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, vomiting
“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

Web of Causation in this case
WAS MALNUTRITION PREVENTABLE?

Yes
OUTSIDE THE HEALTH SYSTEM

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

- Inadequate energy intake
- Low birth weight
- Decrease immunity
- Recurrent ARI/GI tract infections

Malnutrition in children
Socio- Epidemiological Concept

Malnutrition in children

Poverty & Illiteracy

Large family size/no contraception use

Under-weight mother

Low birth weight

No access to govt. health facility

Poor personal hygiene

Worm infestation

Inadequate energy intake

Recurrent ARI/GI tract infections

Wrong Breast feeding practices

Incomplete Immunization

Poor environmental conditions

No access to govt. health facility
Malnutrition in children

Uncontrolled Urbanization

Poverty & Illiteracy

Large family size/no contraception use

Wrong Breast feeding practices

Lack of political Commitment

Availability Of health facility

Social & Political Discrimination

Aviation

Poor personal hygiene

Poor environmental conditions

No access to govt. health facility

Under-weight mother

Low birth weight

I nadequate energy intake

Recurrent infections/Decrease immunity

Worm infestation

No Immunization

Poor living conditions in urban slums
PUBLIC HEALTH TRAINS YOU TO HAVE A “HOLISTIC APPROACH” TO HEALTH AND DISEASE
# Clinical vs Public Health

<table>
<thead>
<tr>
<th>UNIT OF STUDY</th>
<th>Clinical Medicine</th>
<th>Public health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual</td>
<td>Population/Community</td>
</tr>
<tr>
<td>TARGET GROUP</td>
<td>Mostly Patient - with disease</td>
<td>Diseased and healthy individuals</td>
</tr>
<tr>
<td>VIEWPOINT OF HEALTH SYSTEM</td>
<td>Mostly passive process</td>
<td>Active process</td>
</tr>
<tr>
<td>TYPE OF CARE</td>
<td>Major focus on curative care</td>
<td>Comprehensive care</td>
</tr>
<tr>
<td>SERVICE PROVIDERS</td>
<td>Majority by private sector</td>
<td>Both public &amp; private sector</td>
</tr>
<tr>
<td>BENEFITS</td>
<td>Short term benefits, Obvious benefit</td>
<td>Long term benefits, Not obvious</td>
</tr>
</tbody>
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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?
“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

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?

Yes  Can’t tell  No

Thank You

Comprehensive Rural Health Services Project
BALLABGARH (CCM, AIIMS)