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India Background and Facts

Size: 1.269 million miles². 7th largest country by landmass¹. Sub divided into Northern and Southern India.

Location: South Asia. Climate: Tropical climate. A mixture of monsoon climates and dry hot climates¹.

Colonial History: Portugal imposed imports on the coast. The British Empire controlled India from 1850 to 1947. 1947, India declared independence from Britain¹.

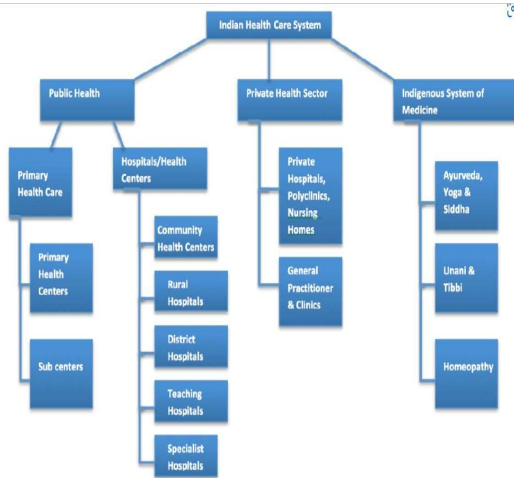
Government System: India was heavily influenced by British government. India also follows a constitution like the USA. They have separation of powers into different branches such as a supreme court. India is described as a "sovereign socialist secular democratic republic"¹. India also has an executive branch with a president that can be elected on five-year terms. The current president is Ram Nath Kovind.

Healthcare System: India's Healthcare is divided into private, public and indigeneous. A very small percentage of the Indian population can afford healthcare from private hospitals. Majority of the Indian population depends on public healthcare. This leads to overstretching of resources in public hospitals. The Indian government has national public healthcare insurance fund. The fund is called "Ayushman Bharat Yojana" and it enables free access to healthcare for low income earners which is more than 50% of the population.

Leading Causes of Disability and Death of Children Under 5

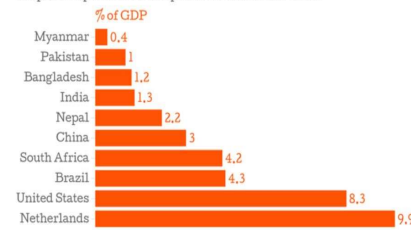
- Neonatal conditions such as prematurity/low birth weight/asphyxiation (33%)³
- Pneumonia (22%)³
- Diarrheal Diseases (14%)^{3a}

Health Background



- India spends 1.3% of its GDP on public health, which is low compared to other nations.
- India's doctor population ratio is 1:1456, against WHO recommendation of 1:1000.
- India's major health burdens are mainly lifestyle diseases such as diabetes.
- 60% of all deaths in the country are caused by non communicable diseases such as heart disease, cancer and diabetes.
- It has the 3rd largest HIV epidemic in the world.
- Major public Health issues in India are poor sanitation, immunization, unstructured and under resourced medical care.

Snapshot of public health expenditure around the world



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Data: World Bank

Background of Malnutrition in India

Biology/pathology: Malnutrition is described as an insufficient intake of the necessary calories and/or nutrients to sustain a healthy metabolic rate and physiological functioning. Malnutrition can cause harmful effects such as increased catabolic hormones, decreased immune system, reduced growth factors, difficulty concentrating, poor memory, depression, decreased mobility, and mortality⁴.

History: Malnutrition is most common in rural areas in India.

Contributing Factors and Social Determinants:

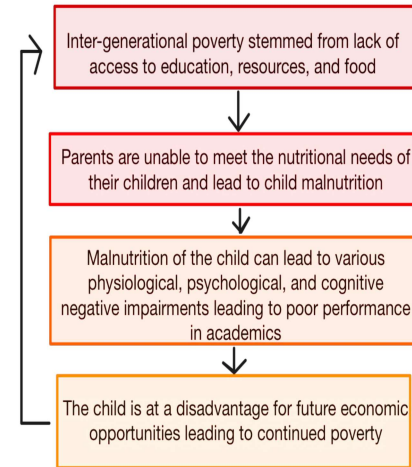
- Generational poverty is one of the largest factors contributing to malnutrition of children⁵.
- Access to resources for adequate nutrition remains limited in many parts of India⁵.
- Limited nutritional parenteral education has shown to be correlated with malnutrition of children⁵.

Malnutrition In India:

- Despite India's strong economic development, 44% of children under 5 are underweight⁷.

Measurement of Malnutrition

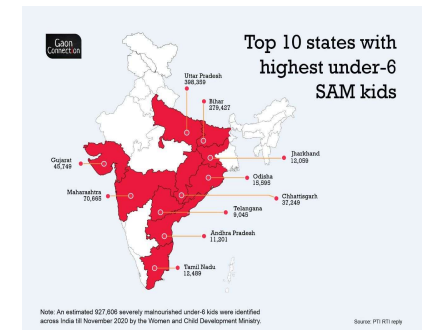
The Poverty Link to Child Malnutrition



Severity and Statistics

Measures of worldwide burden of disease/condition:

- 22% of children under 5 are stunted in 2020⁶.
- In 2020, 13.6 million children were chronically ill⁶.
- Malnutrition has killed 2.3 million children⁶.
- More commonly found in girls than boys⁸.
- Low household income correlates with child malnutrition⁸.
- 60% of caregivers lacked dietary education⁸.



Note: An estimated 927,806 severely malnourished under-6 kids were identified across India till November 2020 by the Women and Child Development Ministry. Source: PFI 6/1/2021

Burden and Prevention

To prevent malnutrition of children in India, the government and the society must act early in the child's life if not before birth. The health of the mother is central in the health of the child and the child's future development. Prevention is addressing not only food access but also generational poverty and education.

There have been measure that the government have been implementing through policy and program interventions.

Direct policies involve⁷

- Expanding the safety net to cover all vulnerable groups (Children, adolescent girls, mothers and expectant women)
 - Popularise low cost nutritious foods
 - Fortify essential foods with appropriate nutrients
- Indirect policies include⁷
- Ensuring food security through increased local food production
 - Increasing production and availability of nutritionally rich foods
 - Implementation of land reforms that will reduce vulnerability of the poor
 - Public education nutrition and establishment of nutrition programs
 - Nutrition surveillance that will prevent food adulteration.

Activities and Reflection

- HIV campaign aimed at truck driver.
- Palliative care for cancer patients.
- Drug addiction centres for both adults and juveniles.
- Sanitation centres.
- Emergency medicine.
- Pulmonology facility.
- Homeless shelter for the elderly, women and children.
- Trip to various tourist attraction locations.

The experience was thoroughly informative and impactful. It helped me appreciate the importance of improving healthcare systems. Seeing how universal healthcare concerns are, I was challenged to broaden my understanding and perspective of healthcare. I have become aware of how lacking healthcare resources are and the need to make them much more available and accessible to everyone. Culturally, I was able to experience diversity and appreciate it as part of healthcare.

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