Aust. J. Rural Health (2002) **10**, 129–135

Original Article

CURRENT HEALTH SCENARIO IN RURAL INDIA

Ashok Vikhe Patil,[1] K. V. Somasundaram[2] and R. C. Goyal[2]

[1]*International Association of Agricultural Medicine and Rural Health and* [2]*Department of Community Medicine, Rural Medical College of Pravara Medical Trust, Maharashtra, India*

ABSTRACT: *India is the second most populous country of the world and has changing socio-political-demographic and morbidity patterns that have been drawing global attention in recent years. Despite several growth-orientated policies adopted by the government, the widening economic, regional and gender disparities are posing challenges for the health sector. About 75% of health infrastructure, medical man power and other health resources are concentrated in urban areas where 27% of the population live. Contagious, infectious and waterborne diseases such as diarrhoea, amoebiasis, typhoid, infectious hepatitis, worm infestations, measles, malaria, tuberculosis, whooping cough, respiratory infections, pneumonia and reproductive tract infections dominate the morbidity pattern, especially in rural areas. However, non-communicable diseases such as cancer, blindness, mental illness, hypertension, diabetes, HIV/AIDS, accidents and injuries are also on the rise. The health status of Indians, is still a cause for grave concern, especially that of the rural population. This is reflected in the life expectancy (63 years), infant mortality rate (80/1000 live births), maternal mortality rate (438/100 000 live births); however, over a period of time some progress has been made. To improve the prevailing situation, the problem of rural health is to be addressed both at macro (national and state) and micro (district and regional) levels. This is to be done in an holistic way, with a genuine effort to bring the poorest of the population to the centre of the fiscal policies. A paradigm shift from the current 'biomedical model' to a 'sociocultural model', which should bridge the gaps and improve quality of rural life, is the current need. A revised National Health Policy addressing the prevailing inequalities, and working towards promoting a long-term perspective plan, mainly for rural health, is imperative.*

KEY WORDS: *commercialisation of health, communicable diseases, health infrastructure, health policy, health seeking behaviour, rural health.*

INTRODUCTION

India is drawing the world's attention, not only because of its population explosion but also because of its prevailing as well as emerging health profile and profound political, economic and social transformations.

After 54 years of independence, a number of urban and growth-orientated developmental programs having been implemented, nearly 716 million rural people (72% of the total population), half of which are below the poverty line (BPL) continue to fight a hopeless and constantly losing battle for survival and health. The policies implemented so far, which concentrate only on growth of economy *not* on equity and equality, have widened the gap between 'urban and rural' and 'haves and have-nots'. Nearly 70% of all deaths, and 92% of deaths from communicable diseases, occurred among the poorest 20% of the population.

However, some progress has been made since independence in the health status of the population; this is reflected in the improvement in some health indicators. Under the cumulative impact of various measures and a host of national programs for livelihood, nutrition and

Correspondence: Dr Ashok Vikhe Patil, President: International Association of Agricultural Medicine and Rural Health, c/o Pravara Medical Trust, Loni 413 736, Ahmednagar District, Maharashtra, India. E-mails: pravara@bom3.vsnl.net.in or pmt@pravara.ren.net.in

Accepted for publication January 2002.

shelter, life expectancy rose from 33 years at Independence in 1947 to 62 years in 1998. Infant mortality declined from 146/1000 live births in 1961 to 72/1000 in 1999. The under 5 years mortality rate (U5MR) declined from 236/1000 live births in 1960 to 109/1000 in 1993.[1] Interstate, regional, socioeconomic class, and gender disparities remain high. These achievements appear significant, yet it must be stressed that these survival rates in India are comparable even today only to the poorest nations of sub-Saharan Africa.

The rural populations, who are the prime victims of the policies, work in the most hazardous atmosphere and live in abysmal living conditions. Unsafe and unhygienic birth practices, unclean water, poor nutrition, subhuman habitats, and degraded and unsanitary environments are challenges to the public health system. The majority of the rural population are smallholders, artisans and labourers, with limited resources that they spend chiefly on food and necessities such as clothing and shelter. They have no money left to spend on health. The rural peasant worker, who strives hard under adverse weather conditions to produce food for others, is often the first victim of epidemics.

This present paper attempts to review critically the current health status of India, with a special reference to the vast rural population of the beginning of the twenty-first century.

HEALTH PRACTICES AND PROBLEMS IN RURAL INDIA

Rural people in India in general, and tribal populations in particular, have their own beliefs and practices regarding health. Some tribal groups still believe that a disease is always caused by hostile spirits or by the breach of some taboo. They therefore seek remedies through magico-religious practices. On the other hand, some rural people have continued to follow rich, undocumented, traditional medicine systems, in addition to the recognised cultural systems of medicine such Ayurveda, *unani*, *siddha* and naturopathy, to maintain positive health and to prevent disease. However, the socioeconomic, cultural and political onslaughts, arising partly from the erratic exploitation of human and material resources, have endangered the naturally healthy environment (e.g. access to healthy and nutritious food, clean air and water, nutitious vegetation, healthy life styles, and advantageous value systems and community harmony). The basic nature of rural health problems is attributed also to lack of health literature and health consciousness, poor maternal and child health services and occupational hazards.

The majority of rural deaths, which are preventable, are due to infections and communicable, parasitic and respiratory diseases. Infectious diseases dominate the morbidity pattern in rural areas (40% rural: 23.5% urban). Waterborne infections, which account for about 80% of sickness in India, make every fourth person dying of such diseases in the world, an Indian. Annually, 1.5 million deaths and loss of 73 million workdays are attributed to waterborne diseases.[2]

Three groups of infections are widespread in rural areas, as follows.

1. Diseases that are carried in the gastrointestinal tract, such as diarrhoea, amoebiasis, typhoid fever, infectious hepatitis, worm infestations and poliomyelitis. About 100 million suffer from diarrhoea and cholera every year.[3]
2. Diseases that are carried in the air through coughing, sneezing or even breathing, such as measles, tuberculosis (TB), whooping cough and pneumonia. Today there are 12 million TB cases (an average of 70%). Over 1.2 million cases are added every year and 37 000 cases of measles are reported every year.[3]
3. Infections, which are more difficult to deal with, include malaria, filariasis and *kala-azar*. These are often the result of development. Irrigation brings with it malaria and filariasis, pesticide use has produced a resistant strain of malaria, the ditches, gutters and culverts dug during the construction of roads, and expansion of cattle ranches, for example, are breeding places for snails and mosquitoes. About 2.3 million episodes and over 1000 malarial deaths occur every year in India.[3] An estimated 45 million are carriers of microfilaria, 19 million of which are active cases and 500 million people are at risk of developing filaria.[3]

Every third person in the world suffering from leprosy is an Indian. (Nearly 1.2 million cases of leprosy, with 500 000 cases being added to this figure every year.[4])

Malnutrition is one of the most dominant health related problems in rural areas. There is widespread prevalence of protein energy malnutrition (PEM), anaemia, vitamin A deficiency and iodine deficiency. Nearly 100 million children do not get two meals a day. More than 85% of rural children are undernourished (150 000 die every year).[1]

A recent survey by the Rural Medical College, Loni (unpublished data), in the villages of Maharashtra State, which is one of the progressive states, has revealed some alarming facts. Illness and deaths related to pregnancy and childbirth are predominant in the rural areas, due to the following.

1. Very early marriage: 72.5% of women aged 25–49 years marry before 18, where the literacy rate is 80%.
2. Very early pregnancy: 75% married women had their first pregnancy below 18 years of age.
3. All women invariably do hard physical work until late into their pregnancy.
4. Fifty-one per cent of deliveries are conducted at home by an untrained traditional birth attendant.
5. Only 28% of pregnant women had their antenatal checkup before 16 weeks of pregnancy.
6. Only 67% of pregnant women had complete antenatal checks (minimum of three checkups).
7. Only 30% of women had postnatal checkups.

In addition, agricultural- and environment-related injuries and diseases are all quite common in rural areas, for example: mechanical accidents, pesticide poisoning, snake, dog and insect bites, zoonotic diseases, skin and respiratory diseases; oral health problems; socio-psychological problems of the female, geriatric and adolescent population; and diseases due to addictions.

The alarming rate of population growth in rural areas nullifies all developmental efforts. The rural population, which was 299 million in 1951, passed 750 million in May 2001. Since 1951, the government has been attempting through vertical and imported programs to combat the problems, but to no avail. However, the new National Population Policy 2000[5] gave emphasis to an holistic approach; for example, improvement in 'quality of life' for all, no gender bias in education, employment, child survival rates, sound social security, promotion of culturally and socially acceptable family welfare methods.

Two distinct types of health status have been in evidence. The 'rural–urban' divide depicted in Table 1, helps in understanding the health status of rural people, which is far behind their urban counterparts. There are also other divides such as 'rich–poor', 'male–female', 'educated–uneducated', 'north–south, 'privileged–under privileged', etc.

HEALTH POLICY AND INFRASTRUCTURE FOR RURAL AREAS

Inappropriate

The selective health intervention during the colonial period resulted in the so-called 'modern medicine' in India. After independence, the state has chosen to follow these 'western models'. This system, which is highly selective, institutionalised, centralised and top down – not by oversight but by design – and which treats people as objects rather than subjects, has failed to address the needs of the majority, that is to say, the rural poor and indigenous people. While a significant portion of the country's medical needs, especially in rural areas, have been attended to by the indigenous health systems such as Ayurveda, homeopathy, *unani*, naturopathy and folk medicine, it has been conveniently neglected by the policy makers, and planners. The draft of the new National Health Policy 2001, has also not given due importance to Indian systems of medicine. The concept of a family physician with social accountability, which has traditional roots and acceptance from the rural masses, has diminished with the existing policies and value systems.

TABLE 1: *The disparity of rural and urban health in India*

Sector	Indicator	Rural	Urban	Combined	Ref. year
1	Population (million)	716.0	286.0	1002.0	2000
2	Birth rate	30.0	22.6	28.3	1995
3	Death rate	9.7	6.5	9.0	1997
4	IMR	80.0	42.0	72.0	1998
5	MMR (per 100 000)	438.0	378.0	408.0	1997
6	Stillbirth rate	10.8	5.3	10.5	1995
7	% Deliveries attended by untrained people	71.0	27.0	59.0	1995
8	% Deaths attended by untrained people	60.0	22.0	54.0	1995
9	Total fertility rate	3.8	2.8	3.5	1993
10	% children (12–23 months) who received all vaccinations	31.0	51.0	–	1992–1993

Source: Sample Registration System, Government of India, 1997–98 (reproduced with permission).

The present westernised hospital-based medical education and training, which is supported by public funding, has proved beyond doubt that new doctors are not inclined to and capable of meeting the needs of the majority of the public (i.e. rural people), which is where their services are most required.

A recent study conducted by the Rural Medical College (unpublished data) on the involvement of general practitioners, has revealed the following facts:

1. 80% of general practitioners practice western medicine (allopathic medicine) without proper training.
2. 73% consider cost to be the most important factor when prescribing a drug, without considering pharmacological properties.
3. 75% were aware of the Government-run Primary Health Center (PHC) or village subcentres without knowing the names of the medical officer at the PHC; half (53%) do not know the health workers in their own area.
4. About 67% had knowledge of various national health programs but only 33% participated.
5. Over 68% received information regarding the health programs through the media, and only 28% received information through public health staff.
6. About 74% provide family planning services, mainly oral contraceptives and condoms. General practitioners do provide services to pregnant women (65%), but only 35% registered them.
7. Almost all general practitioners routinely handle cases of diarrhoea, but only 29% know the exact composition of oral dehydration solution (ORS); amazingly, none knew the right method to prepare the ORS packet.

While the current need for rural areas is medical and paramedical manpower, such as social physicians, public health nurses and midwives and paramedical workers (e.g. laboratory technicians, rural health and sanitation workers, health literacy educators, population educators, community health guides, community oral health guides), the country has been concentrating on producing specialist doctors.

Some of the rural health technologies propagated are inappropriate, such as ORS packets instead of locally available water and cooked cereals, sugar–salt solution and herbal teas, which are culturally accepted by the community.

Though the concept of primary health care is appropriate to rural areas, it remained sound on paper only because of the deliberate attempts of health professionals. The present system has not left any scope for the involvement of the community, nor for grassroots level health workers to take ownership of the programs and integrate them with overall development. The concept of placing a community-selected person from the village, and providing them with essential training so that the community can cope more effectively with its health problems, was the centrepiece of the PHC. As a result, the basic requirements of decentralised people-based, integrated curative, preventive and promotive services have been totally undermined by the 'vertical programs'.[6]

INEQUALITY AND INADEQUACY

It is unfortunate that while the incidence of all diseases are twice higher in rural than in urban areas, the rural people are denied access to proper health care, as the systems and structures were built up mainly to serve the better off (Table 2).

While the urban middle class in India have ready access to health services that compare with the best in the world, even minimum health facilities are not available to at least 135 million of rural and tribal people, and wherever services are provided, they are inferior. While the

TABLE 2: *Health infrastructure: urban versus rural*

	Rural	Urban	Total	Year
Hospitals	3968 (31%)	7286 (69%)	13 692	1993
Beds	95 315 (20%)	524 118 (80%)	696 203	1993
Dispensaries	12 284 (40%)	15 710 (60%)	27 403	1993
Doctors	440 000	660 000	1 100 000	1994
All systems	440 000	660 000	1 100 000	1994
% allopathy	25%	75%	38%	

Source: Duggal R. Health Care Budgets in a Changing Political Economy. *Economic and Political Weekly* May 1997: 17–24 .

TABLE 3: *Patterns of health sector growth in India, 1951–1993*

	1951		1993	
Infrastructure	*n*	% rural	*n*	% rural
Hospitals	2 694	39	13 692	31
Hospital beds	117 000	23	696 203	20
Dispensaries	6 600	79	27 403	40

Source: Duggal R. Health Care Budgets in a Changing Political Economy. *Economic and Political Weekly* May 1997: 17–24 .

health care of the urban population is provided by a variety of hospitals and dispensaries run by corporate, private, voluntary and public sector organisations, rural healthcare services, mainly immunisation and family planning, are organised by ill-equipped rural hospitals, primary health centres and subcentres.

Much has been achieved in the last 54 years. The first landmark in official health policy of independent India was the acceptance of the Bhore Committee recommendations of 1946, which laid the foundations of comprehensive rural health services through the concept of primary health care.[7] Primary Health Centres were established in rural areas from 1952 onwards. The basic infrastructure is that one PHC covers 30 000 of the population and one subcentre covers 5000 of the population. As of December 2000, there were 2935 Community Health Centers (CHC), 22 975 PHC and 137 271 subcentres to cater to the needs of nearly 650 million people.[8] It is unfortunate to note that due to regional imbalances, the type and quality of services being offered, adequacy and motivation of the staff, and shortage of

TABLE 4: *Pattern of public investment on health and rural health and Indian system of medicine and homeopathy (ISM and H) in different plan periods*

Five Year Plans	Health Budget as % of Total Budget	Outlay on PHC and Rural Health as % of total Health Budget	Outlay on ISM and H as % of total Health Budget
I (1951–1956)	3.30	17.8	0.61
II (1956–1961)	3.00	10.2	2.84
III (1961–1966)	2.60	18.05	4.34
Annual Plan (1966–1969)	2.10	–	–
IV (1969–1974)	2.10	6.60	4.72
V (1974–1979)	1.90	5.40	3.64
VI (1980–1985)	1.80	8.54	1.60
VII (1985–1990)	1.70	NA	1.27
VIII (1990–1995)	1.60	NA	NA

NA, Data not available.

Source: Mukhopadhyay A. State of India's Health, 1998. New Dehli: Voluntary Health Association of India, 1999.

TABLE 5: *Selected public health expenditure ratios, all India*

	1980–1981	1985–1986	1991–1992	1994–1995
Health expenditure as % to total government expenditure	3.29	3.29	3.11	2.63
Expenditure on medical care as % of total health expenditure	43.30	37.82	26.78	25.75
Expenditure on disease programs as % of total health expenditure	12.96	11.69	10.59	9.51

Source: Duggal R. Health Care Budgets in a Changing Political Economy. *Economic and Political Weekly* May 1997: 17–24.

supplies in the Centres have attributed to gross under-utilisation of the infrastructure.

It is obvious that there is a marked concentration of health personnel to maintain the heavy structures, in the urban areas. Of the 1.1 million registered medical practitioners of various medical systems, over 60% are located in urban areas. In the case of modern system (allopathic) practitioners, as many as 75% are in cities.[9] As a result, a large number of unqualified people (quacks) have set up medical practice in rural areas, and the rural population as a result exerts pressure on urban facilities.

Curative care, which is the main demand of rural people, has been ignored in terms of investment and allocation. In addition, the percentage share of health infrastructure for rural areas has declined from 1951 to 1993 (Table 3).[10]

INADEQUATE PUBLIC HEALTH EXPENDITURE AND MISALLOCATION OF PUBLIC MONEY

The total expenditure on health in India is estimated as 5.2% of the GDP; public health investment is only 0.9%, which is by far too inadequate to meet the requirements of poor and needy people.[10] Successive 5-year plans allocated less and less (in terms of per cent of total budget) to health. A major share of the public health budget is spent on family welfare. While 75% of India's population lives in rural areas, less than 10% of the total health budget is allocated to this sector. Even here the chief interest of the primary health care is diverted to family planning and ancillary vertical national programs such as child survival and safe motherhood (CSSM) which are seen more as statistical targets than as health services. According to one study, 85% of the PHC budget goes on personnel salaries.[11]

The lack of commitment to provide health care for its citizens is reflected in the inadequacy of the health infrastructure and low levels of financing, and also in declining support for the various healthcare demands of the people; especially since the 1980s, when the process of liberalisation and opening up of the Indian economy to the world markets began. Medical care and control of communicable diseases are crucial areas of concern, both in terms of what people demand as priorities as well as what existing socioeconomic conditions demand. Along with overall public health spending, allocations to both these subsectors also showed a declining trend in the 1980s and 1990s (Table 5).[11]

In the case of medical research, a similar trend is observed. While 20% of research grants are allocated to studies on cancer, which is responsible for 1% of deaths, less than 1% is provided for research in respiratory diseases, which accounts for 20% of deaths.

GROWING COMMERCIALISATION OF HEALTH

The disillusionment and frustration with the growing ineffectiveness of the government sector is gradually driving poor people to seek help of the private sector, thus forcing them to spend huge sums of money on credit, or they are left to the mercy of 'quacks'.

While estimates vary, the government probably accounts for no more than 20–30% of total health spending. The share of the private sector has grown from 14% in 1976 to 67% in 1993. About 67% of all hospitals, 63% of all dispensaries and 78% of all doctors in India are in the private/corporate sector. Much has been experienced and written on the growing privatisation and commercialisation of the medical practices and their links with drug and medical instrument manufacturers.[12] While WHO recommends about 130 essential drugs, as many as 4000 drugs are available on the Indian market.

Due to this, 'buying' healthcare has gone beyond the reach of the rural poor. Two recent all-India surveys (NSSO 46th round and NCAER, New Delhi), have shown that medical treatment is the most important cause of rural indebtedness, next only to dowry.[12]

A recent study conducted by the undergraduate medical students of the Rural Medical College, Loni (unpublished data), on the expenditure pattern of rural families, reveals the following facts.

1. 70% of families spend 60% of their annual income on health.
2. 93% of the amount spent on health is on curative and emergency care.
3. Invariably, men receive preferential treatment (56% of the expenditure).
4. Adolescents and the elderly are neglected (14% of expenditure).
5. Poor families spend a higher percentage of their income on health than do the rich, as they are forced to use the services of the private sector because the public sector is ill-equipped and unaccountable.

While a number of health insurance schemes are available to the urban sector, the unorganised rural masses that do not have insurance coverage are driven into the arms of the exploitative private sector.

STRUCTURAL ADJUSTMENT PROGRAMS AND RURAL HEALTH

While the 1980s saw the beginning of liberalisation and privatisation of the Indian economy, the 1990s have accelerated the pace under the umbrella of SAP.

Today, the availability of drugs is inadequate in all of the PHC, SC and hospitals that have been set up by the government over the years. There is thus an infrastructure lying unused merely because of the sharp cutback in public expenditure on health, and the focus on privatisation of health services. This affects severely the poorest of the population. It obviously denies the basic fundamental right for essential health care and also forces rural poor to revert to social taboos and resort to harmful health-seeking behaviours ('quacks', witch doctors and illegal medical practitioners). The negative impact of SAP as a long-term solution to poverty in rural areas of India has been well documented.[13]

CONCLUSION

The 'magical' year of 2000 AD has come to an end. 'Health for all by 2000 AD' remains as a distant mirage and the slogan has been rephrased as 'Health for all in 21st Century'. Primary health care, as a paradigm, has been lost on the way. The failure of the 'Alma Ata Declaration' in fulfilling its objectives to shift resources from urban to rural scene, reiterates the urgency of looking for alternative strategies at the national and local level.

To improve the prevailing situation, the problem of rural health is to be addressed both at the macro (national and state) and micro level (district and regional), in a holistic way, with genuine efforts to bring the poorest of the population to the centre of the fiscal policies. A paradigm shift from the current 'biomedical model' to a 'sociocultural model' is required, to meet the needs of the rural population. A comprehensive revised National Health Policy addressing the existing inequalities, and work towards promoting a long-term perspective plan exclusively for rural health is the current need.

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