# Module 3: India's Rural Health System



- HS 142 Elective: Introduction to India's Health System
- 5<sup>th</sup> Semester BTech –IIT Guwahati 24<sup>th</sup> August, 2022(Wednesday)

Dr Daksha Parmar

Assistant Professor-Development Studies, HSS Department

Source: JSS, Chattisgarh

## Population Norms for Rural Health System

<b>Health Institution</b>	Plain Areas	Tribal/Hilly Areas
Sub Health Centres	5,000	3,000
Primary Health Centres	30,000	20,000
Community Health Centres	1,20,000	80,000

Source: Rural Health Statistics, MoHFW, Government of India, 2017

#### India's Public Health Delivery System

Medical Colleges

District Hospitals

Community Health Centre

A 30-bed hospital/referral unit for 4 PHCs with specialised services

Primary Health Centre (PHC)

A 4-6 bed referral unit for six sub-centres, manned with a medical office in-charge and 14 subordinate paramedical staff

Sub-centre

First point of contact for a community in India's primary healthcare ecosystem, manned with one female health worker/auxiliary nurse midwife and one male health worker.

### Average Population Covered by Health Facility in India 2019

Average rural population covered by health facility (based on the mid-year populatio as on 1<sup>st</sup> July 2019):

	Norm	Average rural
		population
		covered
Sub Centre	3000-5000	5616
Primary Health Centre (PHC)	20000-30000	35567
Community Health Centre (CHC)	80000-120000	165702

### Sub Health Centres

- It is the **first contact point** between the health care system of India and the community.
- The Sub-centres are vital peripheral institutions for providing primary health care to the people at the grassroots level.
- Provide services in relation to maternal and child health, family welfare, nutrition, immunization, diarrhoea control and control of communicable diseases programmes.
- Manpower: One Auxiliary Nurse Midwife(ANM); One Male Health Worker also known as Multi-Purpose Worker(MPW).
- One lady health visitor (LHV) is entrusted with the task of supervision of six Sub Centres.
  - A Medical Officer (MO) from the PHC will either visit the Sub Centre either once or twice in a month.
- A Sub-Centre must have its own **building** with separate rooms for observation, clinic and residence of the ANM
- As on 31st March, 2019, there are 157411 numbers of rural SCs functional in the country.

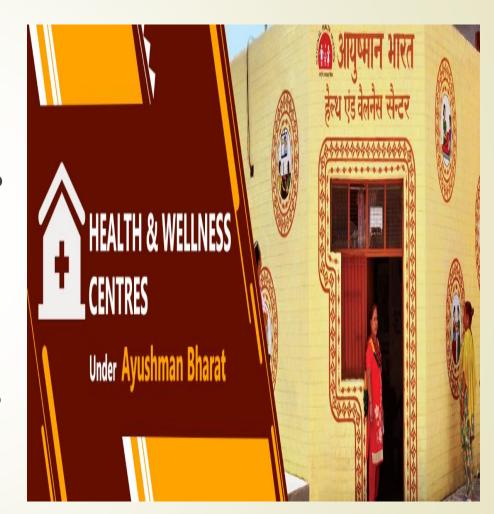


Outpatients at the health sub-centre at Viralimalai block in Pudukottai district in Tamil Nadu.

Source: Scroll.in

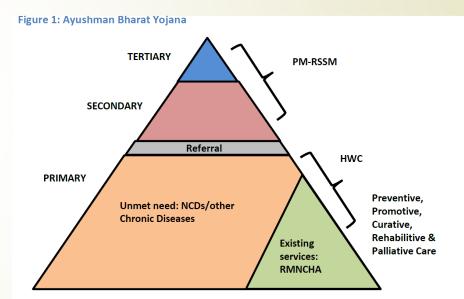
### From SCs to HWCs

- Sub-centres are expected to provide promotive, preventive and few curative primary health care services
- Focus in on providing Outreach Services-Door to Door visits
- Maternal and Child Health; Nutrition Diarrhoea
   Control, Family Welfare, Immunization, Control of
   Communicable and Non Communicable Diseases
  - In/February 2018, Government of India decided to convert 1.5 lakhs Sub-Centres to Health and Wellness Centres



# Health and Wellness Centres(HWCs)





Source: Lahariya, Chandrakant. 2018. "Ayushman Bharat Program and Universal Health Coverage in India." *Indian Pediatric* 55: 495–506.

Source: MoHFW

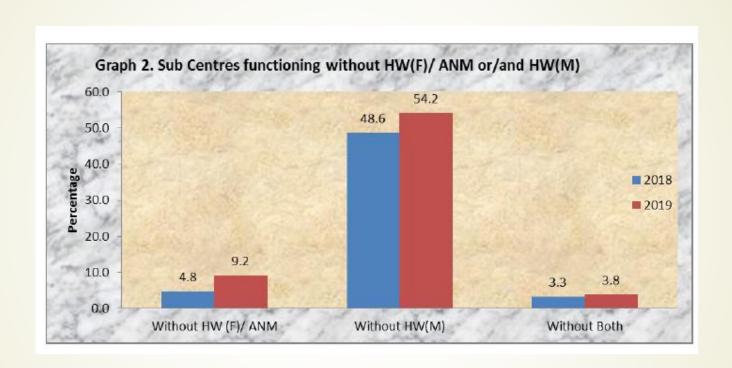
# Classification of HWCs as per Indian Public Health Standards(IPHS-2022)

- Health and Wellness Centres Sub Health Centre:
- a) Health and Wellness Centre Sub Health Centre in Rural areas
- b) Urban Health & Wellness Centre in Urban areas (15,000-25,000 population).
- ► HWC-Sub Health Centres: Community Health Officers (CHOs), Auxiliary Nurse Midwife (ANMs), Multi Purpose Workers(MPWs) and one ASHA per 1000 population-TEAM of CPHC.

### Service Provision at HWCs

- Go beyond first contact care.
- Critical role in the prevention of several disease conditions-communicable and chronic diseases.
- Undertake public health functions-community engagement.
- Meet people's needs through a process of population enumeration, regular home and community interactions and improving people's participation.
- Health promotion, early identification, ensuring treatment adherence, follow-up care, ensuring continuity of care by appropriate referrals, optimal home and community follow-up and disease surveillance.
- Clinical services-Outpatient care and platform for teleconsultation as well as expanding the range of diagnostics-two-day care beds.
- Provides two-way referral services to primary and secondary level facilities-equipped ambulances.

## SCs functioning without Health Workers



Source: Rural Health Statistics

### Primary Health Centres

- PHC is the first contact point between village community and the Medical Officer-Doctor
- The PHCs were envisaged to provide an integrated curative and preventive health care to the rural population
- It has around 4-6 beds for inpatient care.
- Manpower: 1 or 2 Medical Officers with 12-14 Paramedical staff.
- PHC provides 24\*7 services to its population.
- Outpatient Services, In-patient Services, Emergency Medical Care, Basic laboratory and diagnostic services, MCH Services.
- At the national level, there are 24855 PHCs functioning

### Manpower at PHC in India

Sr.N	Staff	Essential
0		
1	Medical Officer-MBBS	1
2	Medical Officer-AYUSH	1
3	Accountant cum Data Entry Operator	1
4	Pharmacist	1
5	Pharmacist-AYUSH	1
6	Nurse Midwife(Staff Nurse)	3
7	Health Worker (Female)	1
8	Health Assistant(Female)	1
9	Health Assistant/Lady Health Visitor	1
10	Health Educator	1
11	Laboratory Technician	1
12	Cold Chain Vaccine Logistic Assistant	1
13	Multi-Skilled Group D Worker	2
14	Sanitary Worker-Watchman	1



Source: IPHS –GoI 2012

An Auxiliary Nurse Midwife conducts a health check at a primary health Centre in Rajasthan. Source: Scroll.in

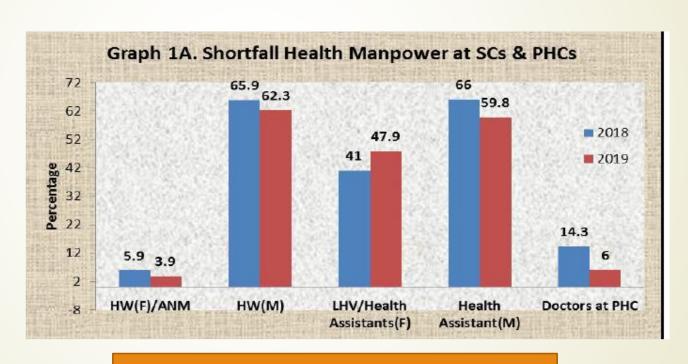
### PHCs-Contd

- PHC acts as a **Referral Unit** for 6 Sub Centres.
- The activities of PHC involve curative, preventive, promotive and family welfare services
- It refers out cases to CHC (30 bedded høspital)
- PHC constitutes the backbone of the present health services in India



Anaemic pregnant women get their doses of iron-sucrose intravenously in Dalot PHC, Pratapgarh district-Source Scroll.in

### Shortages of Health Manpower at SCs and PHCs



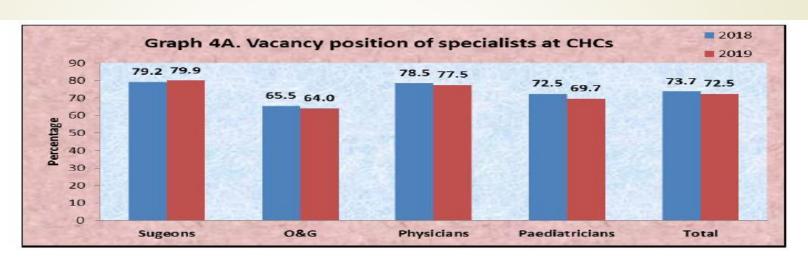
Rural Health Statistics, 2018-19

### Community Health Centres(CHCs)

- CHC is a **30-bedded hospital** providing **specialist care** in Medicine, Physician, Obstetrics and Gynecology, Surgery and Pediatrics, and Anaesthesiologists.
- ► 4 PHCs are included under each CHC thus catering to approximately 80,000 populations in tribal/hilly/desert areas and 1,20,000 population for plain areas
- CHCs acts as **block level health administrative unit** and **gatekeeper** for referrals to higher level of facilities-Block/Taluka/Tehsil/Circle Level.
- Services: Inpatient and Outpatient services.
- It should have one Operation Theatre, X-ray, Labour Room, Blood Storage Services and Laboratory facilities.
- Pharmacy-with all the essential drugs; Wards-Males and Female; Residential Quarters.
- Manpower: CHC is required to be manned by four medical specialists i.e. Surgeon, Physician, Gynecologist and Pediatrician supported by 21 paramedical and other staff.
- It serves as a referral centre for 4 PHCs and also provides facilities for obstetric care and specialist consultation

#### C. STAFF FOR COMMUNITY HEALTH CENTRE: Medical Officer # .... Nurse Mid– Wife (staff Nurse) ..... Dresser ..... 3 Pharmacist/Compounder ..... Laboratory Technician ..... 5 Radiographer ..... Ward Boys ..... Dhobi..... 9 Sweepers ..... Mali ..... 10 Chowkidar ..... 11 12 Aya ..... 13 Peon Total: 25

### Vacancy and Shortages of Specialists at CHCs





# Sub District/Division Hospitals

- Sub-district (Sub-divisional) hospitals are **below the district** and above the **block level** (CHC) hospitals and act as First Referral Units (FRUs) for the Tehsil/Taluk/blocks in which they are located.
- They form an important link between SC, PHC and CHC on one end and District Hospitals on other end.
- Bed Capacity of 31 to 100 in SDH-and caters to about 5-6 lakhs population
- Comprehensive care: OPD, IPD, Specialist services and emergency services are provided through these Subdistrict hospitals and they receive referred cases from neighboring CHCs, PHCs and SCs.
- A staff of around 20 doctors of different specialties, 45 paramedical staff, 20 administrative staff, and support staff.
- For 5-10 lakhs population there should be one Sub District Hospital (IPHS 2022).

# District Hospitals (DH)

- Every district should have at least **one** district hospital.
- Bed strength varies from 75 to 500 beds depending on the size, terrain and population of the district.
- Provide all basic specialty services and develop super-specialty services apart from routine OPD, indoor, emergency services, accident and trauma, dialysis and new born care.
- Specialists like surgeon, physician, obstetrician and gynaecologist, paediatrician, orthopaedic surgeon, ophthalmologist, anaesthetist, ENT specialist and dentist have been placed in the district headquarter hospital.
- Provisions for quality assurance in clinics, laboratories, blood bank, ward unit, pharmacies, and accident & emergency services
- The district hospital has a critical role to play in delivery of clinical care, knowledge hub and health professional training.

### Tertiary Teaching Hospitals and Medical Colleges

- All India Institute of Medical Services(AIIMS-New Delhi)-1956 premier Medical Institution and College.
- In 2006, six AIIMS-like medical institutes were announced in Patna, Bhopal, Raipur, Bhubaneswar, Jodhpur and Rishikesh.
- 16 new AIIMS have been approved of which 9 will be fully functional by 2022.
- Mangalagiri (Andhra Pradesh), Guwahati (Assam), Rajkot (Gujarat),
   Bilaspur (Madhya Pradesh), Deoghar (Jharkhand), Nagpur (Maharashtra), Bathinda (Punjab), Gorakhpur (Uttar Pradesh) and Kalyani in (West Bengal)

### Inputs of Health Systems

- -Infrastructure
- -Health Workers
- -Drugs
- -Diagnostics and Equipment's
- -Health Information Systems
- -Finances
- Combined together to provide quality health services- that are equitable, accessible, affordable and responsive to the needs of the population.

# Levels of Services in Health System

- Evolution of a multilevel infrastructure
- Three levels of health services: Primary, Secondary and Tertiary Level of Care
  - Pyramidal regionalization of health services
  - The right mix of competence and health care technology
  - Competence and technological needs and uses must be carefully defined to achieve the widest application to the largest population.

# Primary Level Care

- First contact point.
- Serves a defined community/area (PHC and their Sub Centres, Health and Wellness Centres, Dispensaries and Health Posts).
- Functions of the PHC range from curative to preventive and promotive activities.
- Carries out simple diagnostics and curative activities for patients
- Normally has no beds(except few for emergencies and maternity care)
- May/may not have a physician, nurse assisted by auxiliary health workers
- Low technology, simple equipment's

# Secondary Level Care

- Secondary level **REFERRAL CARE** available through CHCs and district hospitals.
- A recognized referral facility providing a 24 hour medical care
- Deals with more complex problems
- Represents a high level of competence(more specialists) than the source of referral.
- More beds and sophisticated technology in terms of diagnostic and treatment than the source of referral.

# Tertiary Level Care

- Most sophisticated hospital located in national or state capital or other big city
- Typically a University Teaching Hospital
- Providing the highest level of medical care available in the country or a region.
- Super Specialist Care with centralized expertise and high-end advanced technology
- Is a resource for education, training and consultation.

#### Three Tier Structure of Public Health Services

- Primary care services: Provided by the Sub Centres, Health and Wellness Centres and the Primary Health Centres.
- Secondary care services: Community Health Centres, Sub District Hospitals and District Hospitals.
- Tertiary care services: Medical Colleges and Teaching Hospitals

To provide continuity of care and integrated healthcare to population

### Contd

Logic of having levels of care is to judiciously use

- Technology
- Skills to satisfy the health needs, so that the majority of People have improved healthcare
- Resources
- Basic Services at the grassroots
- High Tech-More Expensive-Located at the Central Level-Can cover large number of people.

### Combining Services: Promotive, Preventive, Curative and Rehabilitative

#### FOUR Stages:

No Disease----Disease----Disability-----Death

Promote Health: Improve the general level of health and wellbeing so that conditions of disease process are prevented.

Preventive Services: Interventions so that we do not contract or develop disease

Curative Services: Medical Treatment and Cure

Rehabilitative Services: Rehabilitation of patients after surgery

