



CE 443

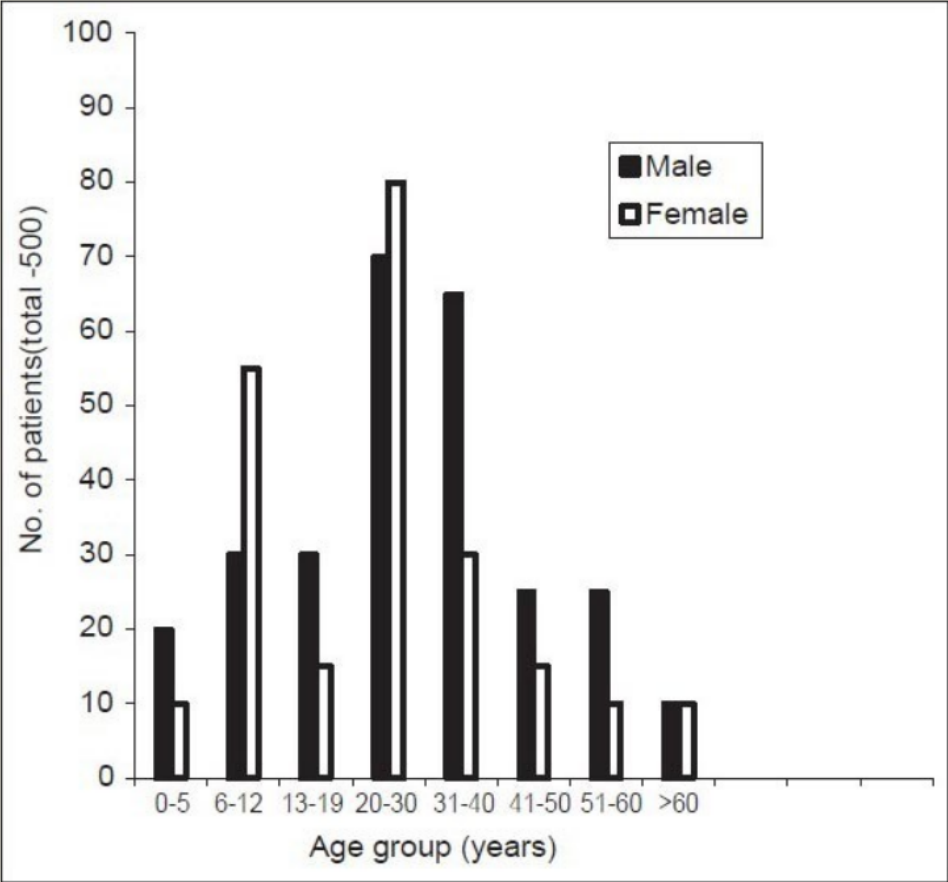
AMAN GOPE
19084005
Electrical Engineering (IDD)

Issues observed in your locality for the last two decades regarding the diseases borne by AIR, WATER (and others) and VECTOR, conventional control measures and your innovative inputs

After independence, India has experienced marked epidemiological transition due to change in disease pattern, improvement in the nutritional and health infrastructure, eradication and control of major killer diseases, and socioeconomic development. But even after more than 6 decades of self-governance, these health achievements are not withstanding. The burden of disease is still high due to large-scale poverty, developmental disparities between states, gender discrimination, growing aged population, and failure of government policies to deal with rural-urban divide in terms of provision of health facility both in government and private sector.

Majority of Indian population is dependent on medical services provided at primary care level by general practitioners (GPs). GPs constitute an important source of medical care in India, especially in the rural areas. They are the most preferred and considered to be the first contact person for medical services at primary care level in India

According to a study on 500 people by government of Jharkhand on diseases by air water and vector spread



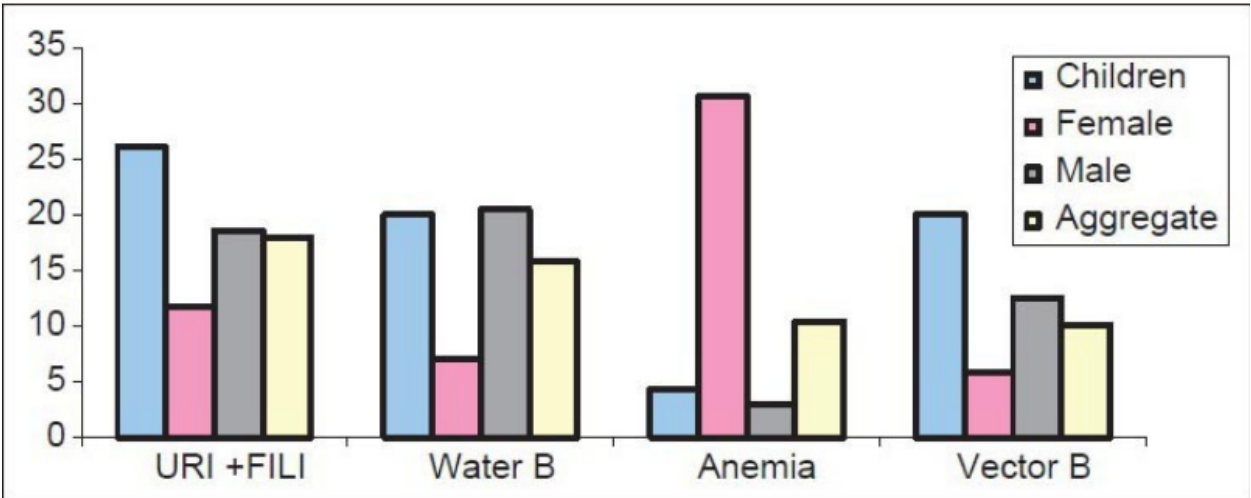
Age distribution of patients in the study

The patient age pattern attending the clinic **clearly shows that economically productive younger population is maximum affected in our locality**. Recent population survey of country in 2011 stated that India is currently having maximum number of younger population than any other country in world.

Mode of transmission	Diseases possible	Preventive measures and t/t
Air-borne diseases	Acute respiratory infections (including febrile influenza like illness) and tuberculosis	Adequate nutrition, case management
Water-related diseases	Diarrhea, dysentery, typhoid, parasitic infestation like hook worms, round worms, etc.	Safe drinking water, good sanitation, personal hygiene, case management
Vector-borne diseases	Malaria, leishmaniasis (kala-azar)	Vector control, self-protection and hygiene, case management
Contact or fomite-borne infection due to poor socioeconomic conditions including sexually transmitted infections	Scabies, tinea infections, gonorrhea, syphilis, chlamydia, chancroid, and worm infestations	Hygiene, personal protection, health education, case management

Common Diseases

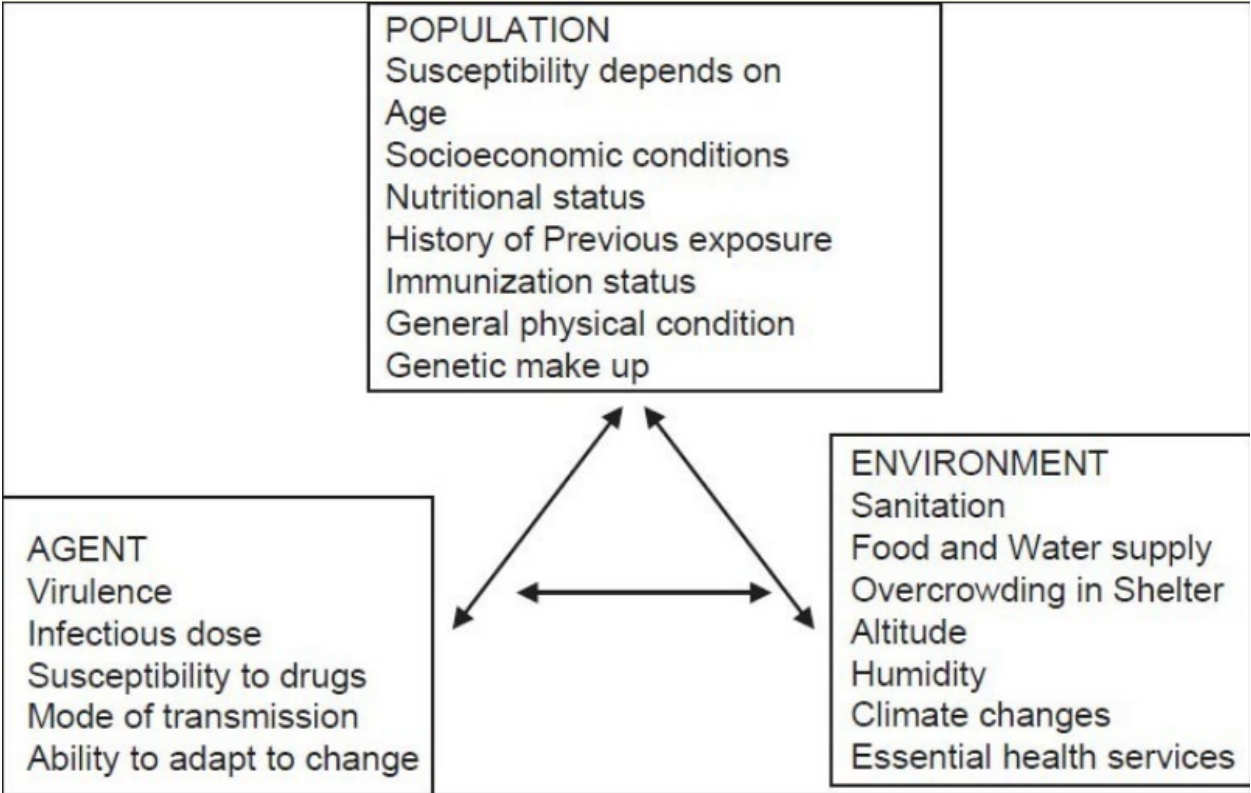
As locality is situated in a hilly area ,**vector-borne diseases** like malaria, filaria, kala-azar, etc.,. However, successful implementation of malaria control program and National Rural Health Mission (NRHM), the incidence of fatal cerebral malaria which was thought to be a major killer in recent past just a decade ago has come down significantly. From the morbidity profile of the patients; URI with associated FILI, acute gastroenteritis (diarrhea), and dermatological infections (like scabies, tinea, etc.) in children; anemia, nonspecific back pain with depressive illness, and URI in women; and URI (associated with FILI), dyspepsia (peptic ulcer disease), and typhoid in men were found to be the most prevalent diseases among patients who came for consultation.



Some common communicable diseases in the locality

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Air-borne diseases	Acute respiratory infections (including febrile influenza like illness) and tuberculosis	Adequate nutrition, case management
Water-related diseases	Diarrhea, dysentery, typhoid, parasitic infestation like hook worms, round worms, etc.	Safe drinking water, good sanitation, personal hygiene, case management
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Communicable diseases have been defined as an illness that arises from transmission of an infectious agent or its toxic product from an infected person, animal, or reservoir to a susceptible host, either directly or indirectly through an intermediate plant or animal host, vector, or environment. There exists equilibrium between susceptible population, infectious agent, and environment for constant presence of disease in particular locality



General Solutions

- More than 90% of the illness affecting the population can be effectively managed by properly trained family physician. This will significantly reduce cost and bring rationality in management of illness.
- Excessive referrals and the “Specialist” culture are proving to be very expensive for common man and will only get worse in future. Reduction of referrals and more emphasis on “Generalist” culture can significantly reduce healthcare expenditure by average lower middle class common man who is regularly being pushed to below poverty line (BPL) category due to these unexpected financial burdens. If the GPs could be made multicompetent and empowered to refer less, certainly the healthcare cost can be reduced substantially.

Control for Airborne Diseases

The control of URIs is based on early detection and standard case management. Volunteers and community health workers (CHWs) in the community can play a major role in controlling the disease. This also requires staff training, adequate drug supplies, and acute respiratory infection (ARI) management charts for primary health clinic (PHC) workers if it progresses to involve the lower respiratory tract (LRT). Access to healthcare (first-level health facilities and first referral hospitals) should also be assured. In addition to case management, URIs control also involves health education and personal hygiene.

Control of Waterborne disease

The following measures may be undertaken to control outbreaks of typhoid:

- Chlorinating the water supply is the best assurance against a massive typhoid outbreak in the community
- Promoting food hygiene should focus on hand washing among food handlers and checking that anyone who has ever been sick does not prepare food for others. However, identifying food vendors with typhoid fever and restricting them from work until they are not contagious may not be feasible in emergency situations
- Vaccine against typhoid (Vivotif oral) is available but not recommended as it offers only low, short- term individual protection and no protection against the spread of the disease
- Importance of due personal protection is always emphasized.