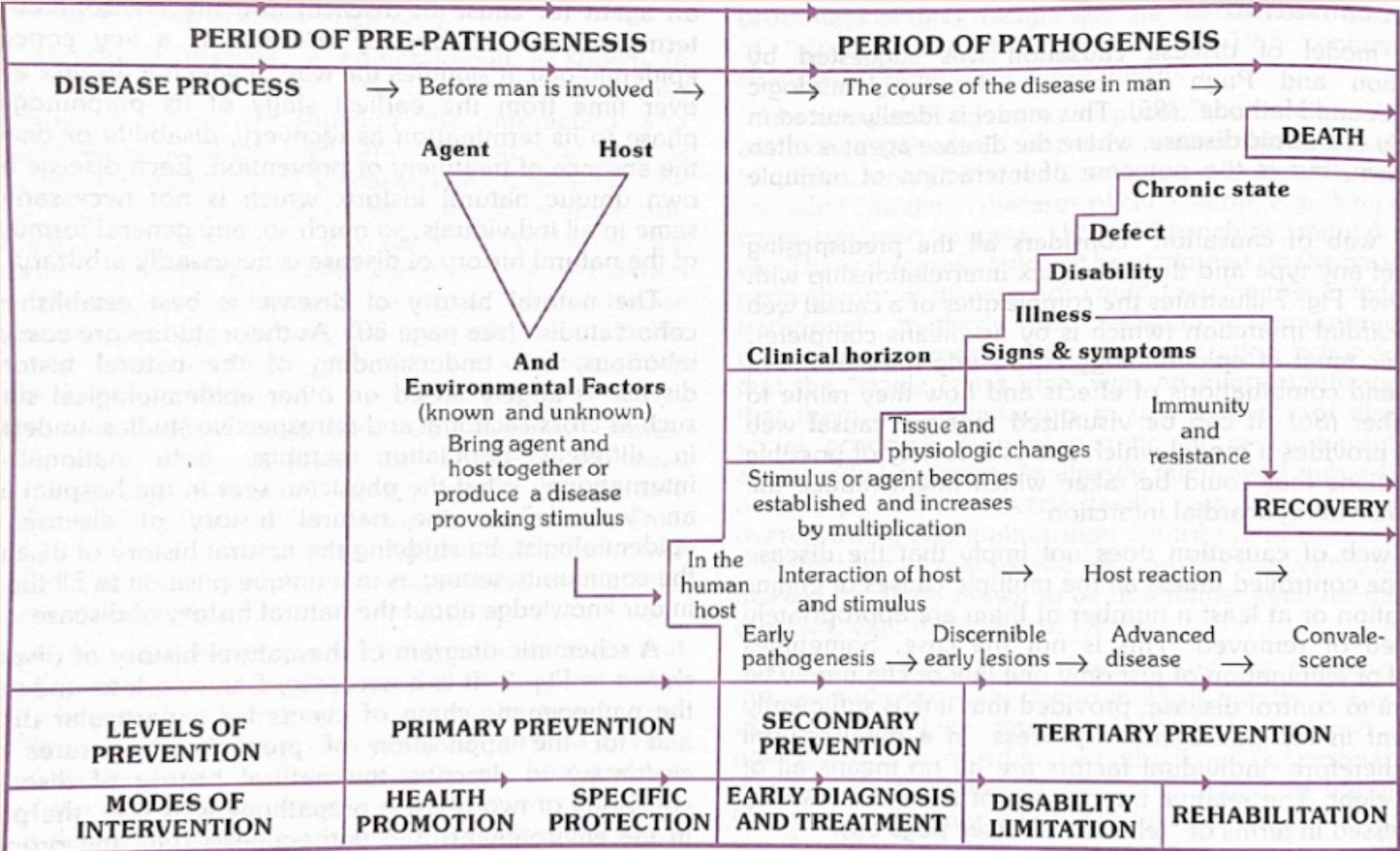
# NATURAL HISTORY OF DISEASE- Pathogenesis Phase



- Begins with entry of disease "agent" in susceptible human host events
- Pathogenesis phase are clear-cut in infectious diseases: Disease agent multiplies & induces tissue & physiological changes----- Disease progresses through a period of incubation----- later-----early & late pathogenesis.
- Outcome: Recovery, disability or death



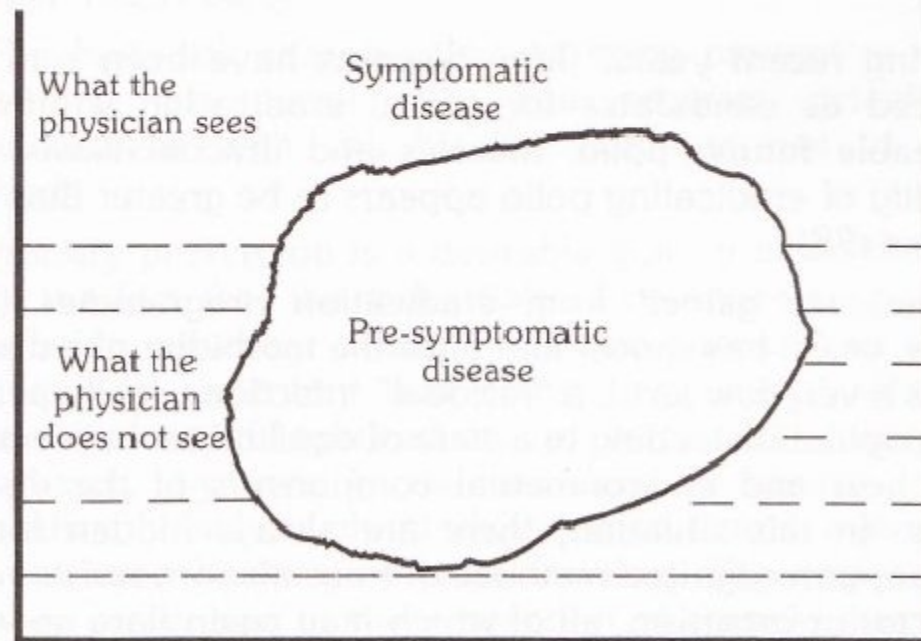
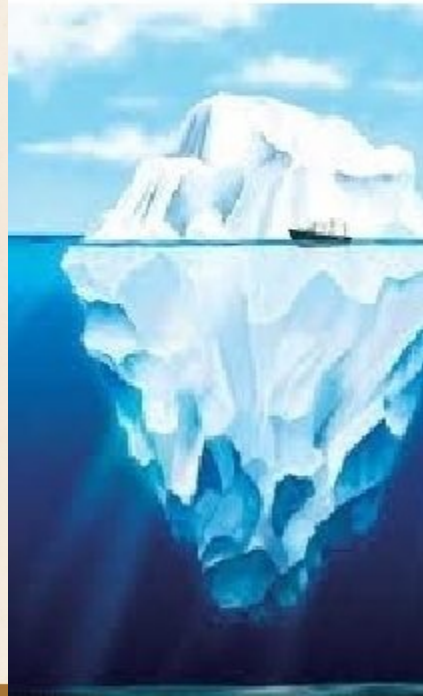
# NATURAL HISTORY OF DISEASE





# ICEBERG PHENOMENON

## Iceberg Phenomenon of Diseases





# References



Park K. Park's Textbook of Preventive and Social Medicine, 22nd ed. Banarsidas Bhanot; 2013. ISBN-13: 978-938-2219-026. Chapter 3 (Page number 75-80)

