CENTRE FOR COMMUNITY MEDICINE, ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI, INDIA

Concepts in Public Health: A Case Study of Protein Energy Malnutrition (PEM)

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- 2 years old *Munni*
- Youngest of the four children of *Yashoda*
- Belongs to Scheduled caste
- Resident of urban slum
- Family belongs to Below Poverty Line

Source: Accessed from Google images

THE STORY . . .

- Munni is currently suffering from loose stools, voimiting
- She had experienced recurrent episode of diarrhea and ARI in past one year
- Born at home with low birth weight
- *Ghutti* was given at the time of birth
- Exclusive breast feeding for four *months*
- Undernourished for age at present
- Incomplete immunization as per age
- Her sisters are also suffering from loose stools, worms in stools, vomiting and are undernourished for their age

THE STORY . . .

- *Yashoda* - 24 yrs, illiterate , married 7 years back
- Has four daughters, out of which 2 are under five yrs age
- She delivered four girl children in a hope of male child
- Not adopted any family planning method due to fear of its complications
- Migrated in urban slum area from village 5 years back
- Lives in *jhuggi* area in rented *jhopadi*
- *Yashoda* and her husband are daily wage labourers
- Eldest daughter takes care of younger ones

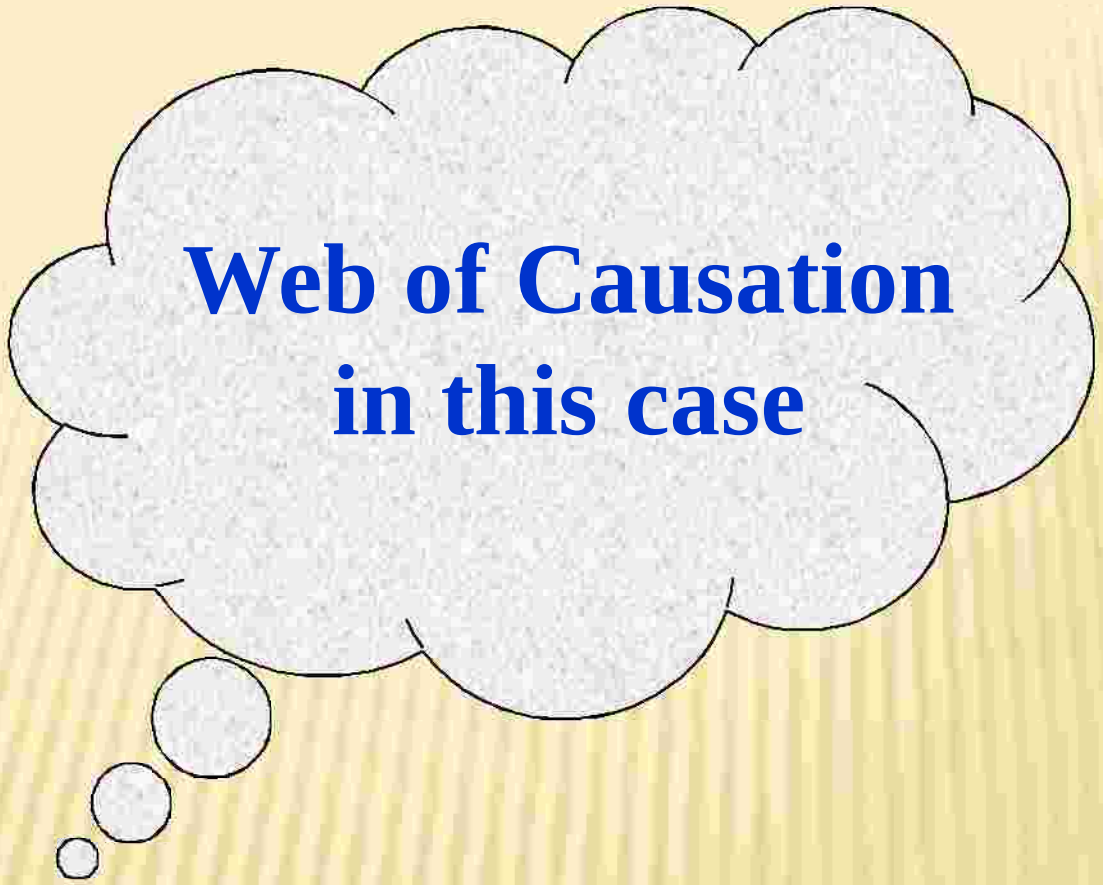
THE STORY . . .

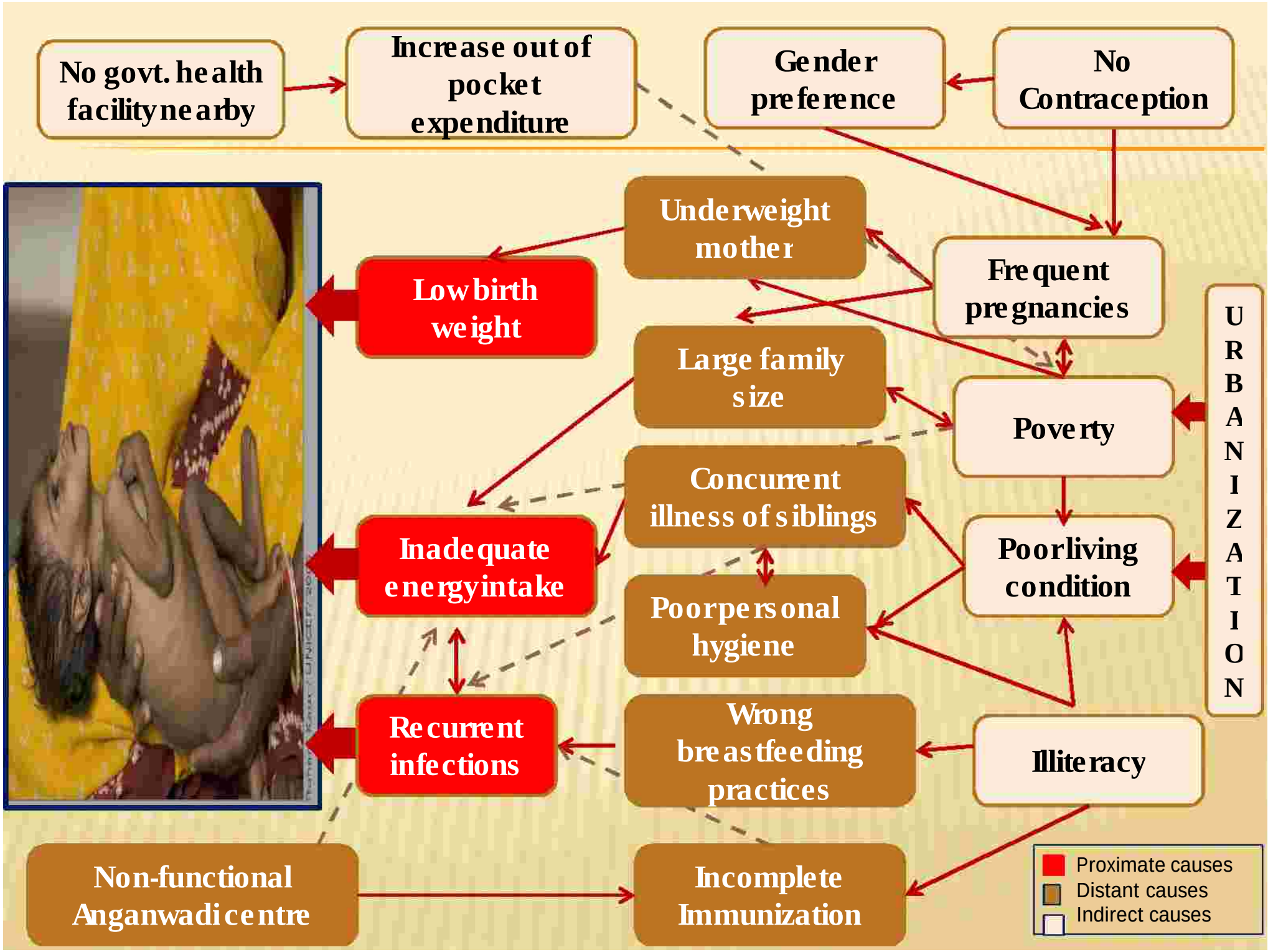
- There is no government health facility in an urban slum
- *Yashoda was unable to* take *Munni* to General Hospital which is 10 kms away as it will lead to daily wage loss
- *Yashoda* had sought treatment for her children from unqualified private practitioner in an urban slums
- None of her daughter are going to *Anganwadi* as it remains closed all the time
- Family belongs to BPL but they does not possess BPL card
- Able to provide food to their daughters once a day only

PEM IN INDIA…

- 51.1% of children are undernourished at given point of time
- High risk factor for malnutrition in children:
  - Age of mother: 18 – 23 yrs
  - Female gender
  - Rural area
  - Birth order > 3
  - Birth spacing < 47 months
  - Low birth weight
  - Illiterate mother
  - Scheduled caste/ scheduled tribe
  - Underweight status of mothers

Source: International Institute for Population Sciences (IIPS) and Macro International. 2007. National Family Health Survey (NFHS-3), 2005–06: India. Mumbai :IIPS. Available at http://www.nfhsindia.org/pdf/IN.pdf (accessed on 21 October 2010)


Web of Causation
in this case


No govt. health facility nearby
Increase out of pocket expenditure
Gender preference
No Contraception
Underweight mother
Low birth weight
Frequent pregnancies
Large family size
Poverty
URBANIZATION
Concurrent illness of siblings
Inadequate energy intake
Poor living condition
Poor personal hygiene
Recurrent infections
Wrong breastfeeding practices
Illiteracy
Non-functional Anganwadi centre
Incomplete Immunization
Proximate causes
Distant causes
Indirect causes

WAS MALNUTRITION PREVENTABLE?

Yes

Non-functional Anganwadi centre

Underweight mother

Low birth weight

Large family size

Frequent pregnancies

Concurrent illness of siblings

Inadequate energy intake

Increase out of pocket expenditure

Poor personal hygiene

Recurrent infections

No Contraception

Wrong breastfeeding practices

No govt. health facility nearby

Incomplete Immunization

THROUGH HEALTH SYSTEM

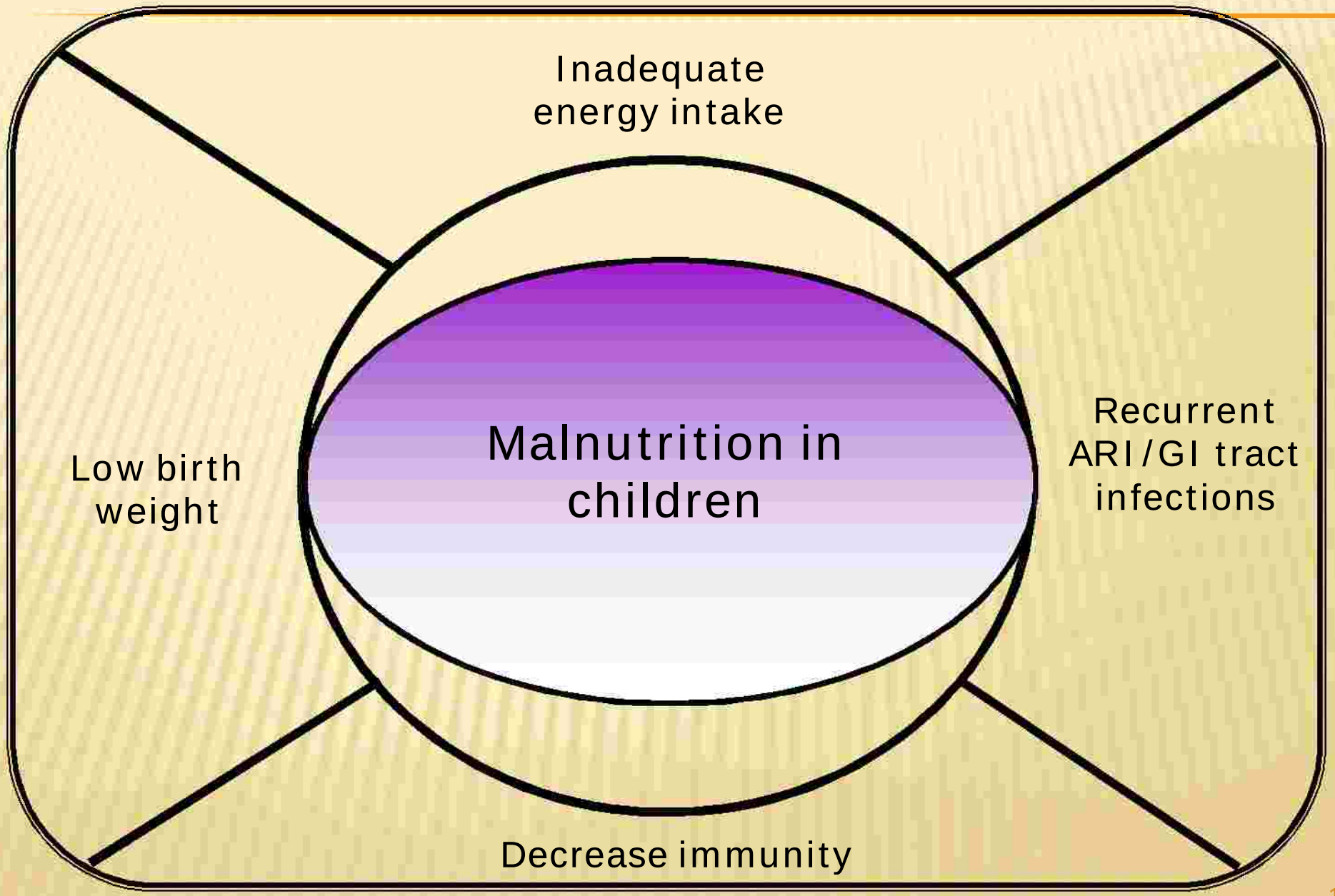
- Gender preference
- Poverty
- Poor living condition
- Illiteracy
- Urbanization

OUTSIDE THE HEALTH SYSTEM

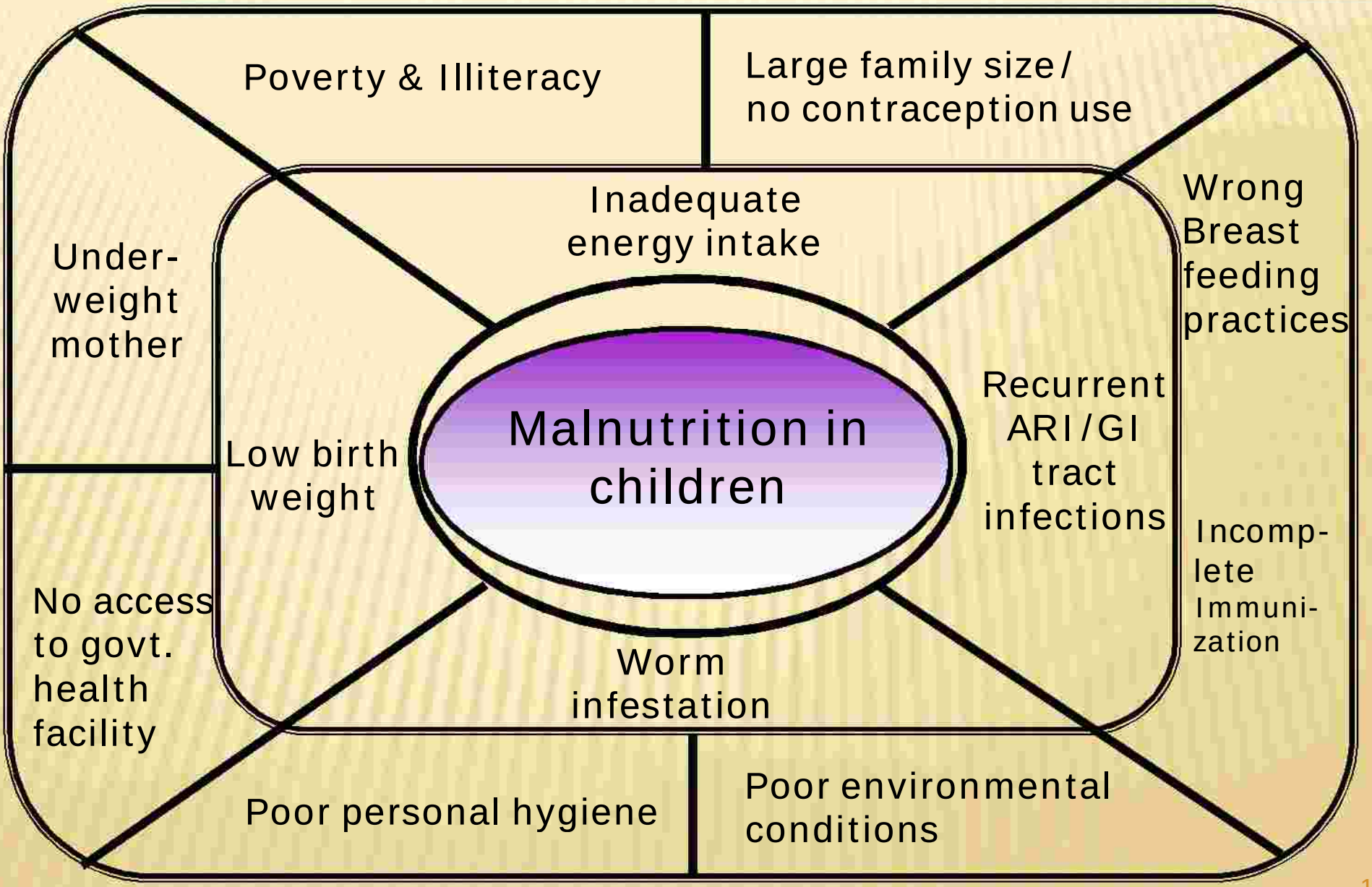
CONCEPTS OF DISEASE CAUSATION

- Traditional Bio-medical concept
  - Disease caused due to the presence of causative agents
  - Basis in Germ theory of disease
- Socio- Epidemiological Concept
  - Causative agents alone may/may not be sufficient for disease occurrence
  - Social factors important in the disease causation & progression
- Politico- Developmental Concept
  - Comprehensive approach, puts health in the context of politico-developmental situations
  - Effects of government policies & outfalls of development on disease occurrence,
  - Stems from the multi-factorial causation of disease

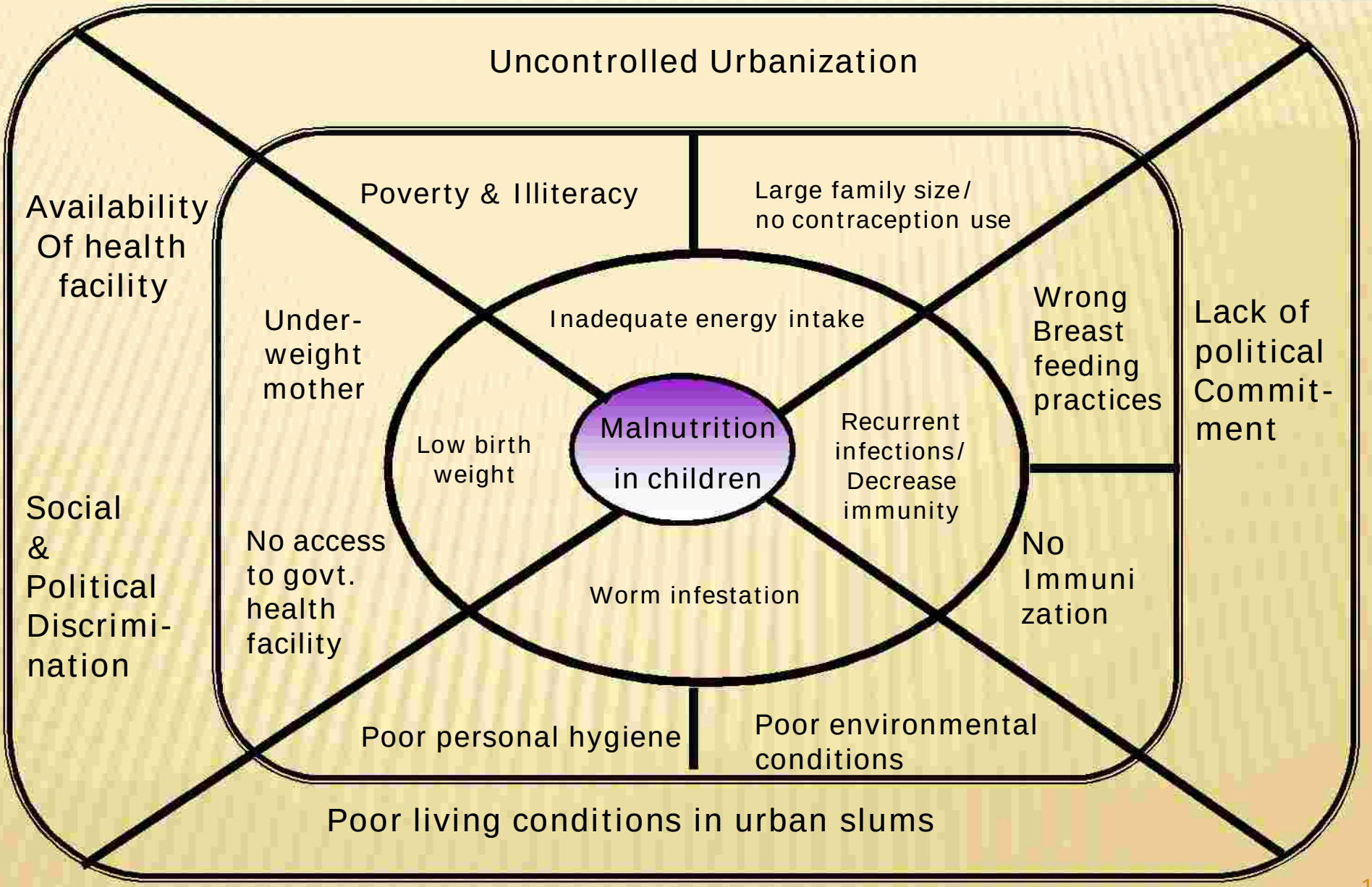
Traditional Bio-Medical Concept



Socio- Epidemiological Concept



Politico- Developmental Concept



PUBLIC HEALTH TRAINS YOU TO HAVE A "HOLISTIC APPROACH" TO HEALTH AND DISEASE

CLINICAL VS PUBLIC HEALTH

	Clinical Medicine	Public health
UNIT OF STUDY	• Individual	•Population / Community
TARGET GROUP	• Mostly Patient – with disease	• Diseased and healthy individuals
VIEWPOINT OF HEALTH SYSTEM	• Mostly passive process	• Active process
TYPE OF CARE	• Major focus on curative care	• Comprehensive care
SERVICE PROVIDERS	• Majority by private sector	• Both public & private sector
BENEFITS	• Short term benefits • Obvious benefit	• Long term benefits • Not obvious

In Public Health – Good work means no patients

AXIOMS OF PUBLIC HEALTH

- Prevention is better than cure
- Best should not be the enemy of good
- Good for many rather than best for few
- Primary health care is NOT primitive care

TAP TURNERS *OR* FLOOR MOPPERS ?

BHORE COMMITTEE

"The physician of tomorrow will be

- naturally be concerned with the promotion of the new era of social medicine
- scientist and social worker
- ready to cooperate in team work
- in close touch with the people he serves
- a friend and leader
- directs all his efforts towards the prevention of disease and
- becomes a therapist where prevention has broken down
- the social physician
- Protecting the people, and Guiding them to a healthier and happier life".

BHORE COMMITTEE REPORT (1946) Health Survey & Development Committee , Govt .of India

CRITICAL APPRAISAL

Yes Can't tell No

Do you believe the results?

Can the results be applied to the local population?

Do the results of this study fit with other available evidence?

Thank You

Comprehensive Rural Health Services Project
BALLABGARH (CCM, AIIMS)