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Role of PrimaryHealthCarein India towards a Healthy India: An Objective Analysis

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ABSTRACT

Delivering the quality of primary care to large populations is challenging at all times, and this is definitely the case in India. Primary healthcare is a vibrant policy which rests the backbone of health service distribution. Primary healthcare is the everyday care desired to defend, sustain, or reinstate our health. For greatest number of people, it is both their first point of interaction with the healthcare system and their most commonly exercised health service. The advantages of a primary health care model for health service distribution are better access to desirable services; improved quality of care; a superior attention on prevention; timely supervision of health problems; and accumulative progresses in health and lower illness as a result of primary health care distribution. In India, idea of primary healthcare was set down by the recommendations of Bhore Committee (1946). In last 6 decades of independence, we have perceived much development in primary healthcare services, infrastructure, and correlated healthcare guides of the country. Nevertheless, countless challenges are in advance to attain health for all. There is a necessity to review primary healthcare in the country to know our strengths and weaknesses to deal with the challenges in the future. This review article discusses the development of primary healthcare system in India over the period of time as well as it also emphases on the challenge for the primary healthcare system in the current consequences as well as in the future scenario.

Key Words: Primary Health Centre (PHC),Sub-Centre(SC), National RuralHealthMission(NRHM), AccreditedSocialHealthActivist (ASHA)

1. Introduction

India is a signatory to the Alma Ata Declaration of 1978 and was committed to attaining the goal of "Health for All by the Year 2000 A.D." through the universal provision of primary health care services [1]. Access to high quality health care services plays an important part in the health of rural communities and individuals. Resolving the health problems of rural communities will require more than simply increasing the quality and accessibility of health services. Eventually, it mentions that India's public health system eradicated smallpox, polio and guinea worm, and fighting hard against measles [2]. However, the urban - rural health differences have received less attention in the entire course of action. On average, urban populations in modern-day periods live longer than do rural populations, and with the exception of HIV (Human immunodeficiency virus)/AIDS (Acquired immunodeficiency syndrome), exhibit healthier levels across a range of indicators [3].

However, the current conditions of physical infrastructure, staff, access, and usage are laid out here before identifying critical gaps and requirements in infrastructure and services [4]. Issues related to institutions, financing, and policy are discussed in the context of these critical need gaps and the potential role of the private sector in healthcare provisioning in villages is explored [4, 5]. On the basis of previous discussion, the present study makes an attempt to reveal the real picture of the system by examining the relationship between efforts and accomplishments.

2. STRUCTURE OF HEALTH CARE SYSTEMIN INDIA

Thehealth careinfrastructurein rural areas has been developed as a threetiersystemand isbased on the followingpopulation norms [4, 6];

Table 1: Three tierhealthSystembased on different populationnorms

	Population Norms	
Centre	Plain Area	Hilly/ Tribal/ Difficult Area
Sub-Centre	5000	3000
PrimaryHealth Centre	30,000	20,000
CommunityHealth Centre	1,20,000	80,000

Hereis thedetail description ofall of these three categories:

2.1. Sub-Centres(SCs)

The Sub-Centre is the most peripheral and first contact point between the Primary Health Care (PHC) system and the community. Each Sub-Centre is required to be manned by at least one Auxiliary Nurse Midwife (ANM) / Female Health Worker and one Male Health Worker. Under National Rural Health Mission (NRHM) there is a provision for one additional second Auxiliary Nurse Midwife (ANM) on contract basis [6].

One Lady Health Visitor (LHV) is entrusted with the task of supervision of six Sub-Centres. Sub-Centres are assigned tasks relating to interpersonal communication in order to bring about behavioral change and provide services in relation to maternal and child health, family welfare, nutrition, immunization, diarrhea control and control of communicable diseases programs [6, 7].

The Sub-Centres are provided with basic drugs for minor ailments needed for taking care of essential health needs of men, women and children**.** The Ministry of Health & Family Welfare is providing 100% Central assistance to all the Sub-Centres in the country since April 2002 in the form of salary of Auxiliary Nurse

Midwife (ANMs) and Lady Health Visitor (LHVs), rent and contingency, in addition to drugs and equipment kits. The salary of the Male Health Worker is borne by the State Governments [6].

Under the Swap Scheme, the Government of India has taken over an additional 39,554 Sub Centres from State Governments / Union Territories since April, 2002 in lieu of 5,434 Rural Family Welfare Centres transferred to the State Governments or Union Territories. There are 1,48,124 Sub Centres functioning in the country as on March 2011 [6, 8].

2.2. Primary Health Centres (PHCs)

Primary Health Centre (PHC) is the first contact point between village community and the Medical Officer. The PHCs were envisaged to provide an integrated curative and preventive health care to the rural population with emphasis on preventive and promotive aspects of health care. The PHCs are established and maintained by the State Governments under the Minimum Needs Programme (MNP)/ Basic Minimum Services (BMS) Programme. As per minimum requirement, a Primary Health Centre (PHC) is to be manned by a Medical Officer supported by 14 paramedical and other staff. Under National Rural Health Mission (NRHM), there is a provision for two additional Staff Nurses at Primary Health Centre (PHCs) on contract basis. It acts as a referral unit for 6 Sub Centres and has 4 - 6 beds for patients. The activities of PHC involve curative, preventive, promotive and Family Welfare Services. There were 23,887 Primary Health Centre (PHCs) functioning in the country as on March 2011 [6, 8].

2.3. Community Health Centres(CHCs)

Community Health Centres (CHCs) are being established and maintained by the State Government under Minimum Needs Programme (MNP) / Basic Minimum Services (BMS) programme [6, 9]. A Community Health Centres (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 has 30 in-door beds with one OT, X-ray, Labor Room and Laboratory facilities. It serves as a referral Centre for 4 Primary Health Centre (PHCs) and also provides facilities for obstetric care and specialist consultations. As on March, 2011, there
are 4,809 Community Health Centres (CHCs) functioning in the country [6] .

3. FIRST REFERRAL UNITS(FRUS)

An existing facility (District Hospital, Sub-Divisional Hospital, Community Health Centre etc.) can be declared a fully operational First Referral Unit (FRU) only if it is equipped to provide round-the-clock services for Emergency Obstetric and New Born Care, in addition to all emergencies that any hospital is required to provide [10]. It should be noted that there are three critical determinants of a facility being declared as a First Referral Unit (FRU) [6]:

i) Emergency Obstetric Care including surgical interventions like Caesarean Sections;

ii) New-born Care; and

iii) Blood Storage Facility on a 24-hour basis.

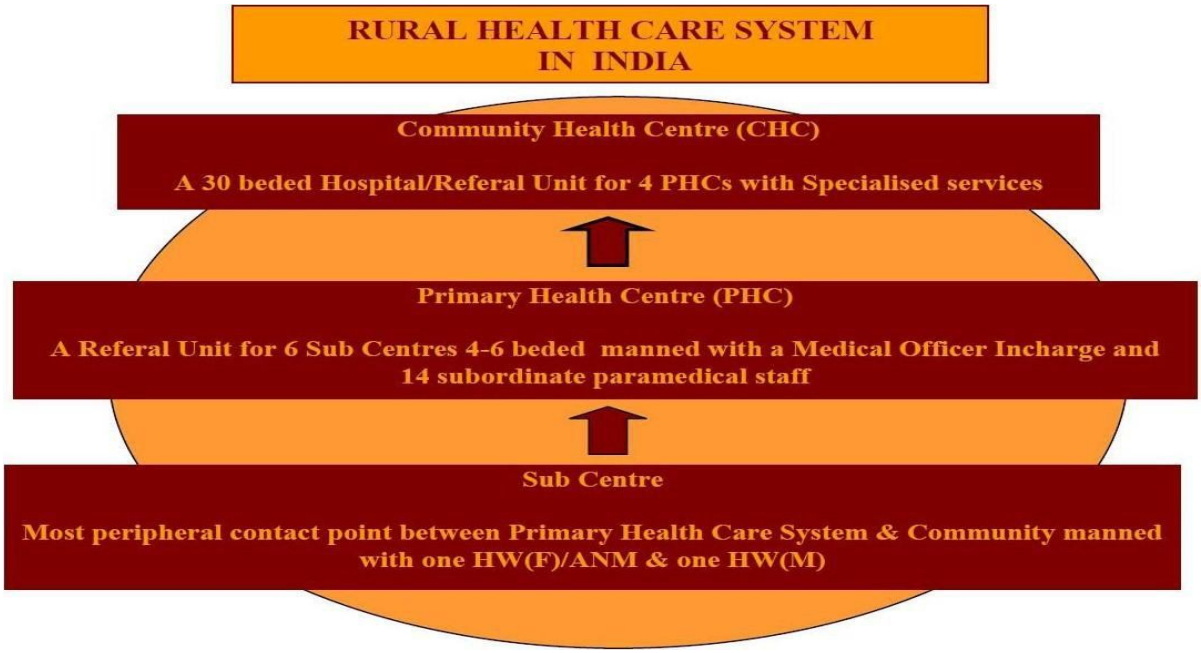

Figure 1: Describe the Rural Health Care System in India

4. Strengthening of Rural Health Infrastructure under National Rural Health Mission

The National Rural Health Mission (2005-12) seeks to provide effective healthcare to rural population throughout the country with special focus on 18 states, which have weak public health indicators and/or weak infrastructure [11]. These 18 States are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Manipur, Mizoram, Meghalaya, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttarakhand and Uttar Pradesh. The Mission is an articulation of the commitment of the Government to raise public spending on Health from 0.9% of GDP to 2-3% of GDP.

National Rural Health Mission (NRHM) [12] aims to undertake architectural correction of the health system to enable it to effectively handle increased allocations as promised under the National Common Minimum Programme and promote policies that strengthen public health management and service delivery in the country. It has as its key components provision of a female health activist in each village; a village health plan prepared through a local team headed by the Health & Sanitation Committee of the Panchayat (Local Governing Body); strengthening of the rural hospital for effective curative care and made measurable and accountable to the community through Indian Public Health Standards (IPHS); integration of vertical Health & Family Welfare Programmes, optimal utilization of funds and infrastructure, and strengthening delivery of primary healthcare. It seeks to revitalize local health traditions and mainstream Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH) [13] into the public health system. It further aims at effective integration of health concerns with determinants of health like sanitation and hygiene, nutrition, and safe drinking water through a District Plan for Health. It seeks decentralization of programmes for district management of health and to address the inter-State and inter-district disparities, especially among the 18 high focus States, including unmet needs for public health infrastructure. It also seeks to improve access of rural people, especially poor women and children, to equitable, affordable, accountable and effective primary healthcare [14].

5. Core and supplementary strategies of National Rural Health Mission (NRHM)

5.1. Core Strategies

Train and enhance capacity of Panchayati (Local Governing Body) Raj Institutions (PRIs) to own, control and manage public health services [15]. Promote access to improved healthcare at household level through the female health activist Accredited Social Health Activist (ASHA) [16] [17]. Health Plan for each village through Village Health Committee of the Panchayat. Strengthening sub-Centre through an untied fund to enable local planning and action and more Multi-Purpose Workers (MPWs) [16].

Strengthening existing PHCs and CHCs, and provision of 30-50 bedded CHC per lakh population (1,00,000) for improved curative care to a normative standard (Indian Public Health Standards defining personnel, equipment and management standards) [16]. Preparation and Implementation of an inter-sect oral District Health Plan prepared by the District Health Mission, including drinking water, sanitation & hygiene and nutrition [17]. Integrating vertical Health and Family Welfare programs at National, State, District, and Block levels [16] [18]. Technical Support to National, State and District Health Missions, for Public Health Management. Strengthening capacities for data collection, assessment and review for evidence based planning, monitoring and supervision [17]. Formulation of transparent policies for deployment and career development of

Human Resources for health [16] [17]. Developing capacities for preventive health care at all levels for promoting healthy life styles, reduction in consumption of tobacco and alcohol etc. promoting non-profit sector particularly in underserved areas [18] [19].

5.2. Supplementary Strategies

Regulation of Private Sector including the informal rural practitioners to ensure availability of quality service to citizens at reasonable cost. Promotion of Public Private Partnerships (PPP) for achieving public health goals. Mainstreaming Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH) - revitalizing local health traditions [8]. Moreover, reorienting medical education to support rural health issues including regulation of Medical care and Medical Ethics [9] [10] [19].

6. National Rural Health Mission (NRHM) Plan of Action relating to Infrastructure and Manpower Strengthening

6.1. Accredited Social Health Activists (ASHA)

Every village/large habitation will have a female Accredited Social Health Activist (ASHA) - chosen by and accountable to the panchayat- to act as the interface between the community and the public health system. Every State can chose specific model. [20]. ASHA would act as a bridge between the Auxiliary Nurse Midwife (ANM) and the village and be accountable to the Panchayat [21] [22]. However, ASHA will be an honorary volunteer, receiving performance-based compensation for promoting universal immunization, referral and escort services for Reproductive & Child Health (RCH), construction of household toilets, and other healthcare delivery programs [21] [22] [23] [24]. Moreover, ASHA will be trained on pedagogy of public health developed and mentored through a Standing Mentoring Group at National level incorporating best practices and implemented through active involvement of community health resource organizations [21][23] and will facilitate preparation and implementation of the Village Health Plan along with Anganwadi Worker (They need to provide care for newborn babies), ANM, functionaries of other Departments, and Self Help Group members, under the leadership of the Village Health Committee of the Panchayat [22] [24]. ASHA be promoted all over the country, with special emphasis on the 18 high focus States. The Government of India will bear the cost of training, incentives and medical kits. The remaining components will be funded under financial envelope given to the States under the programme [21] and will be given a Drug Kit containing generic AYUSH (Ayurveda, Yoga, Unani, Siddha and Homeopathy) and allopathic formulations for common ailments. The drug kit would be replenished from time to time.

Induction training of Accredited Social Health Activist (ASHA) to be of 23 days in all, spread over 12 months. On the job training would continue throughout the year [22]. Prototype training material to be developed at National level, subject to State level modifications and Cascade model of training proposed through Training of Trainers including contract plus distance learning model [21]. Training would require partnership with NGOs (Non-Government Organization) /ICDS (Integrated Child Development Services) Training Centres and State Health Institutes.

7. Strengthening Sub-Centres (SC)

Each sub-centre will have an Untied Fund for local action 10,000/- RS. per annum (335 US$). This Fund will be deposited in a joint Bank Account of the Auxiliary Nurse Midwife (ANM) and Sarpanch (is an elected head of a village level statutory institution) and operated by the ANM, in consultation with the Village Health Committee. Thus, Supply of essential drugs, both allopathic and AYUSH, to the Sub-centres [25].

However, in case of additional Outlays, Multipurpose Workers (Male)/ Additional Auxiliary Nurse Midwife (ANMs) wherever needed, sanction of new Sub-centres as per 2001 population norm, and upgrading existing Sub-centres, including buildings for Sub-centres functioning in rented premises will be considered [25].

8. Strengthening Primary Health Centres (PHCs)

Mission aims at strengthening PHCs for quality preventive, promotive, curative, supervisory and outreach services, through: adequate and regular supply of essential quality drugs and equipment (including Supply of Auto Disabled Syringes for immunization) to PHCs and provision of 24 hour service in at least 50% PHCs by addressing shortage of doctors, especially in high focus States, through mainstreaming AYUSH manpower [26].

In case of additional Outlays, intensification of ongoing communicable disease control programmes, new programmes for control of non-communicable diseases, up gradation of 100% PHCs for 24 hours referral service, and provision of 2nd doctor at PHC level (1 male, 1 female) would be undertaken on the basis of felt need [27].

9. Strengthening Community Health Centres (CHCs) for First Referral Care

A key strategy of the Mission is operationalizing existing Community Health Centres (30-50 beds) as 24 hour First Referral Units, including posting of anesthetists [29]. Codification of new Indian Public Health Standards setting norms for infrastructure, staff, equipment, management etc. for CHCs and also promotion of Stakeholder Committees for hospital management. Developing standards of services and costs in hospital care and develop, display and ensure compliance to Citizen's Charter at CHC/PHC level [28] [29].

In case of additional Outlays, creation of new Community Health Centres (30-50 beds) to meet the population norm as per Census 2001, and bearing their recurring costs for the Mission period could be considered [28] [29].

10. Rural Health Infrastructure - a statistical overview

10.1. The Centre's Functioning

Sub Centre, Primary Health Centre (PHC) and Community Health Centre (CHC) are the three pillars of Primary Health Care System. Progress of Sub Centres, which is the most peripheral contact point between the Primary Health Care System and the community, is a prerequisite for the overall progress of the entire system. A look at the number of Sub Centres functioning over the years revealed that at the end of the Sixth Plan (1981-85) there were 84,376 Sub Centres, which increased to 1, 30, 165 at the end of Seventh Plan (1985-90) and to 1, 45, 272 at the end of Tenth Plan (2002-2007). As on March, 2011- 1,48,124 Sub Centres are functioning in the country [6].

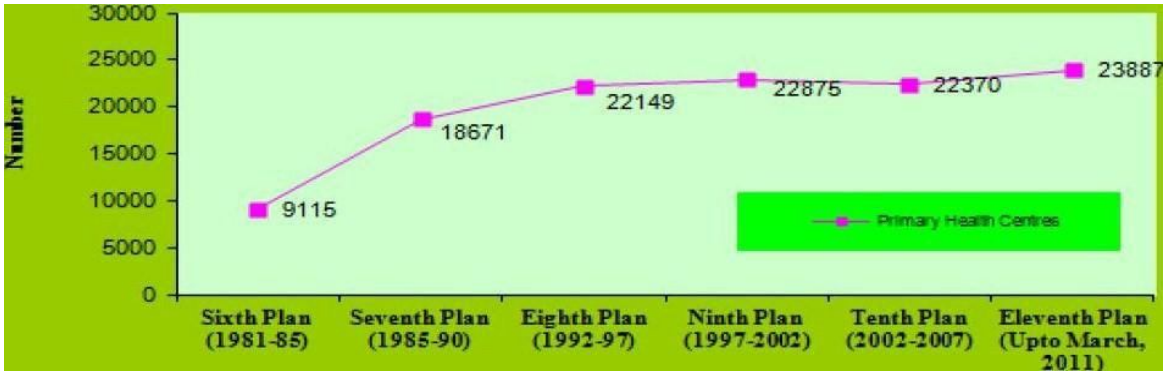

Figure 2: Progress of Sub-Centres (SCs) [6]

Figure 3: Progress ofPrimaryhealth Centres (PHCs) [6]

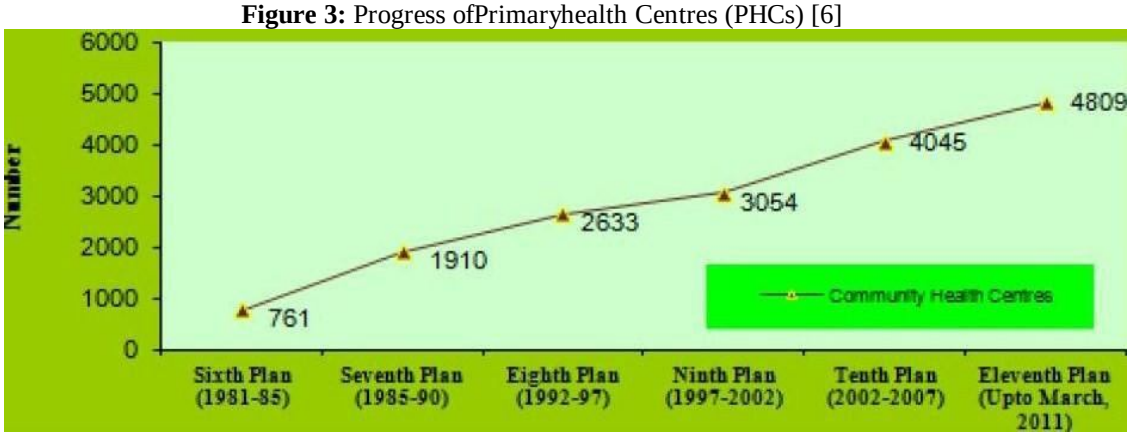

Figure4: Progress of Community Health Centres(CHCs) [6]

However, similar progress can be seen in the number of PHCs which was 9115 at the end of Sixth Plan (1981-85) and almost doubled to 18671 at the end of Seventh Plan (1985-90). Number of PHCs rose to 22370 at the end of Tenth Plan (2002-2007). As on March, 2011, there are 23887 PHCs functioning in the country. A number of PHCs have been upgraded to the level of CHCs in many States. In accordance with the progress in the number of Sub Centres and PHCs, the number of CHCs has also increased from 761 at the end of Sixth Plan (1981-85) to 1910 at the end of Seventh Plan (1985-90) and 4045 at the end of Tenth Plan (2002-2007). As on March, 2011, 4809 CHCs are functioning in the country [30] [31].

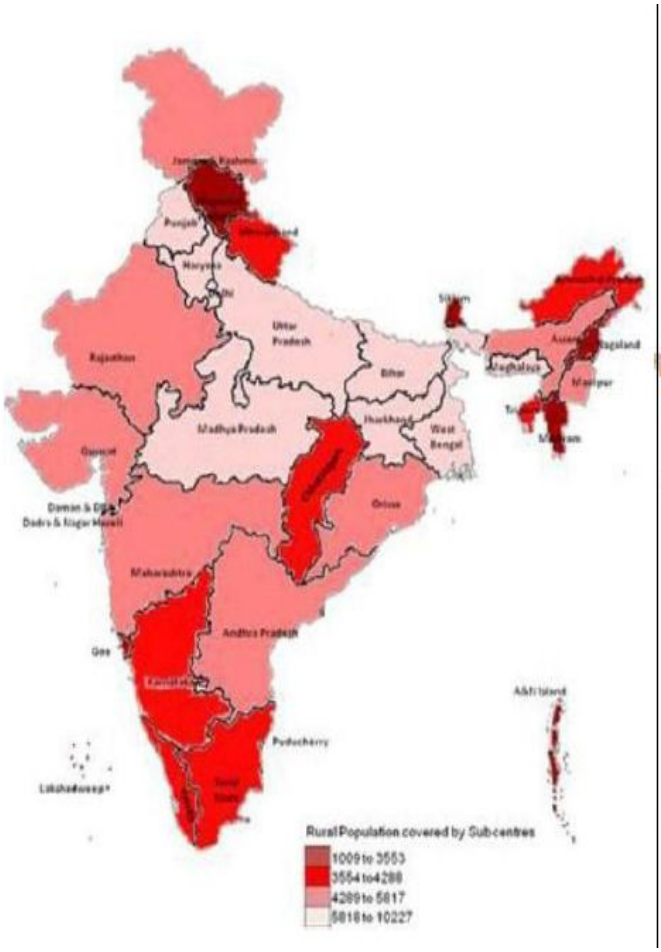

Figure5: Average Rural Population Covered by Centres (SC)(2011) [30]
(2011) [30]

Figure6: Average Rural Population covered Sub-by Primary Health Centres(PHCs)

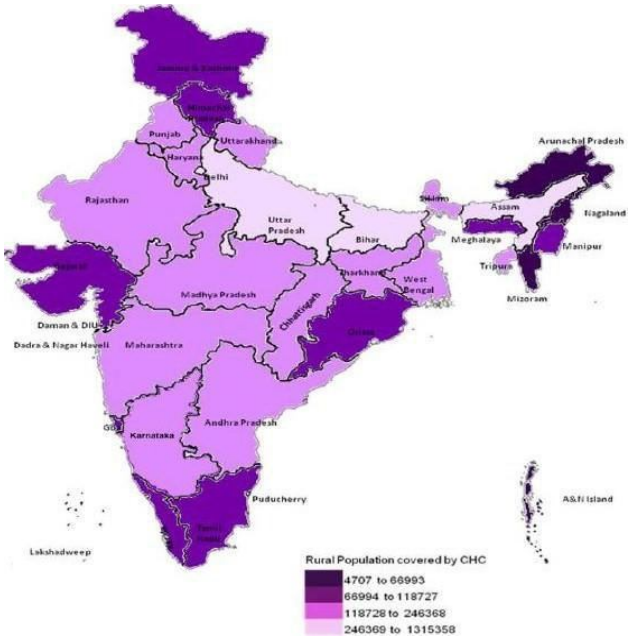

FIGURE 7: AVERAGE RURAL POPULATION COVERED BY COMMUNITY HEALTH CENTRES (CHCS) (2011) [30]

11. Drawbacks and how to Overcome

11.1. Health Inequality

Problems:

Overall, many health indicators have shown an improvement over the years, but the gains have been unequally distributed. Glaring inequalities are seen between different states, communities, between different strata in societies within the urban areas [32].

Remedial measures

It is important to understand that the roots of health inequities lie in social conditions outside the direct control of health systems and hence need to be tackled through inter- sectoral coordination and cross-government action [33]. Health inequities stem from social stratification and inequalities such as income, social status, neighborhoods where people live, employment conditions, personal factors etc.

In addition when a major chunk of healthcare expenditure is made out of pocket at the point of service delivery it increases health inequities as the rich can afford to pay and the poor cannot. In India nearly 75% of the health expenditure is such out of pocket expenditure [34]. Lack of accessibility and poor quality of services also adds to such inequalities.

The target of equitable distribution / universal coverage is yet to be achieved. Universal coverage of health services is necessary foundation for health equity. It is necessary but not sufficient to achieve health equity.

11.2. Human Resource

11.2.1. Manpower Shortfall

Problems:

Generally rural public health facilities across the country are having a difficult time attracting, retaining, and ensuring regular presence of highly trained medical professionals. The higher the level of training required for the position, the greater is this need gap [35].

There is a shortage of manpower at the centres providing primary healthcare. Overall there is a shortage of all cadres of workers. There is a 7.8% shortfall of the total requirement of doctors at PHCs and more than 50% shortage of the posts of male Man Powered Workforce (MPW) at sub-centres and specialists at community health centres. In the present circumstances, medical personnel in general do not want to relocate to rural and remote areas [36] [37].

Remedial measures

Keeping in view the above considerations three main types of approaches are to be made;
1) pre-service and in-service training of the newly recruited and existing health and family welfare personnel as a part of continuing education; 2) Appropriate basic professional training of medical, nursing and other paramedical personnel in future; keeping in view the contemporary needs reform of educational curriculum may be warranted. 3) Development of new categories of workers, as exemplified by the health guides, community health workers etc. [38].

11.2.2. Absenteeism

In addition to the shortage of service providers, the system is plagued by poor involvement and participation of those who are employed. There is a great degree of absenteeism among education and health providers that should be focused properly [4].

11.3. AccesstoInfrastructure

Even if a healthcare provider is not present in a village, he/she can be reached easily, some basic access issues would be taken care of. However, there are many limitations especially in the context of road connectivity and adequate transport services. Many of the healthcare facilities, public or private, are not accessible throughout the year to about a third of the villages. Private and government hospitals are relatively more accessible as these are typically located in areas well connected by metaled roads [4] [39].

Administrative data above showed that:

1) A well-defined system of public healthcare provision exists, 2) There is some shortfall in infrastructure, 3) There is a significant problem with the adequacy of working facilities (supplies and equipment) within these centres. 4) There is a significant lack of adequately trained staff and 5 There continues to be a lack of adequate access to the facilities that exist [4] [40].
This, of course, affects usage of the healthcare infrastructure and therefore access to adequate healthcare.

11.4. Low government spending, high out-of-pocket expenses and lack of insurance Problems

The government spending on healthcare is grossly inadequate. It spends about 1% of the nation's GDP on healthcare. This has led to very high out-of-pocket (OOP) expenditure for the general public. This means that 78% of all spends on healthcare are paid by the people and 72% of this is on drugs alone. Estimates suggest that 39 million people are forced into poverty because of medical expenditure. Here's a breakdown of total % of GDP spent on healthcare, percentage spent by individuals and per capita spent by the governments of various developed, developing and under-developed countries [41].

Table2: Describestotal% of GD Pspenton Health care by the governments of various developed, developing and under developed country [41]

Country	Total % of GDP spent on healthcare	Private Expenditure %	Per capita spent on healthcare (US $)	Per capita government spends on healthcare (US$)
India	4.1	70.8	132	39
USA	17.9	46.9	8362	4437
UK	9.6	16.1	3480	2919
South Africa	8.9	55.9	935	412
China	5.1	46.4	379	203
Brazil	9	53	1028	483
Pakistan	2.2	61.5	59	23
Nigeria	5.1	62.1	121	46
Russia	5.1	37.9	998	620

Source: WHO

As we can see India is nowhere near the top bracket in the sense of private expenditure. India doesn't even spend anything close to what BRICS (Brazil, Russian, India, China and South Africa) counterparts spend. In fact, Indian spending is even lower than a country like Nigeria's. Because of the centre's negligent attitude, most of the resources lie with the private sector. It currently has 80% of all doctors, 26% of nurses, 49% of beds and 78% of ambulatory services and 60% of in-patient care. It seems audacious not to exploit those resources [41] [42].

Remedial measures

To this effect, the Planning Commission had suggested that the public sector tie-up with the private sector (PPP) to improve the country's healthcare scenario. However, the proposal was vehemently opposed by health activists who felt that it would 'corporatize' healthcare [41] [43].

11.5. Lack of Insurance

Another big issue is lack of medical insurance. Only 243 million of India's out of 1.2 billion citizens are covered under Govt. health insurance schemes and a total of 300 million (25% of total population) don't have health insurance at all [41] [42].

11.6. Medical Education and Health care Human Resources

India has some top quality medical institutes which provide quality education and a huge number of medical professionals are added to the task-force every year. While that is indeed a huge number, most of them are based in urban centres resulting in deficit of healthcare services in rural and semi-urban India [40] [41] [42].

Table 3: Number of Different Medical Practitioners in India [41]

HealthHR	Doctors	Specialists	AYUSH*	Nurses	ANM	Pharmacists	Total
Numbersgraduating annually	30,000	18,000	30,000	54,000	15,000	36,000	1,63,000

*Practitioners of Ayurveda, Yoga, Unnani, Siddha and Homeopathy

11.6.1. Some statistics to ponder about

Urban India has four times more doctors and three times more nurses than rural India. Only 193 of India's 640 districts have medical colleges. This has a domino effect on the local community with doctors moving away, either to urban centres with medical colleges or abroad. Almost 80% of the medical colleges is located in South Tobridgetheseissues, variousstepshave been suggested(Chennai, Bangalore) and West India (Mumbai) creating a dearth of professionals in Central, Eastern and Northern India [41] [42].

To bridge these issues, various steps have been suggested

1) Giving AYUSH doctors the right to prescribe allopathic drugs after a one year course. 2) AIIMS (All India Institute of Medical Science) like institutions must be established in various parts of the countries. They are going to be located in Patna, Bhopal, Bhubaneshwar, Jodhpur, Raipur and Rishikesh. 3) A compulsory bond that will force the doctors to return to India after completing their medical education abroad. 4) Setting up of a centralized National Commission of Human Resources and Health which will have all other medical bodies in the country under its jurisdiction.
However, most of these initiatives met vehement criticism and have experienced opposition from the medical community [40] [41].

11.7. Information Technology (IT) for Accessible Healthcare Provisioning

Problems

It is well known that many doctors are not willing to serve in the rural areas due to lack of facilities even if they are paid high salaries [4].

Remedial measures
However, as telecom network is spreading swiftly and the government is keen to provide broadband connectivity to all parts of the country, information technology can be effectively harnessed to improve the delivery of health services [4] [44].

11.8. Education of People about Health Matters Problems
People in general, particularly in rural areas and urban slums are rot knowledgeable about health matters, such as what are the prevailing health problems in the community and how to prevent and control these, what are the needs for the maintenance and promotion of health; what are the resources available and how and when to utilize these etc. [45]. Socio-economic backwardness, ignorance, traditions and superstitions had been acting as blocks to progressive thinking including development of the concept of positive health. Health education efforts have been very inadequate. Illiteracy, particularly of the women, has acted as barriers to communication in health and related matters [46].

Remedial measures
Appropriate educational programs are to be organized for different groups of people. Health education to the community should be a prime function of the health workers and village level functionaries [47]. In this endeavor, functionaries of other sectors such as social and women's welfare, education, agriculture and animal husbandry, panchayats and voluntary agencies like mahila mandals and youth clubs can contribute very significantly [48]. Health education in schools and adult education sessions should incorporate various health problems, and the methods for their prevention and control [49].

11.9. Promotion of Food Supply and Proper Nutrition Problems
Nutritional deficiency states of varying degrees in regard to protein-calorie malnutrition, vitamin-A and iodine deficiency and nutritional anemia are prevalent in a wide section of population. Nutritional deficiency states are particularly noticeable among pregnant and nursing mothers and in infants and children [50] [51] [52]. Available statistics indicate that of the deaths occurring among the age group of 0 to 5 years, in 7 % of deaths malnutrition is the causative factor and in another 46 % it is an associated factor [52] [53].

Remedial measures
This dismal condition can be substantially improved by organizing and conducting nutrition education in the community and in the schools; encouraging people to make kitchen gardens and community gardens; and educating the people on food hygiene. Steps also need to be taken to encourage growing locally more foods such as cereals, pulses, vegetables, fruits, milk, fish and poultry products through cooperative and other efforts so as to make these easily accessible and affordable to the people [52] [54]. Simultaneously, the purchasing capacity of the families might be improved through a variety of income generating schemes.

In these endeavors functionaries from other sectors such as agriculture, animal husbandry, irrigation, banks and cooperatives, social and women's welfare, panchayat and voluntary organizations can play a very significant role [55] [56].

11.10. Supply of Safe Water and Basic Sanitation Measures Problems
Many health problems have their roots in various aspects of community life and cannot be influenced by medical or health interventions alone. Safe and potable water is not available to a majority section of the population. Many of the water borne diseases prevalent in the country are preventable, but the importance of the use of pure and safe water as well as the personal hygiene is not properly appreciated [57] [58] [59]. Environmental sanitation is very poor, particularly in rural areas and in urban slums. In most of the places, there are no proper arrangements for disposal of human and animal wastes, sewage etc. [59].

Remedial measures
Systematic approach should be made to survey and identify resources of safe water and to carry out proper analysis of the water. Arrangements should be made for regular purification of water through chlorination etc. before using for drinking and other household purposes [59] [60]. People at all levels including the village leaders, women, and children at schools should be educated on continuous basis about the importance of proper maintenance of water resources. Observation of personal hygienic practices should be emphasized [61]. It would be important to organize the people and the resources for constructing household and community latrines, and making arrangements for collection and disposal of human and animal wastes [62].

12. Conclusion

Bringing qualified health workers to rural, remote, and underserved areas is a challenging task which needs to be undertaken on a priority basis. Overall, the attitude of the medical students towards the importance of rural health care is positive. However, perceived factors such as infrastructure and salary emerged as potential barriers to students opting for a career in rural health. According to World Health Organization (WHO) a number of supportive activities essential for successful implementation of primary health care which are enumerated below [63] [64]: 1) Community involvement and participation, 2) Intra- and inter-sect oral coordination, 3) Development of effective referral support, 4) Development and mobilization of resources, 5) Involvement of managerial processes.

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