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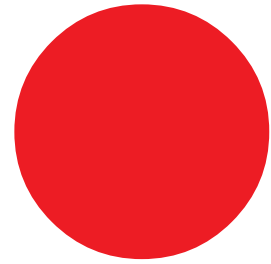


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February 2018

Editorial: Health Workforce in India - Facing the Crisis in Public Health

Jashodhara Dasgupta

Writing about the great Bengal famine of the 1940's a scholar termed it 'starvation amidst plenty' (Bose 1990). This paradox is well-suited to describe the crisis of the health workforce in India, where the public health system appears plagued by shortages and persistent vacancies despite India having the largest number of medical colleges in the world churning out doctors and paramedics every year, many thousands of whom enter the private sector or serve abroad. While India beckons as a world destination for tertiary medical treatment, the poor who are sick in this country are being turned away at primary and secondary health facilities because the public health system lacks the human resources to provide basic healthcare. While almost every neighbourhood in urban settings sports the ubiquitous signboards advertising private medical care, vast swathes of the Indian countryside are bereft of any access to medical treatment. These inconsistencies and contradictions are explored in this edition of the *medico friend circle Bulletin* that examines the crisis of public health in India given the multifarious issues around health workforce. This includes not only the more visible categories such as doctors and nurses but also the lab technicians, pharmacists, physiotherapists, and least visible administrators, cleaners and so forth.¹

India is faced with an enormous challenge of planning sustainable production and management of health workforce. The northern EAG states that account for nearly half the country's population have only a fifth of the total number of MBBS seats and nursing colleges, most of which are concentrated south of the Vindhyas. Policy focus has overwhelmingly been centred on Allopathic medical training, to the comparative neglect of an integrated multi-pathy approach and the production of adequate paramedic workers to support the physicians. India produces over

56700 allopathic doctors each year besides over 32000 AYUSH doctors and yet the public health system is starved of doctors and specialists (Duggal, this volume).

Only one-fifth of those who call themselves doctors in rural areas have a formal qualification to practice medicine (Anand and Fan 2016), and rural areas or impoverished pockets are served by informal providers with very limited training. Given the shortfall of trained Allopathic doctors in the public health system, most states in India have coped by giving contractual appointments to AYUSH doctors, and they are implicitly expected to provide Allopathic medicines (Priyadarsh et al, this volume). Once qualified, allopathic doctors are meant to be regulated by the Medical Council of India, but rampant corruption within this body has made it the subject of intense parliamentary scrutiny (92nd Standing Committee report, Rajya Sabha, 2016).

Cost-effective quality care requires 4 nurses to one doctor, whereas in India the ratio was 1.5 nurses to a doctor in 2009 (Hazarika 2013, figures from the MoSPI report 2011). With 2% of the country's population, Kerala has 38% of India's trained nurses; meanwhile there are 73 districts in India that do not have a single nurse with medical qualifications (Anand and Fan 2016). On the other hand, even where there is a glut of trained nurses, contracting agencies may create an artificial scarcity and fail to recruit nurses who are locally available and who meet the requirements of the District Reservation policy, as seen in Chhattisgarh (Kerketta et al, this volume). A few cadres of health workers have dwindled and almost disappeared such as male health workers and the village traditional birth attendant. While the lakhs of community-based ASHA workers across the country

are definitely a sign of hope, they are unable to fulfil the roles of these former cadres, and there are many issues with the 'voluntarism' enforced upon them and the inadequate financial compensation.

Examining the conditions within which the health workers carry out their duties, it emerges that cost-cutting and efficiency drives have led to reduced permanent appointments and recruitment on contract basis which creates an informal sector within the formal public sector employment. These contractual workers do not have job security or a career path, are paid less and have fewer social security benefits. The lower categories in the medical hierarchy provide services through private contractors, and may have inadequate training, poor working conditions and split accountability (Roy, Guha, this volume). Even trained doctors who are willing to serve in remote and difficult areas may not be allotted proper accommodation with electric supply, which makes it difficult for them to stay on (Joshi et al, this volume).

Calculations for the 2015 draft National Health Policy calculated a per capita health spending of Rs 3800 which would require over Rs 500 thousand crores (Duggal, this volume). The current health budget is less than half of that, and has failed to meet the goal of 2.5% recommended in the HLEG Report (Planning Commission 2011). This under-resourcing and weakening of public health systems over decades has fuelled the rise of private health markets and the establishment of the corporate medical sector. The HLEG report noted that non-creation of posts in public health facilities and undue delays in recruitment are pervasive across all levels of care, leading to high vacancies and additional work burden on those in position. On the other hand, the private sector now accounts for 85% of doctors and 93% of hospitals in India (Planning Commission 2011).

Over the last few decades, the private sector has played an ever-increasing role in medical education to feed the workforce demand. These for-profit colleges have serious shortages in faculty, infrastructure and quality of education. Yet, allured by the prospect of good earnings, young people pay exorbitant amounts to obtain medical training in private institutions. Predictably after qualifying, they do not prefer to enter public service as they hope to recoup their investment. Some of them end up almost as bonded labour in private hospitals, trying to repay their loans (Mahindrakar, Basu, Som, this volume). The recent struggles of nurses in private hospitals across India have highlighted this situation. Young women who join nursing are usually from rural and deprived

backgrounds (Som, this volume). The subordinate position of nurses within the medical hierarchy where most doctors are male and upper-caste is further entrenched by the fact that nurses are predominantly from Scheduled Castes and Tribes (Duggal, this volume).

The entire paradigm of the way physicians are trained needs to be reexamined, to reconfigure the power relations between patients and providers, and the lack of contextualized decision-making for health. Currently medical training in India creates physicians who see themselves as all-powerful and all-knowledgeable in comparison to their patients. Medical schools equip physicians primarily for urban-based tertiary care rather than essential community-based services, because the site of teaching is a multi-specialty tertiary care centre. The doctors produced in this setting aim for further specialization and post-graduate degrees since they feel under-equipped to handle the health needs of the community (Zachariah, this volume). They are often unable to express empathy for their patients and fail to respond to their human contexts, seeing bio-medical treatment as divorced from the messy realities of peoples' lives.

As against this there have been efforts to develop other fields more related to the social determinants of health, called by assorted names such as Family Medicine, Preventive and/or Social Medicine, Community Health and Public Health (Gandhi, this volume). There is also a movement to make doctors more humane in their approach through a study of humanities in the medical curriculum, although it has not yet gone beyond the metropolises (Basu, this volume).

The papers in this Bulletin examine the kinds of workforce required, and the perceived shortfall, while exploring the untold stories behind these. They delve into some of the questions around the production of the health workforce and whether it is fit for purpose. The papers describe the ever-increasing role of the private sector in the production and deployment of the workforce, while investigating the privatization and informalization within the public sector itself, and consequent erosion of workers' rights.

The papers also offer rays of hope in terms of current efforts to address the issues and widen the approaches to community medicine. One way out is the mandatory service in public hospitals after training is completed, in order to fulfil the shortage of trained workforce (Duggal, this volume). The Chhattisgarh government's innovative policy approaches seek to improve retention through additional pay and bonus points for

post-graduate training, which provide considerable incentive for doctors and nurses (Joshi et al, this volume). In-service capacity-building of health providers is another approach that can lead to self-growth and improvement in performance, despite initial resistance (Naveen, this volume). A recent innovative effort in Maharashtra has created a promising cadre of change-makers among younger professionals, through the NIRMAN programme at SEARCH Gadchiroli where the current alumni of 870 includes 365 doctors, who subsequently fan out motivating others to join this platform (Tiwari, this volume).

The papers reflect the urgent need to re-imagine the existing public health system and think creatively of coping with the health workforce crisis. The HLEG Report had envisioned that the health sector could emerge as the single largest employer in the country providing employment opportunities to 50 lakh people, and engaging Rural Healthcare Practitioners with a three-year customized training as has already been tried in some states. Perhaps a less-doctor-centric model can indeed be the way forward, in which task-shifting and de-specialization can enable nurse-practitioners, rural medical cadres or AYUSH practitioners to assure quality services for the poor in under-resourced areas. The production of trained health workforce needs to be done at district level to the extent possible, in order to ensure the contextualized healthcare provision that is lacking at present (Planning Commission 2011).

In absence of an independent Human Resource Commission, the responsibility to improve the situation falls directly on the Union Ministry and State Departments of Health and Family Welfare. The professional associations (IMA, IAPSM, IPHA) and trade unions could play the important role of pressurizing the governments towards changes in this direction; however at present there is a regrettable lack of unified purpose or broader vision of the requirements of the country.

Note

¹ WHO defines 'Health Worker' (HW) as 'all people engaged in actions whose primary intent is to enhance health'. It includes a wide variety of personnel: family members, informal health care providers (traditional healers, medical quacks), ASHAs, Traditional Birth Attendants, ANMs, MPHs, Nurses (hospital-based, home-based), Pharmacists, Health Supervisors, Hospital Support Staff (Class-IV attendants, cleaners, security guards), Physiotherapists, Technicians (Lab, OT, X-ray), Dentists, Doctors (of different systems),

Clinical Specialists and Super-specialists (of different systems), Public Health experts, teaching faculties (medical, nursing), Hospital/Health Managers, Counsellors, Computer Operators...and the list may go on.

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References:

Anand and Fan (2016)- Anand, S and Fan, V (2016), The Health Work Force in India: Human Resources for Health Observer, Series No. 16, WHO

Bose, Sugata (1990) Starvation amidst Plenty: The Making of Famine in Bengal, Honan and Tonkin, 1942-45 Modern Asian Studies Vol. 24, No. 4 (Oct., 1990), pp. 699-727

Hazarika, Indrajit (2013), Health workforce in India: assessment of availability, production and distribution, WHO South-East Asia Journal of Public Health 2013 | April-June | 2(2)

Planning Commission (2011) High level Expert Group Report on Universal Health Coverage for India November 2011

Rajya Sabha (2016) Parliamentary Standing Committee on Health and Family Welfare: 92nd Report on the Functioning of the Medical Council of India.

Health Workforce in India: Facing the Crisis in Public Health

Venue: Babu Kuti Campus, Sewagram Wardha, Maharashtra

Date: 9th to 11th February, 2018

The 44th Annual Meet of the MFC will discuss the topic Health Workforce in India: Facing the Crisis in Public Health on February 9-11, 2018 at the Babu Kuti campus, Sewagram, Wardha,

The discussions at the Annual Meet will explore the different aspects of health workforce in today's context of health worker shortage, shrinking roles of the state and goals of the National Health Policy 2017. The sessions will examine the current policy scenario and the domination of the private sector; the distribution and engagement of health workers to meet the goals of Universal Health Coverage, and the issues around training and regulation of health workers. There will be case studies of promising practices in under-resourced settings and recommendations for sustainable ways of addressing the current crisis.

All are invited.

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Health Workforce in India: Facing the Crisis in Public Health Concept Note MFC Annual Meet July 2018

YK Sandhya and Jashodhara Dasgupta

The Health System in India:

Health systems and policies have a critical role in determining the manner in which health services are delivered, utilized and affect health outcomes. The Report on the Health Survey and Development Committee, commonly referred to as the Bhore Committee Report (1946), was a landmark report for India whose recommendations for a three tiered health-care system to provide preventive and curative health care in rural and urban areas, placing health workers on government payroll and limiting the need for private practitioners became the principles on which the public health-care system was founded. The objective was to ensure that access to primary care is independent of individual socioeconomic conditions.

This did not mean that a flourishing private sector did not exist; in fact India has seen the rapid and unregulated expansion of the private sector in health over the years since Independence. Even in the pre-independence era, India had a very large private medical sector especially for non-hospital care. While the colonial state developed the hospital sector at a slow pace, individual private sector expanded without any state intervention (Duggal Ravi, 1997). However, investments in the private hospital sector were very small until the 1970s, after which it spread rapidly. The reasons for this were the slowing down of state investments in hospital sector and the promotion of private sector by giving them subsidies, soft loans, duty and tax exemptions. Further, a market for modern medicines in the peripheral regions sprung up after the government established PHCs and cottage hospitals in rural areas (ibid).

The shift from the welfare state to the neo-liberal state in India, brought into force, a state sponsored privatization agenda started during the 8th (1992-1997) and 9th (1997-2002) Five Year Plans. The shortcomings of the public sector were used as a pretext to increase and encourage the participation of the private sector, especially through public-private partnerships (Purohit, 2001). This change in the nature of the health system over the years also had a reflection on the changing nature of the health work force.

Health Workers: The definition

Health workers play a central role in ensuring the appropriate management of all aspects of the health

system. A society's health and its development are strongly linked and health workers have an indirect but crucial role in the achievement of sustainable human and economic development.

WHO defines health workers as "all people engaged in actions whose primary intent is to enhance health" (The World Health Report 2006). Health workers play a central role in ensuring the appropriate management of all aspects of the health system - from logistics and facility management to finances and health care interventions.

Health Personnel in India - Pattern of Distribution:

India's health workforce is a combination of both registered, formal health care providers and informal medical practitioners (Hazarika, 2013). In India, the existing database on health workers has always been inadequate; information on those employed in public sector health facilities are available but there is a lack of information on the large numbers in private practice and the data from professional registries are scattered and also inaccurate as they do not reflect retirement, death or migration. Nonetheless, the 2001 Census reveals that at the national level the density of doctors of all types (allopathic, ayurvedic, unani and homeopathic) in 2001 was 80 doctors per 100,000 of the population and the density of nurses and midwives was 61 per 100,000 (ibid).

Not only is there a scarcity of health professionals, but there is also a skewed distribution of these professionals with the density being four times higher in urban areas than rural areas, although 72% of the population resides in rural areas (Census 2001 as cited in Anand Sudhir and Fan Victoria, 2016). Further, there is enormous variation in density across states; the doctor density in Punjab (one of the upper income states), was 2.6 times higher than in Bihar, one of the poorest states. In fact, the lowest 30 districts ranked by density of allopathic doctors and nurses with a medical qualification are found mainly in the states of Uttar Pradesh, Bihar and Madhya Pradesh. However, what is an issue for concern is that as many as 73 districts had no nurses with a medical qualification, while on the other extreme the state of Kerala had 38% of the country's medically qualified nurses but only 3% of the population (ibid).

Further, there are a large number of informal providers and traditional healers who do not have the

professional qualifications. Data shows that only one in five doctors in rural India are qualified to practice medicine, and that 57% of those who called themselves doctors did not have medical qualifications and 31% were educated only up to Class 12 (WHO report, 2016). However these informal providers are often the first point of contact for a large proportion of the population especially rural and are sometimes preferred because they communicate to the people in an understandable and sympathetic manner (Vlassoff, 1994).

Gender and the workforce:

Gender, among other power relations, plays a critical role in determining the structural location of women and men in the health labour force and their subjective experience of that location (George Asha, 2007). The resulting gender biases influence how work is recognised, valued and supported with differential consequences at the professional level - career trajectories, pay, training and other technical resources, professional networks - and at the personal level - personal safety, stress, autonomy, self-esteem, family and other social relationships (ibid). Women are more likely to be stereotyped as caring health personnel than men. Medicine is the premier health occupation that rules the division of labour within health care and data shows that a little over 53% of all male health workers were doctors while only 17 % of all female health workers were doctors. On the other hand, there were more female than male nurses and midwives, with females accounting for 83% of the nurse category (Census 2001, as cited in Anand Sudhir and Fan Victoria, 2016). In aggregating health worker categories for males and females, the weight of doctors (high medical qualification) among males is large and the weight of nurses (low medical qualification) is small; among females, in contrast, the weight of doctors is small and the weight of nurses is large. Further, female doctors are less likely to specialise and more likely to be under and unemployed in comparison to their male colleagues as reflected by the data - a larger percentage of marginal workers were female - 53.2% as compared to 37.4% of main workers. Thus, the challenges faced by women entering medicine remains substantial. Apart from their less specialised roles and less secure employment basis, women are in extremely few positions of leadership in medicine, not just in India but in many countries across the world (Reichenbach and Brown, 2004).

The impact of Caste:

Apart from economic factors, dissatisfaction with working conditions and unhappiness with prevalent social attitudes towards nurses were identified as being

of crucial importance for the international migration of Indian nurses (Thomas P, 2006) It was found that nurses working in the private sector and from some linguistic and religious groups were particularly prone to migration. Nurses working in the government sector seemed to be more worried about being unable to adjust to working conditions abroad, and therefore less keen to migrate. The fact that they enjoyed better pay scales, a more relaxed work atmosphere and more facilities may have also played a part here. What seemed to be vital to the decision to migrate for a large number of government sector nurses belonging to the so-called 'Forward' and 'Middle' Castes was that they were being crowded out of promotional avenues as a result of the government's policy of Reservations in Promotions for Scheduled Castes and Tribes (ibid).

Health Workforce: Production and training:

Review of the available data on training of health workers highlights three important developments. First, the recent rapid expansion in the training capacity of health workers - between 1991 and 2013, the number of admissions to medical colleges increased by 121%, while within the same period admissions to dental institutions expanded 668% (Medical Council of India). Similarly there has been a three-fold increase in nursing and midwifery institutes. However, like the distribution of the health workforce, there exist inequalities in the distribution of the training institutions among states. Although the EAG¹ states account for almost half of the country's population, approximately one-fifth of the medical colleges only and a quarter of the dental and nursing institutes are located in them (Hazarika, 2013).

Second, there has been a notable increase in the private sector's involvement in medical education. Prior to 1991, 70% of the medical colleges were government but by 2013, there was a disproportionate increase in the number of non-government colleges with 67% of the new institutions being private (recognized or approved). Similarly, before 1991, 47% of the dental colleges were government owned and by 2013, 93% of the new dental institutions (recognized or approved) were in the private sector.

Third, despite the consistent increase in health-worker production, posts in public-health facilities remained unfilled, for instance although between 2007 and 2009 the number of health workers (doctors, dentists, nurses and midwives) increased, the total number of vacant posts for medical officers at primary health centres and specialists at community health centres also increased by 43.6% and 17.5%, respectively, during 2005-2010, with EAG states contributing to two-fifths of these vacancies (Rural Health Statistics in India,

2006, as cited in Hazarika, 2013). It is ironic that despite an increasing shortage of health professionals locally, India has emerged as the most important source country in the global healthworkforce market (Anand Sudhir and Fan Victoria, 2016). Government funded primary health care in India is plagued with poor infrastructure, staff vacancies, shortage of doctors and specialists and inadequate facilities while, CHCs in rural India are suffering from 'missing doctors syndrome'. Nearly 81% of the posts of specialists in the CHCs are vacant; in rural India a shortage of 84% surgeons, 77% gynaecologists & obstetricians, 83% physicians and 80% paediatricians has been reported.

This state of affairs has been attributed to the manner in which the health services system in India evolved, including the development of westernized medical education (Banerji D, 1976). The colonial value system of British rulers; the class orientation of Indian physicians; their inculturation in British modelled Indian medical colleges; their thorough indoctrination by the General Medicine Council and Royal Colleges of Britain; the power, prestige, status and money oriented attitudes of the profession; the unsuitably trained doctors of the present model identifying with the highly expensive, urban, curative oriented medicine of the West; the "go to the States (USA)" mentality, and the resulting distortion of the country's health priorities'. Further, the nature of medical training in India is such that it leeches out the sensitivity of health workers.

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 health providers that has been the focus of research in recent times (Choudhury et al. 2006). Choudhury et al. measured health workers' absence in nearly nationally representative samples in several countries² using a common methodology based on direct observations during unannounced visits. The survey data reveals that absenteeism among the primary health providers in India is the highest (40 per cent) among the surveyed countries. The survey findings also reveal that absence is fairly widespread, rather than being concentrated.

This rate of absenteeism in public health facilities has been attributed to the fact that there is a lack of administrative action towards effective service provisioning, an absence of basic infrastructure and incentive structure (not necessarily monetary but in terms of job environment and recognition) for doctors and other health workers to be motivated enough to do their job.

Growing Informalisation of health workforce:

Informalisation of the public sector has been driven by the intent to make space for the private sector in health-care, which has in turn fuelled the fragmentation of the health workforce. It was argued that around 70% of the health care budget went into the salaries of public health workers and professionals, who do not perform commensurately (National Workshop on Informalisation of Employment in the Health Sector, 2016). This was used as the basis to promote the informalisation of labour in the public health system. The assumption was that by creating a pressured work environment where performance would form the basis of renewal of contracts, the quality of services would improve. But not only did this not happen, the basis for any kind of public health system strengthening got further eroded.

Further within the 'formal' medical sector, there is a growing informalisation which dates back to the 1970s with the employment of Class IV contract workers in hospital (Anand Sudhir and Fan Victoria, 2016). This resulted in the invisibilisation of the Class IV employees - the cleaners, the handlers of bio-waste - who were viewed as piece rates, with the health system having nothing to do with them. As pointed out earlier, human resource appointments in hospitals were more or less fixed and vacant posts were not being filled as per the requirement even for medical officers at primary health centres and specialists at community health centres. This has led to under-staffing and overload of work for existing staff, in turn affecting the quality of health care.

There exists shortfall across all cadres in the posts of MPW(F)/ANM, MPW(M), Health Assistant (Female)/LHV, and that of Health Assistant (Male). The large shortfall in Male Health Workers, has resulted in poor male participation in Family Welfare and other health programmes and overburdening of the ANMs. This shortage is despite government efforts to train health workers through various training programmes throughout the country for more effective and systematic service delivery (Bhandari and Dutta, 2007).

With the coming in of the National Rural Health Mission in 2005, financial support was provided to States/UTs to strengthen their health systems including support for engagement of health workers on a contractual basis (Government of India, National Rural Health Mission (2005 -12) Mission Document). Under the NRHM, in 2014, a total of little over 1.78 crore human resources employed were

contractual across the country; these were employed to fill the posts of Medical officers, specialists, staff nurses, ANMs, paramedics, Ayush doctors and paramedics, District Programme Managers, block managers and accounts managers (Ministry of Health and Family Welfare, 2014). The largest number of contractual staff category was the Auxiliary Nurse Midwife (ANM) who comprised of nearly 41% of the posts.

The introduction of contractual workers, instead of permanent workers, resulted in these workers neither having job security nor social security (except in Jharkhand where, the workers engaged on contract basis under NRHM are granted casual leave, maternity leave, paternity leave and compensatory leave). As a result they were not only less dedicated to their work but were also not able to unionize to fight for better working conditions. High dissatisfaction among these workers has adversely affected the quality of service provisioning. Thus, informalisation of work needs to be looked in the broader context of neoliberal health policies. At the same time, the role of informalisation in further weakening public health institutions and compromising the quality of health services has to be recognised and highlighted.

Recent Developments in the Health Sector:

i) Increasing dominance of the Private sector:

The private sector has become the dominant source of health care services, both institutional or non-institutional for patients in rural and urban areas; of those seeking treatment, 78 per cent rural and 81 per cent urban patients are availing private non-institutional facilities and 58 per cent rural and 62 per cent urban patients are going to private hospitals (NSSO 2004). Further, the dependence on the private sector is significant across all income ranges from the poorest to the richest, and utilization for public facilities is only very marginally higher among the poorest segments.

The role of the government health services has diminished despite higher costs of private sector services. This has been attributed to the lack of adequate infrastructure and personnel at public health care facilities, the orientation of the staff towards delivery of services, the accessibility, timing, and availability of services and finally to quality of services provided. Although private sector providers necessarily do not always provide better quality health care than government facilities, yet such is the perception of the user group. This has resulted in the private sector becoming a dominant force in all segments of the health care services and what was only

true of a few urban areas is now true also of the rural hinterland as well (Bhandari and Dutta, 2007). The private sector is servicing the poorest segments in both rural and urban areas despite charging significantly higher prices for its services. Finally, the private sector is also becoming the dominant force in the preventive care segment.

ii) Growth of Corporate Healthcare:

In recent years, new medical technology has added another dimension to the private sector expansion by the participation of corporate sector in health care provisioning. The entry of corporates in healthcare was ostensibly to fill the vacuum created by failing and deteriorating standards of government healthcare infrastructure to fulfil the health need and aspirations of quality conscious new rich. Land for many charitable hospitals, slowly and steadily was taken over by Corporate Hospitals and hospitals which were earlier Trust (such as Moolchand in Delhi) also became Corporate. Corporate hospitals brought best technologies and expertise to India but it was very expensive and was within the reach of only a few.

Health insurance started growing with this new opportunity and the Indian government promote insurance from private sector by pooling resources and risks. Insurance shifted the discourse from provisioning of care to merely assuring coverage, thus reducing the need to hire more health professionals in the public health sector. The National Health (Assurance) Mission is precisely this. According to global estimates, most developing countries spend around 7-8% of their Gross Domestic Product (GDP) on health, whereas India spends around 4% of its GDP, of which only about 1.2% is spent by the government. Because of the meagre contribution of government, people are major contributors to health-care spending, paying close to 71% of total health expenditure 'out-of-pocket'.

Further, several specialty corporate hospitals are being built in collaboration between Indian and foreign companies (Chanda Rupa, 2002). These speciality corporate hospitals 'export' health services through consumption abroad. Patients come to these hospitals from industrialized and developing countries for surgery and specialized services attracted their pool of highly qualified health care professionals and by their ability to provide good quality, affordable treatment (ibid). This has further implications on the availability of specialists in the public health sector.

iii) Non-profit community based providers:

India's voluntary sector demonstrates much experimentation and innovation with community and

self financing methods including user charges, community based prepayment schemes, fund raising commercial schemes (Dave P, 1993). Many non-profit Non-Governmental Organisations (NGOs) operate in India to provide preventive and curative health care services to the people (such as Jan Swasthya Sahyog Bilaspur, CINI, Kolkata and SEWA-Rural Gujarat). A small number of these NGOs also offer pre-payment health insurance schemes (such as Seba Cooperative Health Society, Kolkata; VHS, Chennai). Such non-profit community based insurers are an alternative that offer the best hope of providing high quality, affordable and sustainable health care to the poor (Berman, 1992). Karuna Trust is another example of a NGO that in partnership with UNDP has collaborated with the state-owned National Insurance Company (NIC) in designing a health insurance product that complements the public healthcare infrastructure and compensates for some of its weaknesses (Bhandari and Dutta, 2007). While such groups do not account for a large share of health care, they are often the only source or only trusted source of health service to the population (Berman, 1992).

Facing the Crisis in Public Health - Visualising a Paradigm Shift:

How can a complete transformation of health system be achieved in the face of these challenges? Is it possible to conceive of a paradigm shift - can for instance, the artificial differences created by us between doctors and nurses be overcome - can we begin by giving nurses, ANMs and ASHAs a more prominent role to play. How can sensitivity be imparted in medical school - can gender, caste and religious sensitivity be inculcated in medical education? What role can technology play in making medicine more accessible and equitable? The MFC Annual meet will attempt to explore these and other issues on how in the face of the withdrawal of govt liability, the public health system can overcome the crisis that it has been plunged into.

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Notes:

- 1 Empowered Action Group, including the states that had poor health indicators like UP, Bihar-Jharkhand, MP and Chhattisgarh, Rajasthan, Odisha and Assam
- 2 India, Bangladesh, Ecuador, Indonesia, Peru and Uganda

References:

1. Anand Sudhir and Fan Victoria (2016), The Health Work Force in India: Human Resources for Health Observer, Series No. 16, WHO
2. Banerji D (1976), History Health Services in India, 1-2 Medico Friends Circle Bulletin
3. Berman, Peter and Priti Dave (1993): 'Financing Health Care' in State of India's Health, Voluntary Health Association of India, pp 341-50
4. Bhandari Laveesh and Dutta Siddhartha Health Infrastructure in Rural India, pp 265-285 in Michael Ward (2007), India Infrastructure Report 2007: Rural Infrastructure, Oxford University Press, New Delhi.
5. Chanda R (2002), Trade in Health Services, Bulletin of the World Health Organization, Vol.80 No.2
6. Chaudhury N, et.al (2006), 'Missing in Action: Teacher and Health Worker Absence in Developing Countries', Volume 20, November 1, Journal of Economic Perspectives, Pittsburg.
7. Dave P. (1993): Community and Self-Financing in Voluntary Health Programmes in India; Health Policy and Planning, 6(1)
8. Duggal Ravi (1997), Health Care Budgets in a Changing Political Economy, Economic and Political Weekly, Vol. 32, No. 20/21 (May 17-30, 1997), pp. 1197-1200
9. George Asha (2007), Human resources for health: a gender analysis, Background paper prepared for the Women and Gender Equity Knowledge Network and the Health Systems Knowledge Network of the WHO Commission on Social Determinants of Health
10. Hazarika Indrajit (2013), Health workforce in India: assessment of availability, production and distribution, WHO South-East Asia Journal of Public Health 2013 | April-June | 2(2)
11. Ma S, Sood N. A Comparison of the Health Systems in China and India. Rand Corporation: CA, USA, 2008.
12. Ministry of Health and Family Welfare (2014), Contract Workers Employed in NRHM
13. NSSO (2004): 60th Round, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, New Delhi
14. Peters DH, Rao KS, Fryatt R. Lumping and splitting: the health policy agenda in India. Health Policy Plan 2003; PubMed, 18(3): 249-260
15. Purohit, BC (2001): Private initiatives and policy options: recent health system experience in India, Health Policy and Planning, Volume 16, Issue 1, 1 March 2001, Pages 87-97
16. Reichenbach and Brown (2004), Gender and academic medicine: impacts on the health workforce, PubMed, British Medical Journal, Oct 2; 329(7469): 792-795, available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC521007/>)
17. Rural Health Statistics (2016), Ministry of Health and Family Welfare, <https://nrhm-mis.nic.in/Pages/RHS2016.aspx?RootFolder=%2FRURAL%20HEALTH%20STATISTICS%2F%28A%29RHS%20-202016&FolderCTID=0x01200057278FD1EC909F429B03E86C7A7C3F31&View=%7B3EF44ABD-FC77-4A1F-9195-D34FCD06C7BA%7D>
18. Thomas P (2006): The international migration of Indian nurses, Pub Med, Dec;53(4):277-83.
19. Vlassoff (1994): Gender inequalities in health in the third world: Uncharted ground, Social Science & Medicine, Volume 39, Issue 9, November 1994, Pages 1249-1259, as cited in Engendering International Health: The Challenge of Equity, eds Gita Sen, Asha George, Pirooska Östlin, 2002, The MIT Press, Cambridge
20. WHO (2006), The World Health Report, http://www.who.int/whr/2006/06_chap1_en.pdf

How Gorakhpur was choked

Abhay Shukla, Ravi Duggal and Richa Chintan

Discussion on the recent tragic deaths of children in the BRD Medical College Hospital at Gorakhpur has, so far, been focused on the apparent immediate cause - the interruption of oxygen supply to the hospital, linked with continued default in payments to the oxygen supplier. While the death count in BRD continues to rise alarmingly, reaching nearly 300 in the last month, the state and central governments have failed to even express an intention of addressing the real oxygen supply of system - adequate and timely budgetary inflows to the hospital, which are essential for enabling the hospital to deal with the continued influx of critically ill children. The shortfall of payments to the oxygen supplier needs to be understood as the final link in a cascading chain of severe budget cuts, which has choked the flow of critical resources to the hospital, and the programme for treating children with encephalitis, leading to catastrophic outcomes.

The Gorakhpur hospital tragedy was not just due to a local aberration, though local factors did play a role. If we ignore this deeper chain of causation and fail to seek systemic solutions, there is a risk of remaining confined to knee-jerk answers, which may be at the cost of many more innocent lives.

No hospital or health system can function without adequate financial resources, which translate into sufficient doctors and staff, medicines and supplies, infrastructure and other essential inputs. Adequate budgets are essential to keep health services properly functioning. And the converse is obvious - if the system is chronically and severely deprived of such resources, it might manage to cope for some time, but then a breaking point is bound to be reached. The interruption of oxygen supply following major, continued default of payments to the oxygen supplier for the Gorakhpur hospital represent such a breaking point in a system which was already under tremendous strain, due to severe and long-standing construction of finances at all levels.

The first link in this chain of choked budgets becomes clear when we examine the allocations for Acute Encephalitis Syndrome (AES) and Japanese Encephalitis (JE) for UP over the last few years. This is the main government programme which supports facilities and services for children suffering from these illnesses, for which Gorakhpur is the epicenter. The number of children dying from these illnesses over the last few years remains persistently high- 661 deaths in 2014, 521 in 2015 and 694 in 2016. The deaths increased in 2016 by a massive 33 percent over the previous year.

In this situation, we would expect a substantial hike in resources for the current year, to take care of expected patients, as well as preventive efforts. The reality is exactly opposite - proposed funds, as well as actual allocations provided by the Union health ministry to the state government under the National Health Mission, have been significantly reduced. The budget demand by UP for AES/JE for 2016-17 was Rs 30.40 crore, of which only Rs 10.19 crore was approved by the Centre. However, in the current year (2017-18), the budget demand was reduced to Rs 20.01 crore, while the amount approved by the Centre was further slashed to just Rs.5.78 crore -barely 29 percent of the proposed amount.

The further link in the chain is equally worrisome. After grossly inadequate allocations from the national level, at the state level, there is a further holding back of fund disbursement. Out of the amount committed for the AE/JE programme in UP for 2016-17, the actual expenditure of funds over the entire year was only 33 percent. Parallel to this choking of funds for the encephalitis programme, the funds available for running the 808-bed Nehru hospital associated with the BRD medical college, have also been inadequate. A teaching hospital of comparable size - Nair Hospital in Mumbai - spends Rs. 30 lakh per bed annually, while Nehru hospital spends a mere Rs. 11.5 lakh. Similarly, UP's overall health budget is one of the lowest in the country at Rs. 790 per capita, in sharp contrast to the national average of Rs. 1538 per capita. With over 16 percent of the country's population, UP accounts for only 9 percent of India's public health spending, which gets reflected in the most adverse health outcomes. Some other states like neighbouring Bihar have recently significantly stepped up their health sector funding, by using flexibilities allowed by the 14th Finance Commission's recommendations. However, the UP government seems to be unwilling to use a larger part of the additional revenues now available to it for increasing its abysmally low health spending which should at least be brought to levels of the national average per capita spending.

Given the context of a constricted flow of resources from various levels, it is not surprising that within the hospital, allocations and fund flow for important supplies like oxygen have been woefully inadequate. The total budget for medicines, materials and supplies (which would include medical oxygen) for the BRD medical college associated hospital in 2015-16 was Rs. 8.85 crore. Despite an increase in the number of patients and an increase in prices, this has been reduced to Rs.7.92 crore in the current year. Further, the flow of funds from the state to hospital level is reported to have been chronically erratic and delayed. The doctors

Is the private sector response to the health workforce crisis a solution?

(a preliminary note)

Indira Chakravarthi

I.

The discussion/discourse on health workforce focuses primarily, if not exclusively, on the human resources issues for and of the government health services. It is widely known that the healthcare in India is characterized by a large private sector component which provides the larger proportion of out-patient and in-patients services; that it draws away workforce from the public health services, etc. Yet, there is little systematic documentation and analysis of the features and workforce characteristics in the formal private healthcare sector, of recruitment, employment and remuneration patterns, working conditions and problems of the healthcare workers in this private sector. Little is known about cadre such as healthcare managers, health insurance managers and administrators that is increasingly being employed in the formal private healthcare sector.

Even less well-known is the ways by which policies and measures have been advanced and implemented to involve the private sector in addressing the health workforce crisis.

This note is an attempt to present what is 'actually happening on the ground' - to understand how the reinforcement and entrenchment of private business interests seems to be taking place in the name of finding solutions to the health systems crisis, including that of HRH.

According to a recent WHO Global Health Workforce Alliance document on strategies for health workforce (WHO 2015):

(i) Effective collaboration with the private sector (for-profit and not-for-profit) is required to harness the capacity and resources of these actors in support of the health workforce agenda; (ii) Other than public-private partnerships, the private sector can also serve as an incubator for innovations to develop simpler and cheaper service delivery approaches, or new business models that find alternative ways to supply and optimize the performance of the health workforce; (iii) The private sector can offer important lessons in terms of both working conditions and innovative approaches

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in the encephalitis ward (who are engaged on a contractual basis) reportedly had not been paid for over four months, when the tragedy struck. The non-functioning of ventilators and baby warmers in the wards due to a lack of funds for maintenance has also reportedly been common.

In this larger setting, it is not surprising that since November 2016, payments were not being released to the company supplying liquid oxygen, and by March 2017 the unpaid amount owed to the company had reached Rs.72 lakh. It should be no surprise that the company stopped supplying oxygen to the institution - not an isolated incident, but rather likely to have been the final link in a lethal chain of budgetary blockages, the last straw which broke the proverbial camel's back.

The Centre and State government seem to be busy blaming the deaths on encephalitis, pneumonia, infections etc. thus deflecting attention from the underlying man-made cause - major strangulation of the "oxygen supply" of the public health system, namely budgetary provisions for health care. Grossly

inadequate, downsized health budgets are by no means unique to UP; public health facilities across the country are today finding it increasingly difficult to breathe. This is not just about Gorakhpur, but about Lucknow, Jamshedpur, Ranchi etc.

The loss of innocent lives must not be brushed aside with facile excuses, or by making scapegoats of a few low-level officials- the real responsibility lies higher up in the system, where governance is led, and budgetary allocations are decided. These unfortunate deaths of scores of children, who breathed their last before they could have their chance at life, should serve as a resounding wake-up call. The message is clear - there is urgent need to massively increase financing of public health services, along with making major improvements in governance, including systems for social accountability. Otherwise, many more Gorakhpurs will happen.

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to performance management; (iv) The public sector has an important role to play in creating the enabling environment for the private sector to contribute to public goals regarding HRH; this includes aspects such as regulation, planning and information sharing; (v) Given the global trend towards private medical education, strategies are required to ensure that the private teaching institutions serve public health needs.

These strategies flow from the work of the Private Sector Taskforce commissioned by WHO to 'accelerate private sector responses to the crisis in human resources for health' (WHO 2012). This taskforce advocates a paradigm shift towards creation of health labour markets, of employment opportunities, particularly for women.

II.

How is the collaboration with the private sector being implemented? One route is the well-known PPP mode, such as the recently announced PPP for NCDs in District Hospitals by the NITI Aayog, with the World Bank providing the inputs for its implementation. Another route is that of promoting 'business models'. With regard to health workforce, a Healthcare Sector Skill Council (HSSC), a non-statutory Certifying Organization, has been set up under the Ministry of Skill Development and Entrepreneurship (MSDE), and promoted by the Confederation of Indian Industry (CII), National Skills Development Corporation (NSDC) and the healthcare industry to provide vocational training to 12th pass students in allied health professions.

The major activity of this HSSC relates to setting up institutes offering courses in allied health professions by private companies. For instance: GE has set up the GE Healthcare Institute (GE HCI) in collaboration with Max, Mahajan Imaging, Manipal University, Infrastructure Leasing and Financial Services IL & FS, HED Healthcare Private Ltd, Santosh Education & Healthcare Private Ltd. GE HCI and Tata Trusts have entered into collaboration in late 2016, to train 10,000 youth in various technical areas of healthcare over a three-year period. GE HCI will design, develop and offer the courses, while Tata Trusts will provide loan scholarships to selected candidates. The courses are in X-ray, radiography, medical equipment, anaesthesia, operation theatre and cardiac care technicians, as well as diabetic education counsellors,

with certification from HSSC. Becton Dickinson is to provide training in phlebotomy modules; 3M Healthcare will work with HSSC to train people to work in the Central Sterile Services Department.

III.

One finds that in effect it is the business and for-profit component of the private healthcare sector that is the most influential and most dominant is encouraged and with whom the government engages while speaking of collaboration with private. The formal for-profit private sector has permeated all spaces, and is addressing most aspects of the crisis of the public health services, with active policy support from national and international institutions.

What are the implications of such involvement of the healthcare industry for the entire healthcare system; how are these forms of private sector involvement shaping the overall approach to health and health services? Are such solutions/strategies the wolf in sheep's clothing, merely promoting deeper penetration of market ideology and business interests, in the name of choice, efficiency, etc., in the name of strengthening of public health services for universalism etc.?

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Medico Friend Circle

Invitation to the 44th Annual General Meeting, 9th February 2018

Dear Members,

This is to invite all of you to the XLIV (44th) Annual General Body Meeting (AGM) of the Medico Friend Circle (MFC).

The AGM will be held in Sewagram Wardha on the first evening of the Annual Meet - the 9th of February, 2018 between 7:30 to 9:30 pm.

The AGM will be chaired by the Convenor(s) of MFC.

Political Economy of Human Resources for Health

Ravi Duggal

India produces over 56700 allopathic doctors each year besides over 32000 AYUSH doctors and yet the public health system is starved of doctors and specialists. The registered allopaths are over 1 million making for 1 doctor per 1293 persons but from this the public health services gets about one-tenth of the share or 1 doctor per 11097. If we add the AYUSH doctors who number over 771000 then the overall doctor-population ratio becomes 1 doctor per 725 persons. So we do not really have a significant deficit of doctors. Its more a question of distribution across social geographies and how the political economy of healthcare pans out.

Public investment in the health sector in India historically has been very inadequate, despite the brilliance of the Bhole Committee which had recommended an investment of 1.8% of GDP way back in 1946 for a NHS kind of a health system. Since Independence it has moved from 0.4% of GDP to 1.18% as of today peaking at 1.6% of GDP in 1987, when WHO tells us that governments should be spending at least 5% of GDP. While there has been huge under investment in public health services India has been a robust producer of health human resources, especially doctors and nurses. India has not only produced health human resources for the country but also for the World. Since late nineteen fifties India has been a major exporter of both doctors and nurses. For instance, a study by Binod Khadria (2004)¹ reveals that right from the start just from AIIMS over 56% of doctors produced left the country and since the 5th Five Year Plan overall 30-40% of doctors graduating each year migrate to other countries (Duggal 1989)². The situation today has not changed much. While out-migration of doctors may not be as high as earlier the flow of doctors from medical schools to the private health sector remains very high and has even increased because of the expansion of private medical education. The annual intake into the public health system remains negligible and the latter accounts for less than 10% of active medical professionals in the country.

In the mid-eighties post the first national health policy the first serious efforts at reform of the public health system were made through the Minimum Needs Program, especially the expansion of rural health infrastructure and human resources, and public health services seemed to be on trajectory towards Health For All but the structural adjustment macro-economic

reforms pushed back this reducing public health spending to a low of 0.8% of GDP in 1996. This compression in public spending reduced recruitments and soon vacancies grew by leaps and bounds. NRHM was another serious effort at reforming public health services with increased resource commitments but the weakest link was human resources. IPHS guidelines were evolved but public health facilities were far short of these benchmarks, especially for doctors. Even today the vacancies are huge and this is one of the major failures of the public health system. For PHCs the vacancies are over 30% and for specialists over 80% in CHCs.

Tables 1 and 2 from the Rural Health Statistics indicate the availability and vacant positions/shortfall of doctors and specialists across all states in PHCs and CHCs clearly highlighting the deficit of such human resources across the country. There is some variability with states like Kerala, Tamil Nadu, Panjab and NE states doing much better for PHCs but in case of CHCs every state shows gross deficits for specialists. The requirements indicated in these tables are based on old norms of one doctor per PHC and similarly for CHCs. If IPHS norms are used then the requirements and hence vacancies would be much higher especially for PHCs. Apart from what Tables 1&2 indicate about doctors in rural public health facilities there are doctors

Health Human Resources registered numbers and production in India as on 31 March 2016:

1. Allopathic doctors registered 1005281; annual admissions 56748; in govt service 113328 - in PHCs 26464; CHC specialists 4192
2. AYUSH doctors registered 771468; annual admissions 32256
3. Nurses and Midwives 1900837; annual outturn GNM 125762 and BSc Nurses 91806
4. ANMs 821147; in govt service 219980, male Health workers 53422
5. Pharmacists 741548; annual outturn 46795
6. Dental surgeons 197734; annual admissions 26790 (BDS) and 6019 (MDS)

and specialists working in urban hospitals like district and sub district hospitals and teaching and specialty public hospitals and urban clinics and dispensaries. But these too do not amount to very large numbers. The health sector database is very inadequate. The health HMIS that the Ministry of Health compiles is focused largely on RCH indicators and does not have any data on health human resources. The only information we get on the health infrastructure and human resources is published annually as the National Health Profile and it is very little information pertaining to the health human resources which we have summarised in the box below:

So clearly production of health human resources is not the primary problem. The main issue is the failure of the public health system to scale up their budgets to a level that will make it possible to at least initially achieve the benchmark of IPHS for human resources and facility infrastructure. We definitely need to at least double public health spending if we have to move anywhere close to an IPHS compliant public health system. Over the last two decades there has been considerable policy debate around the low levels of public health spending in India which globally pushes India into the bottom quarter of countries with regard to health and human development indicators and even in bottom 5 with respect to proportion of health spending by government. Various assessments have emerged since then, the Commission on Macroeconomics and Health -India, IPHS and NRHM, HLEG, 12th Plan and 2015 Draft NHP and all these indicate that to move towards UHC to begin with the governments must spend a minimum of 2.5% of GDP to assure basic and effective healthcare for all. The 2015 NHP also says that public health spending must be at least Rs 3800 per capita (2015 prices) and state governments should spend 8% or more of the state budget on healthcare services, and that of total public health spending the Centre's contribution should be 40%. So what this means today (2017) is that the public health expenditure should be around Rs 520,000 crores and the Centre's contribution (40%) should be Rs 208000 crores. For 2017-18 the budget estimates of Centre and states combined is about Rs. 200000 crores only so there is a huge shortfall of Rs. 320000 crores (present OOPs in the country is estimated at Rs. 450000 crores). Committing such resources will help bridge the human resource and other deficits in the public health system and make it robust.

Thus, compulsory public health service for a couple of years along with budgetary increases to about 2.5% of GDP as envisaged by 12th Plan, HLEG, the draft 2015 NHP and also endorsed by the 93rd, 96th and

99th Parliamentary Standing Committee on Department of Health reports, will completely transform the political economy of healthcare in India and more specifically the health human resources political economy. With adequate budgetary commitments and compulsory public service, the credibility of public health facilities will improve substantially. Once doctors and specialists are available in sufficient numbers and medicine and diagnostics assured in public health facilities then not only the poor but also the middle classes will come back to the public health system and this will result in a dual impact of strengthened and better utilised public health facilities and a drastic reduction in out of pocket expenditures on healthcare. This will take the healthcare system of the country a step closer to realize universal access to healthcare.

Another dimension of human resources is the caste distribution of doctors, nurses and paramedics. In an article in the mfc bulletin on the caste background of health professionals³ I had analysed Census 2001 data which clearly indicated that there was an overwhelming domination of upper castes and classes in the medical profession and as we went down the hierarchy to nurses and paramedics the share of SCs and STs increased. While similar occupation data from 2011 Census is still not available we do have data from education tables on those having medical degrees which is summarised in Table 3 below. Table 3 compares data across Census 2001 and 2011 for medical graduates and above of all systems (allopaths plus AYUSH) indicating that the share of the SCs and STs remains very small, that is much below their population share but interestingly we see that over 2001 the proportion of SCs and STs in the medical profession has increased substantially in 2011 indicating that there is an increased access to affirmative action over the last decade. Further it is interesting to see that this increase is larger in rural areas and among women reflecting that there is a greater likelihood of SCs and STs and more so of women amongst them to be located in rural areas. The table also tells us that over the decade the number of qualified doctors have nearly doubled from 7.6 lakhs to 15.3 lakhs but for the SCs and STs it has increased by over 2.5 times. However, as mentioned earlier while this is a positive trend it is still at a very low level and nowhere close to the actual share of Dalits and adivasis in the overall population. So the discriminatory patterns of hierarchies of caste and class in the health sector continues to persist. However we do see positive trends in gender distribution also with the share of women increasing from 29% to 40% over the two periods. But in case of rural-urban distribution we do

not see any change with the proportion of doctors in rural areas remaining around one-fifth.

A possible scenario to improve the situation could be as follows. Given that we have less than 26000 PHCs, and over 57000 MBBS doctors and 32000 AYUSH doctors graduating each year, each PHC can get 2 MBBS doctors and 1 AYUSH doctor if we have compulsory public service in PHCs for atleast 2 years and in few years even have a doctor at the subcentre level. Those wanting to do PG studies should be allowed to do so only after completing this requirement and further, after completion of their PG course they should work at govt hospitals for atleast 2 years. This will more than fill up the deficit of specialists at CHCs and other public hospitals.

This along with increased allocations in the budgets would be truly transformative for the public health

system and put it on a path towards universal access to healthcare.

However if the current political economy's strong bias towards of a fully marketized and privatized healthcare system continues we will not witness any significant changes in the distribution of health human resources. What is needed at this point in our history is the State's commitment to public health and primary health care. And this is indeed possible within a capitalist framework as witnessed across the social democracies of Europe and even in a number of developing countries like Thailand, Sri Lanka, Mexico, Brazil etc.. What is critical is to politically accept that healthcare is a public good and consequently strategize to build around that. Compulsory public service and increased budgetary commitments would be important first steps in that direction.

Table 1: Doctors* at Primary Health Centres

S. No.	State/UT	(As on 31st March, 2016)				
		Required1	Sanctioned	In Position	Vacant	Shortfall
		[R]	[S]	[P]	[S-P]	[R-P]
1	Andhra Pradesh	1075	2270	1412	858	*
2	Arunachal Pradesh	143	NA	122	NA	21
3	Assam	1014	NA	932	NA	82
4	Bihar**	1802	2078	1786	292	16
5	Chhattisgarh	790	777	344	433	446
6	Goa	22	48	56	*	*
7	Gujarat	1314	1697	1105	592	209
8	Haryana	474	635	489	146	*
9	Himachal Pradesh	518	636	424	212	94
10	Jammu & Kashmir	637	1347	761	586	*
11	Jharkhand	327	327	271	56	56
12	Karnataka	2353	2353	2133	220	220
13	Kerala	824	1120	1169	*	*
14	Madhya Pradesh	1171	1771	946	825	225
15	Maharashtra	1811	3009	2927	82	*
16	Manipur	85	238	194	44	*
17	Meghalaya###	109	128	105	23	4
18	Mizoram ^	57	152	71	81	*
19	Nagaland	126	108	120	*	6
20	Odisha	1305	1312	959	353	346
21	Punjab	427	518	494	24	*
22	Rajasthan	2080	2807	2422	385	*
23	Sikkim	24	NA	26	NA	*
24	Tamil Nadu	1368	2927	2751	176	*
25	Telangana	668	1318	1024	294	*

26	Tripura ##	94	158	147	11	*
27	Uttarakhand	257	386	215	171	42
28	Uttar Pradesh	3497	4509	2209	2300	1288
29	West Bengal	909	1324	721	603	188
30	A& N Islands	22	42	36	6	*
31	Chandigarh##	3	0	2	*	1
32	D & N Haveli	11	6	11	*	0
33	Daman & Diu	4	3	7	*	*
34	Delhi	5	21	20	1	*
35	Lakshadweep	4	5	7	*	*
36	Puducherry	24	38	46	*	*
	All India2/ Total	25354	34068	26464	8774	3244

Notes:

Sanctioned data for 2015 used; ** Sanctioned data for 2011 used; ^ Sanctioned data for 2013-14 used

NA: Not Available; +: Allopathic Doctors; All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs; *: Surplus; ¹One per Primary Health Centre; ²For calculating the overall percentages of vacancy, the States/UTs for which manpower position is not available, are excluded

Table 2: TOTAL SPECIALISTS AT CHCs						
Total Specialists [Surgeons, OB&GY, Physicians & Paediatricians]						
S. No.	State/UT	(As on 31st March, 2016)				
		Required¹	Sanctioned	In Position	Vacant	Shortfall
		[R]	[S]	[P]	[S-P]	[R-P]
1	Andhra Pradesh	772	384	159	225	613
2	Arunachal Pradesh	252	NA	4	NA	248
3	Assam	604	NA	131	NA	473
4	Bihar	592	NA	40	NA	552
5	Chhattisgarh	620	620	61	559	559
6	Goa	16	5	5	0	11
7	Gujarat	1288	186	148	38	1140
8	Haryana	440	153	30	123	410
9	Himachal Pradesh	316	NA	7	NA	309
10	Jammu & Kashmir	336	344	190	154	146
11	Jharkhand	752	131	122	9	630
12	Karnataka	824	824	498	326	326
13	Kerala	900	30	40	*	860
14	Madhya Pradesh	1336	1336	289	1047	1047
15	Maharashtra	1440	823	505	318	935
16	Manipur	68	4	3	1	65
17	Meghalaya##	108	3	12	*	96
18	Mizoram###	36	0	0	0	36

19	Nagaland	84	NA	8	NA	76
20	Odisha	1508	908	354	554	1154
21	Punjab	600	578	196	382	404
22	Rajasthan	2284	1654	497	1157	1787
23	Sikkim	8	NA	0	NA	8
24	Tamil Nadu	1540	NA	76	NA	1464
25	Telangana	456	284	147	137	309
26	Tripura	80	0	1	*	79
27	Uttarakhand	236	200	41	159	195
28	Uttar Pradesh	3092	2099	484	1615	2608
29	West Bengal	1396	669	125	544	1271
30	A& N Islands	16	9	0	9	16
31	Chandigarh**	8	11	14	*	*
32	D & N Haveli	0	0	0	0	0
33	Daman & Diu	8	2	0	2	8
34	Delhi	0	0	0	0	0
35	Lakshadweep	12	0	0	0	12
36	Puducherry	12	5	5	0	7
	All India²/ Total	22040	11262	4192	7359	17854

Notes: **Sanctioned data for 2013-14 used

##Sanctioned data for 2015 used

Data for 2015 repeated

NA: Not Available.

¹ Four per Community Health Centre

All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs

*: Surplus.

² For calculating the overall percentages of vacancy and shortfall, the States/UTs for which manpower position is not available, are excluded

Table 3: Persons aged above 15 years with Medical Qualifications (Allopathy+AYUSH) across Caste, Sex and Residence for years 2001 and 2011

Category	Census 2011				Census 2001			
	%SC	%ST	%Other	Number	%SC	%ST	%Other	Number
All	6.48	2.24	91.28	1529942	4.68	1.67	93.65	768964
Rural	8.5	4.12	87.38	322408	6.42	3.23	90.35	156437
Urban	5.94	1.73	92.32	1114821	4.23	1.01	94.5	612527
Male	6.14	2.21	91.66	929619	4.78	1.68	93.55	535376
Female	7.01	2.29	90.7	600323	4.46	1.65	93.89	233588
Number	99152	34238	1396552	1529942	35978	12834	720152	768964

Source: Census Table C-08A, C-08A-SC and C-08A-ST, respective Census years

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Notes:

1 Binod Khadria, 2004: Perspectives on Migration of Health Workers from India to Overseas Markets - Brain

Drain or Export?, paper presented at the Seminar on Health and Migration, June 2004

2 Ravi Duggal, 1989: Medical Education in India - Who Pays?, Radical Journal of Health, Vol. 3, No. 4

3 <http://www.mfcindia.org/mfcpdfs/MFC357-360.pdf>, pages 27-30

The role of IAPSM/IPHA in Development of Human Resources for Health in India

Harshad P. Thakur

Importance of Human Resources for Health Development

Human Resources for Health (HRH) is defined by WHO as all people engaged in actions whose primary intent is to enhance health (WHO, 2006). HRH include health care providers, health management and support personnel those who may not deliver services directly but are essential to effective health system functioning. The field of HRH deals with various issues like planning, development, performance, management, retention, information, and research. In recent years, raising awareness of the critical role of HRH in strengthening health system performance and improving population health outcomes has placed the health workforce high on the global health agenda (Grepin, et al., 2009). Health workforce is one of the important components of the six building blocks for strengthening health systems. Other components are financing, information, medical products and technologies, service delivery, and leadership/governance (WHO, 2007). A competent and motivated health workforce is indispensable to achieve the best health outcomes possible through given available resources and circumstances.

India faces challenges in achieving Universal Health Care (UHC) by 2022. To achieve it, the Planning Commission report has recommended concentration on critical areas like skilled human resources apart from health financing, health infrastructure, health services norms, access to medicines and vaccines, management and institutional reforms, and community participation (HLEG, 2011). For strengthening public health system in India, we need to position adequately trained, multi disciplinary, and competent public health professionals at all the levels. (Sharma, et al., 2013). As human resources are required from professional to local level; managerial to technical level; political to ground level workers, HRH is growing all over the world including India.

About IAPSM and IPHA

Preventive and Social Medicine (PSM) is considered synonymous with Community Medicine, Public Health, and Community Health in India with a common goal, i.e. prevention of disease and promotion of health. It's importance has been well recognised from grassroot organizations to international levels,

not only in health sector but in other related sectors too (Thakur, et al., 2001).

The Indian Association of Public Health (IPHA) is an older organisation than the Indian Association of Preventive and Social Medicine (IAPSM). IPHA membership is broader and it includes anyone one with public health degree and/or experience. Both have their own journals; IAPSM publishes Indian Journal of Community Medicine (IJCM) and IPHA publishes Indian Journal of Public Health (IJPH).

The IPHA¹ is a national level professional body founded in 1956 with the headquarters located at the All India Institute of Hygiene and Public Health, Kolkata. The goals of the IPHA are promotion and advancement of public health and allied sciences in India, protection and promotion of health of the people, and promotion of co-operation and fellowship among the members of the association (IPHA, 2009).

The IAPSM² is also a national level professional body founded in 1974. It is a "not for profit" organization. It is dedicated to the promotion of public health by bringing its members' expertise to the development of health policies, an advocate for medical education, health research, health care and health programs and also provides a forum for the regular exchange of views & information. The IAPSM effectively facilitates creation of evidence based policy and planning by the administrators and public representatives. It also contributes to the promotion of population health through extending technical support like capacity building, monitoring and evaluation of health services/programs, epidemiological and health system research (IAPSM, 2015).

Issues in HRH

There are various issues related to HRH where professional organisations like IPHA and IAPSM can play active role. A few such issues are highlighted here...

Many central, state, local level employees are working in health sector including permanent and temporary cadres. Information on HRH is incomplete and unreliable.. There is lack of comprehensive information on the number of health workers, their operations, qualifications, locations, etc. This prevents effective workforce planning and management (Rao,

et al., 2012). The quality of work done by this workforce, the training received, supervision, etc. is of poor quality. Since past few years, there is downsizing in public sector.

Public health is being neglected through reduced budgeting both at the central and state levels which leads to declining public health expenditure. Various Public Private Partnership models are developed to involve private sector and limit the expenditure. The emphasis is still on curative/clinical medicine at the cost of preventive medicine/public health. The effect is reflected through various health indicators which are not encouraging except in a few states.

Many times, there is something like an inferiority complex among community medicine/ public health experts. Usually non-public health/clinical experts take the centre stage with little or poor knowledge and understanding of public health.

Among the medical graduates, PSM and public health are still not the priority topics for postgraduate degrees. So most of the manpower we see at teaching, research and service level today is forced or might be working there due to no other choices available.

Now-a-days various programmes are mushrooming all over India; for e.g., Masters in Public Health in various disciplines, M.Phil./PhD in Public Health/Health Systems Management, etc. Again there are restrictions here. Some courses are open only for MBBS/medical degree holders, while other are open for all, etc. There is definitely a need to develop comprehensive standards for the courses, manpower, performance, etc. like the Indian Public Health Standards (IPHS).

Though initially there were differences among IAPSM and IPHA, now they working with common understanding. Many professionals are common members of both the groups. Unfortunately IPHA/IAPSM both do not have much role (or are not playing one?) in public health except advocacy with policy makers, capacity building, sharing of experience during the meetings/conferences, publishing journals, etc. The role of IAPSM is mainly being restricted within medical colleges and their field practice areas located in both urban and rural areas.

Recommendations/suggestions

Development of HRH is a broad topic. Of course this cannot be developed only through professional bodies like IAPSM and IPHA. We require much broader involvement and commitment from other sectors

including political support. Following are the areas where IAPSM/IPHA can play more vital role...

- Basic course or knowledge/skills in public health are required for HR working in health. IPHA/IAPSM can take the challenging task of developing this basic requirement.
- One innovative model is the Public Health Resource Network (PHRN) started in 2005. It is a distance learning course in training, motivating, empowering and building a network of existing health personnel from government and civil society groups. It aims to build human resource capacities for strengthening decentralized health planning and to reach out to motivated, though often isolated, health workers (Kalita, et al., 2009). IAPSM/IPHA can definitely develop something similar or better.
- There is also a definite requirement of periodic updating of the knowledge/skills through regular Continuing Medical education, workshops, etc. This should be made compulsory for all.
- Over the past few decades public health research output and the commissioning of this research by Indian governmental organizations are increasing. However, the quality of research reports is unsatisfactory. It is necessary for health policy to address these continuing deficits in public health research to reduce the large disease burden in India (Dandona, et al., 2009). Here organisations like IAPSM and IPHA can play vital role.
- Youngsters can benefit from the seniors provided they are role models in public health. So it is up to the senior and middle level members to take initiative and see to it that the future leadership is in safe and competent hands.
- Even in medical colleges, clinicians are the role models and community medicine is not viewed by students as an attractive career choice. It is necessary to build up the credibility of the subject. The IAPSM/IPHA should come forward to develop some guidelines in this direction (Garg, 2017). This will also help in attracting bright students towards public health/community medicine.
- IAPSM/IPHA has to take the responsibility of strengthening and standardizing teaching of this discipline in the country, including creation of

sub-disciplines. It also needs to encourage diversity and debate and evolve consensus on these contentious issues. IAPSM has to embrace other public health stakeholders to form a strong coalition to advocate solutions to the public health problems of the country. It also has to undertake marketing of the discipline to the state and national ministries of health, identify and propagate role models to improve their self-esteem (Krishnan, 2016).

- The Community Medicine departments have their own urban and rural health centres which can be developed as a role model which can be replicated elsewhere. They should demonstrate various important concepts like working with government machinery, networking, community participation, etc. They should not limit themselves to provision of only clinical services to the community. But they must go beyond it and work for improvement of overall development of the area adopted through inter-sectoral coordination.
- IAPSM/IPHA can also play proactive role in bringing out networking and collaboration of various likeminded associations across India. This can work towards designing and adaptation of competency driven curriculum frameworks addressing current and future public health challenges, focusing on multidisciplinary public health outlook, developing accreditation mechanisms, creating job opportunities and designing career pathways for public health professionals in public and private sector (Sharma, et al., 2013).
- The challenge to meet Universal Health Care (UHC) by 2022 can be met by a paradigm shift in health policies and programs. This includes restructuring of public health cadres apart from focussing on vulnerable population groups, reorientation of undergraduate medical education, more emphasis on public health research, and extensive education campaigns (Singh, 2013). If we want to achieve Health For All (or UHC), proactive role of IAPSM/IPHA will definitely be the key factor.

The new horizons and fast emerging super-specialities like epidemiology, health management, health economics, nutrition, demography, health system research, environmental health, information technology are changing the face of public health. The IAPSM/IPHA should consider the capacity

development of HRH in all these disciplines which can include collaboration with well known international universities and organisations. This will not only help attract bright students to public health, but will also give glamour and international exposure to the field.

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Notes:

- 1 IPHA website <http://www.iphaonline.org/> as accessed on 13 Nov 2017
- 2 IAPSM website <http://www.iapsm.org> as accessed on 6 Nov 2017

References:

- Dandona L, Raban MZ, Guggilla RK, Bhatnagar A, Dandona R. Trends of public health research output from India during 2001-2008. *BMC Med.* 2009;7:59.
- Garg BS. Teaching/Training and Practice of Public Health/PSM/Community Medicine. *Indian J Community Med.* 2017;42(3):127-130.
- Grépin KA, Savedoff WD. 10 best resources on ... health workers in developing countries. *Health Policy Plan.* 2009;24(6):479-482.
- HLEG. High Level Expert Group Report on Universal Health Coverage for India. New Delhi. 2011.
- IAPSM. IAPSM Constitution. 2015.
- IPHA. IPHA Constitution - Memorandum & Regulations. Kolkata2009.
- Kalita A, Zaidi S, Prasad V, Raman VR. Empowering health personnel for decentralized health planning in India: The Public Health Resource Network. *Hum Resour Health.* 2009;7:57.
- Rao KD, Bhatnagar A, Berman P. So many, yet few: Human resources for health in India. *Hum Resour Health.* 2012;10:19.
- Sharma A, Zodpey SP. Transforming public health education in India through networking and collaborations: opportunities and challenges. *Indian J Public Health.* 2013;57(3):155-160.
- Singh Z. Universal health coverage for India by 2022: a utopia or reality? *Indian J Community Med.* 2013;38(2):70-73.
- Thakur HP, Pandit DD, Subramanian. History of preventive and social medicine in India. *Journal of Postgraduate Medicine.* 2001;47:3.
- WHO. Everybody's business: Strengthening health systems to improve health outcomes: WHO's framework for action. Geneva: World Health Organization; 2007.
- WHO. The world health report 2006: working together for health. In. Geneva: World Health Organization; 2006.

Has CRMC succeeded in attracting health personnel?

Deepika Joshi, Sulakshana Nandi, Esha Gill and Tanvi Mahajan

INTRODUCTION

The Chhattisgarh Rural Medical Corps (CRMC) was introduced in 2009 by Chhattisgarh government with the aim to improve availability of human resources in rural and remote areas of the state. Under this scheme, health facilities have been categorized into three zones according to levels of 'difficulty' and 'accessibility', whereby differential financial incentives and extra marks for P.G. admission are provided for health staff at each level.

A 2013-14 evaluation of the scheme by NHSRC, Public Health Resource Society, and State Health Resource Centre Chhattisgarh found that CRMC had played a positive role in addition and retention of health workers in difficult areas (NHSRC et al, 2014). However it also identified gaps in implementation and gave recommendations to the state government. Since then the state has drafted new CRMC guidelines that are being implemented since February 2017 (CoCG, 2017a).

The current study, undertaken during August to October 2017, aimed to understand if any changes had come about in the scheme's implementation, three years after the first evaluation was carried out and what the health personnel themselves thought about the efficacy of the scheme.

METHODS

The study was a qualitative one. Kanker district was selected purposively as it was one of the three districts studied earlier and PHRN has been working in the district and was familiar with persons in civil society and government. Three of seven blocks were chosen for the study on the basis of degree of difficulty in access. All the CHCs in these blocks, along with one PHC and one sub centre were visited for the study. The CRMC categorisation of these facilities are given in Table 1. They include the sole CHC categorised as 'difficult' in the district and two out of the three CHCs under 'most difficult'. The PHCs under 'inaccessible' category could not be visited due to security concerns. One sub centre under 'inaccessible' category was visited.

Table 1: Facilities visited for interviews with health staff

CRMC Grading	No. of CHCs	No. of PHCs	No. of SHCs
Difficult	1	0	0
Most Difficult	2	1	0
Inaccessible	0	0	1

Within the facilities, eligible CRMC beneficiaries were identified through snowball sampling and in-depth interviews were undertaken using check lists. All available CRMC beneficiaries in the facilities, who consented to participating in the study, were interviewed. A total of 19 health staff from the facilities, two district and one state NHM official were interviewed (Table 2). Names of respondents and blocks have been kept confidential.

Table 2: Number of health personnel interviewed

S. No.	Respondents	Numbers
1	Specialist	1
2	Medical Officer (MO)	4
3	Dental Officer (not eligible under CRMC)	1
4	Assistant Medical Officer (AMO) (previously known as RMAs)	3
5	Staff Nurse (SN)	6
6	Auxiliary Nurse and Midwife (ANM)	4
7	Health staff from District NHM Team	2
8	NHM state official	1

FINDINGS& DISCUSSION

I About the CRMC scheme

The Chhattisgarh Rural Medical Corp (CRMC) categorizes health facilities into three zones according to difficulty levels: difficult, most difficult and inaccessible. The categorization has been done taking into account indicators of accessibility, environment (eg. conflict), HR vacancies and availability of housing (NHSRC et al, 2014). Additional monthly financial incentives depending on the level of difficulty of facility and extra marks in PG after three

years of service (revised to two years in 2017 guidelines) are provided to health personnel. During the four year contract period, the staff is to be posted in two categories for two years each, after which they would be transferred to a non-CRMC area (GoCG, 2017a).

Bonus marks are to be given to MOs, working under CRMC, who have served a minimum of two years with the government and have cleared their National Eligibility cum Entrance Test (NEET) entrance for PG. 5 % (of scored marks) bonus marks for every year are to be given to doctors who have served in 'difficult' areas and 10 % (of scored marks) bonus marks to doctors having served in 'most difficult' and 'inaccessible' areas (GoCG, 2017b).

The financial incentive amounts have remained the same since 2012 (Table 3).

Table 3: Category-wise monthly incentives (in INR)

S. No.	Designation	Inaccessible (in INR)	Most difficult (in INR)	Difficult (in INR)
1	Specialist	0	40000	30000
2	MO (with PG)	0	35000	25000
3	Emoc/ LSAS Trained MO	0	30000	22000
4	MO	30000	25000	20000
5	AMO	10000	5000	3000
6	SN	5000	3000	2000
7	ANM	2000	1000	0

Source: GoCG, 2017a

New guidelines for CRMC were drafted in January 2017 (to be effective from 1st February 2017). The previous study had found that the performance indicators on the basis of which health staff were being evaluated, did not adequately capture their performance and neither did it take into account the situation of the health facility. Addressing these concerns, the revised guidelines has two appraisal indicators-stay at the place of posting and work performance, with a higher percentage attributed to staying at the place of posting (Table 4).

Table 4: Weightage criteria for approving incentives

Area	% of incentive for staying in the area	% of incentive for performance
Inaccessible	70	30
Most difficult	60	40
Difficult	50	50

Source: CoCG, 2017a

II CRMC as a motivating factor for health staff to work in rural and remote area

What came out clearly in conversations was that the CRMC incentives are a motivating factor for doctors and Assistant Medical Officers (AMOs) to not only join the job but also to continue working. For three of the MOs, the promise of bonus marks in PG entrance was the biggest motivation for their joining CRMC areas. One young MO (MO 3.1) said that though he was initially not interested in joining and had left his job once, he joined back due to the PG marks.

The health administrators and specialist, who was also the BMO of the block, corroborated this from their experiences.

"CRMC is useful for my staff, it is a motivation for them to work" (Specialist/BMO).

A lady MO thought that the CRMC scheme was effective, as it encouraged newcomers to join in remote areas and the PG bonus marks were crucial in attracting them. She herself uses the CRMC amount to pay for her LIC policy annually. When told that according to new guidelines, her CHC may not come under CRMC, she said that in that case she may leave her job and start private practice. One MO opined that before CRMC scheme, no one wanted to work in rural areas. He was previously working in the private sector but shifted to the public sector when his town of work, which is also his native place, came under CRMC scheme.

Though ANMs hadn't known of the scheme during their recruitment, they were happy that they were receiving incentives. Most of the AMOs said that the CRMC incentive was the primary reason for their joining the particular health facility.

III Continuing problems in implementation of CRMC

The previous study had found that the government had made very little effort to publicise the CRMC

scheme, especially among new recruits, irregular payment of incentives was affecting morale of the beneficiaries and harming the purpose of the scheme, monitoring and grievance redressal systems were weak and there were issues in grading of facilities. The current study showed that the situation had not changed much since then, one reason being the non-implementation of the new guidelines:

Awareness regarding CRMC scheme: Doctors were quite aware of the financial incentives and PG bonus marks, criteria details of the area etc. However, most of the staff nurses and ANMs got to know about the scheme only once they joined the facility that came under CRMC scheme. Most were not even sure of their incentive amount.

"The government should do something to spread the awareness among the staff who is entitled to get benefits from the scheme because we don't know what facilities or benefits we are entitled for as CRMC beneficiaries" (Staff Nurse 1.3).

Irregularity and delays in payment of CRMC benefits: The problem of irregular, and sometimes non-disbursement of financial incentives still existed. None of the respondents had been paid incentives for the 2017-18 financial year. Two MOs had not received the incentives for the last financial year (2016-17). An AMO had not received any CRMC incentive the last two years. The ANMs received their incentive once or at the most twice a year in lump sum.

"After I applied for the scheme, in the first year I received the incentive thrice as per the norms, but after that I have been receiving it once every year" (Staff nurse 1.2).

District NHM officials put down the delays in disbursing the incentives to delays in receiving funds from the state and delays in receiving the performance appraisal forms. The NHM state official while admitting to delays in disbursing funds, also said that districts were free to use the left-over money from the last financial year. With regards to timely performance appraisal, respondents suggested that appraisals could be based on the online HMIS data that is uploaded monthly. The new guidelines mention that performance appraisal will be done based on HMIS/MCTS data, however, it was obviously not being implemented at the time of the study.

Issues in grading of facilities: Few respondents expressed dissatisfaction at the grading of facilities.

"The distribution of areas is unfair. There are certain facilities that are on the main road yet they come under inaccessible areas" (AMO P1.1).

"The higher authorities should decide the area categories carefully. It is easy to decide the area categories while sitting comfortably in a room but it is unfair for the people working there" (MO1 CHC3).

The researchers too observed that the categorisation was not consistent. According to NHM state official the new grading of facilities has been done, but the list has not yet been finalised yet.

Lack of a transparent transfer policy: Despite the provisions in the CRMC contract, most of the medical officers had been posted for more than four years in the area, with no scope for transfer. One respondent said that there should be confirmed transfer and choice of posting after three years in CRMC area, as per the bond, as that would provide motivation to work during these three years.

The existing transfer policy also makes it very difficult for doctors to get transferred. As one MO explained, "Till the time someone is not posted to relieve you, you cannot be relieved from your posting" (MO 2.3).

The lady doctor said that she had not been given her home district, despite her requesting multiple times. She alleged that there was corruption in getting transfers done.

Grievance Redressal systems not satisfactory for the beneficiaries: The grievance redressal system was found to be non-existent or unsatisfactory. One AMO narrated his experience of trying to get redressal for non-payment of incentives without any help from the department and finally his incentives for one financial year lapsed. The NHM state official maintained that it is not possible to have a separate grievance redressal cell for CRMC but whenever a complaint comes, it is taken note of and redressed.

IV Health system issues affecting motivation and performance of health workers

Determinants of 'performance': As mentioned above, the performance appraisal system for providing incentives has been revised in recognition of the fact that the performance of health workers is also determined by a range of external factors and workers should not be penalised if any of these are found lacking. Hence, in the new guidelines, more onus has been put on residing in the area and less on actual performance, however the guidelines have not yet been implemented. Even in the new guidelines, fixed targets

are given for delivery, OPD and IPD, which was a concern for the respondents. The NHM state official agreed that it may be not possible for certain facilities to meet certain targets because of low population, inaccessibility etc., and so it was left to the discretion of the district level committee.

Need for strengthening services and facilities: Most of the respondents spoke of the poor state of equipment, infrastructure in their facility. Medical officers complained of the refrigerator not working in blood storage facilities, frequent power cuts, unavailability of medicines, lack of supporting staff and overburdening of doctors, which prevented them from discharging their duties effectively.

"We have to buy nebulizers, but due to lack of funds, we are not able to buy them. We use OPD fees for purchasing medicines" (AMO P1.1).

Lack of basic living conditions, like a proper house, electricity etc. was a major demotivating factor for all staff members.

Personal development and growth: Trainings and exposure to other institutions provided some motivation to the health workers. The lady doctor was satisfied that due to mentoring by senior doctors from Raipur Medical College, her skills had increased even though, her personal life had taken a setback by staying in a CRMC area. She underwent Emergency Obstetric Care training after which she is able to handle complicated deliveries to an extent.

AMOs, Nurses and ANMs felt that their incentives were less as compared to the doctors. When the NHM state official was asked about this in the interview, he said that there may be a possibility of revising the incentives for the AMOs.

CONCLUSION

The study finds that according to the health personnel, the CRMC scheme seems to be playing a role in attracting and retaining health personnel to rural and remote areas. The bonus marks in PG entrance especially seem to be very attractive for young doctors. Though the scheme itself has been revised to incorporate recommendations from the previous study, gaps in implementation still remain. There is need to create more awareness about CRMC among medical and nursing students, ensure regularity in disbursement of incentives and a responsive grievance redressal system. However, the state still has a long way to go, in getting adequate human resource for rural and remote areas. In order to further attract and retain staff, larger, system level changes and addressing the

historical marginalisation of these areas are required. Health facilities need to be strengthened, the supply-side gaps plugged and working and living conditions of the health workers improved. A transparent posting and transfer policy needs to be in place. Opportunities need to be created for children and youth from the local communities to go for higher studies, including medical education. Finally, systems of governance needs to be strengthened, in order to ensure that these reforms and policies result in an actual increase in people's access to quality healthcare and wellbeing.

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REFERENCES

Government of Chhattisgarh (GoCG). (2017a). Amendments to Chhattisgarh Rural Medical Corps Scheme, Department of Health and Family Welfare, Chhattisgarh Government, 2017.

Government of Chhattisgarh (GoCG). (2017b). Notification on Rules for Entrance in seats for Post Graduate programmes in Government and Private Medical Colleges.

Department of Medical Education, Chhattisgarh Government, 3 April 2017.

Lisam S., Nandi S., Kanungo K., Verma P., Mishra J. P., Mairembam D. S. (2015).

Strategies for attraction and retention of health workers in remote and difficult-to-access areas of Chhattisgarh, India: Do they work? *Indian Journal of Public Health*. 59 (3): 189-195. Available at: <http://www.ijph.in/article.asp?issn=0019-557X;year=2015;volume=59;issue=3;spage=189;epage=195;aurlast=Lisam> Last checked 13 Jan 2018

NHSRC, PHRS and SHRC Chhattisgarh. (2014). Evaluation of the Chhattisgarh Rural Medical Corps (CRMC). New Delhi: NHSRC. Available at <http://nhsrcindia.org/sites/default/files/Evaluation%20report%20of%20Chhattisgarh%20Rural%20Medical%20Corps%202013-14.pdf> Last checked 13 Jan 2018

Growing Informalisation of Workforce and Public sector Hospitals in India

Bijoya Roy

Introduction

Under the increasing budgetary pressure public sector hospitals in India are now faced with a number of reforms. Until the mid-nineties employment relationship and the 'world of work' in the public sector hospitals owned and operated by central and state government did not see significant shifts. Over the past two decades these institutional spaces have seen significant reorganisation of the workforce. This is an outcome of multiple forces. There was policy level emphasis on introducing flexibility in jobs to save the non-salary components of health expenditure (World Bank, 1993). Downsizing and flexibility shaped by new public management principles emerged as measures to increase efficiency, contain public expenditure and quality of care in the public hospitals. One of the other reasons was that public sector workers were perceived as problems for the sector itself. Also there have been large number of vacancies across all categories of healthcare providers. Healthcare workforce play an important role in the functioning of hospitals which then defines its quality of care, outcome and overall efficiency.

Commercialisation of public sector hospital spaces across the country has led to changing of employment conditions with greater job and social insecurity. Informal forms^{1,2} of employment have become the new norm in the public-sector hospitals but its magnitude is invisible from common perceptions of hospital work. Depending on the nature of agreement non-standard forms of employment³ in these hospitals can be categorised into

- Direct contract with the hospital authority
- Sub Contracted jobs through Third party agencies or by the private service providers (PPP / Outsourced)
- Daily wage workers

What is critical is the increasing share of informal workers within formal healthcare institutional spaces over the past two decades and growing reliance of the employers on flexible and cheap labour. Today in the public-sector hospitals the share of informal workers in every category (clinical, para-medical, and non-medical) has increased. Ten years back in Delhi government hospitals, around 23% of employees were on contract (SLD, 2007). By 2012 each medical college and hospital in Kolkata had 200 or more contractual workers appointed by different private players in the ancillary services. This is an under researched area with very little enumeration and hence its size, gender and caste composition remains little known.

These contractual or temporary employees play an important role by filling the important gaps in the hospitals. It is important to understand how these shifts in employment arrangement impact public sector hospitals 'world of work'.

Fragmentation and Contractual Hierarchy

Increasingly non-standard forms of employment (direct contractual work or sub-contractual arrangements) is leading to the fragmentation of the employment base within and across different hospital settings. It has thus moved away from the centralised recruitment of the hospital workforce. This has increased the scope for local level negotiations between hospital authority and the third party agency or when workers are directly employed by the outsourced department in the hospital. In tertiary and secondary level public sector hospitals among the contractual workforce hierarchy has emerged based on differing terms and conditions within and across different categories of healthcare workforce. This increasing contractual hierarchy is also shaped by the caste, ethnicity, and class and gender background of the workers.

In the public sector hospitals non-medical low skilled workers (ward boys/ sweepers/ Kitchen staffs / security guards / linen cleaners / drivers etc) were the first group to face maximum informalisation. Even though they play an important role in the maintenance of the hospitals they face with the poorest contracts and working conditions (Roy, 2011). In many of the public sector hospitals their appointment does not fall anymore directly within the hospital administrations authority. Outsourcing these services through competitive tendering has brought their appointment within the fold of private contractors. Outsourcing of ancillary services too shows continuation of caste hierarchies among lower end workers in the hospitals. Ward ayahs, ward boys, cleaners (safai karmacharis), security guards came from lower castes or the socially disenfranchised groups (SLD, 2007).

They have been followed later by pharmacists, laboratory technicians, nurses, doctors and many other lower positions in the administration later. Contractual appointment of the medical personnel is done at the district level, based on sanctioned posts communicated by the state to the respective district authority. In case of para-medicals based on the sanctioned posts, contractual appointment is done either directly or through the third party agency.

Growth in Job Precariousness

Compared to the earlier standard, job precariousness⁴ has increased many times among the different hierarchies of contractual workers in these hospitals. These insecurities range from low wages, long working hours, lack of occupational mobility and safety

Salaries of the regular healthcare workforce has been fixed based on the respective pay commission in each state. The same rule is not applicable for the contractual staffs (skilled or low-skilled) and there is no

performance evaluation process for them as well. In many cases of sub-contractual work arrangement wages are fixed by the third party agency that often does not follow the pay commission rules or the minimum wage policy. In many states including Chattisgarh, West Bengal, Uttar Pradesh and Madhya Pradesh low remuneration has kept many posts vacant. Doctors and nurses are given additional allowances like travelling and dearness allowance. Nonetheless, NHM contract doctors and nurses in Meghalaya and Nagaland reported of inferior pay and huge pay gap compared to their permanent counterpart (Rajbangshi et al, 2017). In the public sector hospitals contractual doctors and nurses found limited avenues of upward mobility. Contractual doctors in both the states reported that even if they got permanent posts their earlier years of work will not be taken into consideration for career progression (ibid).

In cases of outsourced services like hospital diet, cleaning and diagnostics, cost cutting has been a major issue which is borne by the concerned workforce through poor wages and are not assured of any social security provisions like annual increment, provident fund, health insurance or pension and are often exposed to occupational hazard. They have been subjected to inferior rates of pay compared to medical and paramedical workforce and delayed payment of their salary. There has been gradual erosion of the basic workers right and protection. Studies of district hospital PPP units, West Bengal had shown that the private party often appointed untrained people and without any guarantee of the employment regulations (Roy, 2015). Similar trend has been noted among the contractual employees of Delhi government hospitals (SLD, 2007). Often the low-skilled contract workers are not given proper appointment letter specifying their terms and condition.

Impact on Performance and Care

Changes in employment arrangements, job precariousness has added to the challenges of motivation, performance and quality of care by different categories. Increasing uncertainty, low wages bears an impact on individual health and performance. Vacant posts create workload pressure on contract workforce who then have to meet the workload.

Documentation from other industries shows that increased use of temporary workers result in higher 'adverse impacts'⁵. Studies on temporary nurse staffing in US context has demonstrated that they lack familiarity with the nursing unit and overall organisation. Secondly, the hospitals managers and administration is challenged when staff shortage is met with contractual or temporary staffs. They have to ensure that they match the hospitals and patients' requirement⁶. Also when the staff turnover rate is high, it significantly bears on the resources.

In UK NHS hospitals, Davies, 2005 explains that the outbreak of hospital acquired infection can be linked to the poor working conditions emerging out of the competitive contract tendering of outsourced departments. In the name of cost cutting the contractor

gives poor wages which lead to poorer job satisfaction and higher attrition rate. This actually is a loss for the hospital as it repeatedly is opened to newer set of people with little knowledge of the organisation and fewer resource material to work. Thus it jeopardises the patient care process and maintenance aspect of the hospital.

Shifting Work Culture

Overall in public sector hospitals non-standard forms of employment has transformed organisational structures and relationships across the workforce. This bears an impact on the work culture as workforce across categories in the hospital have to work towards a common goal of quality patient care without compromising on workers right.

It is observed that public sector hospital authorities have little knowledge about low skilled contractual workers (security guards, sweepers, ward boys, trolley men, kitchen and catering staff). This nonchalant behaviour on the part of hospital and split in accountability makes contractual and temporary workers feel less respected, cared of and trusted. Majority of them identify themselves with their employers (private contractor) rather than with the hospital authorities. This contributes to the tension and competition between the regular permanent and contractual workforce and also within the contractual workforce as well. There is a sense of powerlessness and anguish when contractual workers realise that they cannot access hospital facilities in which they work like the regular employees (Roy, 2010).

The experiences of these workers are complex. What is consequently happening is the deep embedding of the temporariness, insecurities of informal workers and their unprotected lives in these institutions. At the hospital level this impacts the collaborative effort between and across the regular and contractual workers.

Collective Bargaining

With contractual workers outnumbering permanent workforce in public sector hospitals now contractual workers face complex challenges in these institutions. Initially workers with non-standard forms of employment find it difficult to claim organisational rights and collectivise. However, over the years with their increasing strength and apprehension about their working conditions they have begun to collectivise. Particularly this has come to our notice through increasing strikes⁷ organised by public sector hospital contractual workers in different states. However, there has been minimal engagement with the collectivisation and unionisation process of these workers.

Presently, there are trade unions as per the workforce category or occupation like nurses' union, laboratory technicians' trade unions, operation theatre technicians, Group D staff union and others. Their major demand has been to secure regularise employment, payment of salaries on time, equal work-equal pay and maternity leave. Repeatedly

contractual workers from ancillary services, nurses and lab technicians have resorted to different strategies like hunger strike or indefinite relay strike as they are often receiving delayed payment and are being paid less than the state minimum wage. Contractual workers employed through third party agency and by the hospitals do not necessarily come together but in the recent times contractual workers across categories are coming together. Till now state government has little shown efforts to harmonise the working conditions of contractual workers with that of the permanent workers.

Conclusion

The public sector hospitals in India with limited financial resources are facing unprecedented challenges of recruiting, mobilising and retaining workforce. The world of work in public sector hospitals have become complex with the emergence of tiered workers facing differing employment status and working conditions. Stagnating healthcare expenditure has deepened the crisis. Over the years in many states staffing patterns of public sector hospitals have not been upgraded. Flexible contractual employment has been the response to these problems with ad-hoc call for permanent posts; more so for the high skilled clinical and para-medical workers which apparently has a high demand.

Yet the state health departments do not have any overarching policy on healthcare workforce (clinical and non-clinical). Partially institutional workforce requirements have been spelt out through IPH standards. There have been piecemeal approaches and as a result the ability to transform services, ethics of work and achieve efficiency in the public sector hospitals continues to remain a challenge. Fundamentally, this structural change has challenged the functioning of public sector hospitals and little can be done till public sector hospitals are not adequately funded. It requires also a serious examination as to how it uses different set of workforce within the hospitals.

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Notes

1 Informalisation of the formal economy, 'Represents the replacement of jobs that were formal, standard jobs, with jobs that are non-standard, and often informal' (http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_534326.pdf).

2 Informal employment is employment without any form of protection (that is, job security or social security). This expanded definition, which now is being increasingly used by researchers, includes: (i) workers in informal enterprises; and (ii) workers without any form of protection elsewhere in the economy, including within the formal sector' (Cook and Razavi, 2012).

3 Four types of non-standard employment: (1) temporary employment; (2) part-time work; (3) temporary agency work and other forms of employment involving multiple parties; and (4) disguised employment relationships and dependent self-employment. (http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_534326.pdf).

4 Precariousness refers to the risk that the worker bears in relation to the job compared to the business that hires her or him (http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_534326.pdf).

(https://www.ncbi.nlm.nih.gov/books/NBK2655/pdf/Bookshelf_NBK2655.pdf)

6 (https://www.ncbi.nlm.nih.gov/books/NBK2655/pdf/Bookshelf_NBK2655.pdf)

7 See following links:

<http://indianexpress.com/article/cities/delhi/delhi-contract-staff-on-flash-strike-at-safdarjung-hospital-over-wages-4516734/>; <https://timesofindia.indiatimes.com/city/jaipur/contract-workers-stir-hit-services-in-govt-hospitals/articleshow/57638217.cms>; <https://timesofindia.indiatimes.com/city/hyderabad/contract-sanitation-workers-go-on-strike/articleshow/58709876.cms>; <http://indianexpress.com/article/india/india-news-india/panchkula-national-health-mission-contract-workers-protest-rationalisation-policy-2967222/>; http://www.business-standard.com/article/news-ians/contractual-health-workers-in-bihar-begin-indefinite-strike-115060101467_1.html

References

- Davies S (2005) Hospital Contract Cleaning and Infection Control, Cardiff University, www.cf.ac.uk/socsi/CREST
- Page AEK (NA) Temporary, Agency, and Other Contingent Workers, https://www.ncbi.nlm.nih.gov/books/NBK2655/pdf/Bookshelf_NBK2655.pdf
- Rajbangshi PR, Nambiar D, Choudhury N and Rao KD (2017) Rural recruitment and retention of health workers across cadres and types of contract in North-East India: A qualitative Study, WHO South-East Asia Journal of Public Health, September, 6(2) <http://www.searo.who.int/publications/journals/seajph/issues/seajph2017v6n2p51.pdf?ua=1>
- Roy B (2010) Outsourcing of Service Provisioning and Changing Employment Relationship in Public Sector Hospitals of West Bengal, The Indian Journal of Labour Economics, Vol. 53 No.(2), pp 409-422
- Roy B (2015) Public Private Partnership in Healthcare: Trajectories and Experiences from West Bengal in I Qadeer (Ed.) INDIA: Social Development Report 2014: Challenges of Public Health, Oxford University Press, New Delhi
- Society for Labour and Development (2007) India's Health in a Globalised World: Healthcare Workers and Patients' Views on Delhi's Public Health Services <https://www.slideshare.net/SLDIndia/indias-healthcare-in-a-globalised-world-healthcare-workers-and-patients-views-of-delhis-public-health-services>

Information Technology in a Workers' Hospital: My Experience at Shaheed Hospital

Veershetti Naveen

With the advent of computers, hospital management softwares (HMS) have emerged as a useful tool for hospitals to maintain patient data and analyse disease patterns. These are extensively used by corporate hospitals in cities who have the financial resources required for managing customised variants of such software. On the other hand, small private hospitals with low budgets which form a huge part of the private health sector landscape in the country rely on standardised softwares. However, for hospitals located in the remote areas, where internet connectivity and computer literacy are non-existent, records are still managed manually. Shaheed hospital located in Dalli Rajhara, Chattisgarh is one such example.

I was part of the team mentored by IIT Hyderabad that developed the HMS for the hospital in June 2016. Subsequently I stayed at Shaheed hospital for a year to help deploy the software. This paper highlights the challenges of developing and deploying HMS at Shaheed hospital in Dalli Rajhara.

The Hospital

Shaheed hospital was started in 1983 by the mine workers of Dalli Rajhara under the leadership of Late Shankar Guha Niyogi. The hospital is unique, in the sense that it is completely managed by the workers' union. Presently serving as a 120 bedded hospital, it has been serving the mine workers of Dalli Rajhara as well as the surrounding villages in a 120 km radius. The hospital offers affordable treatment and apart from the doctors, all other staff are locals.

A singular feature of the staff is the health workers, some of whom have been with the hospital since its inception. These were mostly mine workers who had basic primary education and were trained by the doctors. Many of the nurses were family members of miners or farmers and were trained in the hospital for a period of one year.

HMS Design

Since this was the first time a software was being designed for Shaheed hospital, there was no clarity in what exactly was needed. The process of software development involved implementation, feedback and version changes. In keeping with the patient needs, the hospital earlier had colour coded slips, green slip for male patients, red for female patients and white for children so that the patients who are largely

illiterate or semi-literate could easily identify their slips. To continue to cater to this need, the software was designed to show male, female and child icons to make things easier for patients. In the lab results too, results not within normal range were highlighted in bold or red colour.

HMS Deployment

The Hospital management wanted to bring technology not just to eliminate redundant operations like manual entry of patient data at various locations, but also motivate the staff, who had minimal knowledge of English and no exposure to computers, to embrace technology and gain confidence in the ability to use computers. Hence, it was decided that no new staff would be hired for operating the software. This meant that nurses had to be trained to use the HMS. A workshop on the use of software and its operation was conducted for the nurses but was not very helpful. Eventually, the process of training the nurses in the use of computers in a foreign language turned out to be an extremely challenging task.

Language

Due to resource crunch and time constraints, the user interface was in English. The nurses belonging to local areas, having studied up to 10th to 12th Class, had never seen a computer before. They were familiar with Hindi and Chattisgarhi, but knew little English. Bulk of the work was in the OPD where until now the nurses kept a record of patients, both old and new, in different registers. The challenge was to train the nurses to use the computer and enter data of patients coming for treatment. In OPD registration, apart from the patient details, the symptoms of the patient, temperature and BP are also noted down. The nurses were not familiar with the English terms of different symptoms. Then, a chart listing the items in Hindi and the corresponding English translation was created. This was later converted into a book form.

Computers

Nurses in the inpatient ward had to take responsibility for data entry at night. However, they had issues with even basic operations like starting the computer after power cut or paper getting stuck in the printer. Often while cleaning of the area, the connections got loose and had to be reconnected. Using tabs or a new window in the browser was also a difficult task

initially. Not used to the keyboard, nurses would accidentally keep a register on the keyboard and got scared seeing weird operations happening on the screen. Despite gaining some competence in data entry, their confidence in handling a computer used to be low since they were unaware of other features of the computer. To address this, the nurses were introduced to a few typing games for more familiarisation. Gradually over a period of one year, their confidence grew and they were able to use the computer and patient data was directly entered in the software. Initially when there was a huge crowd in the OPD, they were a little afraid but as they gained confidence they could manage things well.

During night shifts, the nurses were busy with work and emergency duty and it was difficult for them to prepare the inpatient sheet since desktops were available in the reception area which was situated in a different building. To overcome this issue, a Wi-Fi zone was created in the hospital. The nurses were taught how to access and operate the software using mobiles and thus it became easier for them to prepare the inpatient sheet and print it. Everyone had their own mobiles but few were apprehensive of using their own mobiles for this work.

Schedule

A major issue in the OPD was that only one of the senior nurses was a regular and the others came by rotation. The senior nurse learnt to use the software soon but the other nurses got an opportunity to learn the software after about two months. This delayed their learning process and it took about a year for them to learn and manage it. The busy schedule of the nurses also made it difficult for them to spare time for learning the software. The same phenomenon was observed even in the inpatient ward. In the inpatient ward too, nurses got their turn after a certain interval and the new nurses needed to be trained every time.

Fear and Apprehension

Not all the nurses or the staff were enthusiastic about computers in the beginning. A couple of senior nurses and staff were opposed to the introduction of computers in the hospital. Some of the younger nurses who had done BSc nursing, were more enthusiastic about learning computers. Some others were curious. Ideology also played a role, since the hospital was set up by the mine workers' union and they had opposed mechanisation and computers in the mines at one point of time. A few staff were afraid that computerisation would take away their jobs. One senior nurse working

for almost 14 years was opposed to the idea of entering data through the computers. For medical reasons, she had to move out from her position in the child ward and was compelled to work in the OPD for about three months. She was forced to learn computers and eventually became very good at operating them.

Impact

The introduction of HMS eliminated the effort involved in writing patient details in multiple forms. It also helped in maintaining patient records and accessing their medical history. It became easy to see the distribution of patients according to caste, gender, class and geography which will help in analysing and identifying disease patterns. This would further help in giving better health services to the community. This also helped the hospital collate data for making reports. It is also helpful in maintaining medicine stocks and check for expiry dates. The software helped in specific departments also. For example, the PARTO graph was generated through software which greatly assisted helped in scheduling the delivery. Considering the number of undernourished people in the area, the software also helped in calculating the BMI when height and weight details were provided. Some of the staff mentioned that due to the software, their workload has increased as they were still getting used to it. However, they also recognised that it was easier to pull out records and keep records of their patients.

During my one year stay and work in the hospital, there were small incidents which made me personally happy. One night, a patient rushed to the hospital around 1:30 am with their neighbours. While I was preparing outpatient sheet using the software, I got to know that she is an old patient. The neighbours were not aware about the patient's past medical history but the scanned records immensely helped the doctor in treating the patient. There were several instances where patients came in a critical condition without their patient slip and software records helped treat them fast.

While the impact of HMS on medical treatment is obvious, it was difficult to foresee the effect it had on the nurses. They overcame the fear of technology, learnt to use computers, type in English and gained some familiarity with the language. The confidence that comes with this new skill is now clearly visible.

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Clinical Medicine and Public Health: Where are the 'Boundary Spanners'?

Mohit P. Gandhi

Clinical Medicine versus Public Health

Clinical Medicine (CliMed) and Public Health (PH) have been symbolized as the two daughters of the Greek God Aesculapius, Panacea and Hygeia, goddesses of healing and of health (Lasker 1997). CliMed is concerned about disease, while PH is concerned about health. CliMed looks for the cause of diseases within the body by employing specific tests. PH, firstly, considers absence of disease as just one of the determinant of health; instead, it talks about wellbeing. Even while explaining the etiology of disease, it considers a variety of factors (social, cultural, economic, environmental, political etc.). In PH's point of view, what a doctor sees in a patient is the final manifestation of these larger factors, what is also referred to as 'embodiment' (Kreiger 2001). In order to treat the disease, CliMed prescribes specific drugs or procedures. It customizes treatment as per the requirement of individual patient so as to get best outcomes. On the other hand, PH is concerned about diseases of the masses and advocates 'good enough' treatment for all those in need through standard regimes delivered in a programmatic fashion. The practice of CliMed is, understandably, restricted to medical and para-medical professionals while the field of PH is open to a wide range of workers. It is similar to how a teacher differs from an educationist, or how a botanist/zoologist differs from an environmentalist/ecologist (Krishnan et al. 2014).

Changing equation between PH and CliMed

Till a few decades ago, communicable diseases were the predominant concerns of both PH and CliMed. Disease like Cholera, Plague, Smallpox, Scarlet Fever and Malaria were the major causes of deaths. Wars were lost not because of a weak or small army, but because of such diseases (George 1993; Krause 2005). State sponsored PH focused on sanitary reforms to control disease and deaths. In parallel ran the stream of thinkers like Fredrick Engels who explained poverty as the cause of disease. Indeed, working class struggles could limit the working hours in factories and could stop employment of women and children in hazardous industries in the West. CliMed didn't have many answers, except bleeding and purging, and sending patients to the hills/sea-side. Under these circumstances, caring about PH used to be a status symbol for physicians as it projected them as somebody above commercial interests (Lasker 1997). At least some physicians were looking beyond their

professional boundaries to solve the problems of the day. For instance, there was a John Snow, who calculated the right dosage of chloroform for patients undergoing surgery, and also surveyed Cholera affected areas of London to establish that contaminated water, and not miasma, was responsible for this scourge. However, the situation started changing with the development of germ theory towards the end of 19th Century.

Being able to pin-point the specific cause of disease suited the core philosophy of CliMed well. The task was now to find ways to kill or control the growth of these micro-organisms. Every new drug discovered progressively added to the armamentarium of CliMed. The industry, state and popular public perception favored the growth of clinical medicine. A positive feedback loop developed in which clinical medicine kept discovering 'magic bullets' and, in turn, kept receiving rewards which enabled and motivated it to continue this spree. The impact of clinical medicine had always been gratifying as it could be realized at individual level. But now, these quick-fixes became available which further enhanced the social prestige and financial incentive for physicians. The cultural gap between the practitioners of CliMed and PH started widening.

While CliMed got teeth with the discovery of germ, PH underwent a paradigm shift. Non-specific and impersonal sanitary measures gave way to specific preventive measures, like vaccines. Approach to control communicable diseases started becoming more and more medicalized. Though, at the same time, PH started getting diversified and going much beyond sanitary reforms to include maternal and child health and issues like mental health. Milk stations and school lunch programs were began to be established to improve child nutrition (George 1993). Post WW-II, concern for non-communicable diseases also came under the fold of PH. Slowly, environmental issues and accidents too got added. The scope of present day PH is so wide that, as a faculty says, 'it includes everything under the sun and even the sun itself'. Consequently, PH people claim CliMed as one of their many arms. But this positioning is far from acceptable to the CliMed people. On the contrary, they see PH as one of their sub-specialities. And it doesn't stop here. PH people see medicine as full of 'arrogance, self-interest and economic aggrandizement', while CliMed

people look PH as 'a politically corrupted field populated with individuals intellectually incapable of medicine and science' (Brandt and Gardner 2000).

Why should the gap between CliMed and PH be a concern?

That social determinants play a significant role in causation of disease is an irrefutable proposition. CliMed, as a field of practice, largely deals with disease once it happens and tries to bring the body back to a disease-free state. It has a neatly cut-out role for itself. From a clinical perspective, it may be considered acceptable if CliMed does just that, ethically and rationally. But what CliMed still need to understand and internalize is that this is not enough. Disease etiology is multi-factorial, as Hippocrates also acknowledged in his treatise 'On Airs, Waters and Places'. There are a range of structural issues surrounding the individual, like the one of access, which needs attention. These may not be, 'technically', CliMed's business. But then, they have to be somebody's business.

On the other hand, PH as a field of practice, is (expected to be) more concerned about structural issues affecting the health of masses. 'Maximum good for maximum number of people' is a dictum it (ought to) follow. What PH needs to acknowledge is the reality and urgency of disease in individual bodies. The patient can't be invisibilized in the 'larger picture'.

The question is not to establish the superiority of one over the other, or to transform one into the other. The issue is to develop sensitivity and respect for each other, and appreciate the roles that each one plays (Lasker 1997). A lot of work has been done to develop such a mutual understanding.

Attempts to build bridges between CliMed and PH

The efforts to bridge the gap between CliMed and PH began in early 20th Century by establishment of Schools of Public Health within, or in close proximity of, Medical Schools. It was believed that medical knowledge was necessary for PH people to deal with prevention and control of disease. Also, there was an aspiration to influence medical schools/professionals with PH approach. For instance, AIHPH Kolkata was established with this idea. But as the scope of PH widened, it became inevitable to bring together broad range of expertise and intellectual disciplines which was not possible within the confines of Medical Colleges. Consequently, standalone PH Schools began to be established. In India, institutes like CSMCH-JNU (1970) and SHSS-TISS (1989) were established for this reason. Another agenda behind this move of

PH people was to develop an identity distinct from their much better earning counterparts in medicine, to secure autonomy and to gain authority (Brandt and Gardner 2000).

More vigorous efforts have been made to sensitize CliMed people towards PH. They started in 1950s with establishment of dedicated departments in Medical Colleges. To begin with these were called Departments of Preventive and Social Medicine. The departments were supposed to undertake re-orientation by: a) giving a social perspective to health problems and health practices, b) interacting with teachers of other medical disciplines to provide a social dimension to their teaching, and c) knitting together concepts and methods of the conventional 'hygiene and public health' with those from other related medical disciplines to impart teaching of comprehensive health services (Banerji 1973). These professionals were expected to be 'boundary spanners', people who could understand the language of CliMed as well as PH, who knew the concerns and needs/requirements of both sides and who had could appreciate the necessity of collaboration from multiple perspectives (Lasker 1997).

The Politics of Terminology

The term 'Preventive Medicine' has origins in United States of America (US) during a period when PH was almost exclusively concerned with the prevention of infectious diseases and was dominated by medical profession (Milton 1985). Specific measures were employed to prevent specific diseases. Starting from quarantine, vaccination, use of DDT for malaria control and distribution of anti-TB drugs on mass scale, it went on to include nutrient supplementation, contraception and genetic counseling. Characteristically, it implies a more personal encounter between the individual and health professional than public health. However, over time, it has expanded to involve general health promotional measures ('primordial prevention'), and has come closer to generic PH.

'Social Medicine' is primarily a European specialty and is concerned with study of social causes and social consequences of diseases. The therapy under social medicine does not consist of administration of drugs, but social and political action for betterment of life. The idea was sown by Neumann and Virchow in 1840s, but germ theory checked its development. In 1912, Rene Sand founded the Belgian Social Medicine Association. It achieved academic respectability in England when, in 1942, John Ryle was appointed as professor of social medicine at

Oxford (Warren 2000). The post war period saw considerable expansion of social medicine as an academic discipline. It is not a new branch, but a new orientation of medicine. McKeown (as cited in Park) describes it as 'an expression of humanitarian tradition in medicine'. However, the discipline is often criticized for being isolated from the service world and as confined mostly to academic study of health and disease.

'Community Medicine' is a term which emerged in United Kingdom in 1960s under specific circumstances. While initially, Medical Officers of Health (MOH) were responsible only for sanitary action at local level, their responsibilities got progressively diversified in the inter-war period. However, NHS (in 1946) trifurcated the health care organization into personal health services, general practice and hospital care which brought MOH back to square one. By late 1950s, they started demanding unification of health services under NHS. It came out in form of a formal report in 1962 (the 'Porritt Report') which recommended the formation of Area Health Boards which would subsume all health services and professionals and would be headed by a medically qualified administrator. When this proposal was seriously considered, it was realized that existing MOH were not suitably trained to shoulder this responsibility. A new specialist cadre, called 'community physicians', was to be created to fulfill this role. The Royal Commission on Medical Education Report ('Todd's Report', 1968) used the term 'community medicine', and defined it in terms which embraced social medicine, but went beyond it by giving greater emphasis on organizational and administrative aspects of health services. It also called for a professional body to undertake the assessments of training of such specialists. This call was worked upon jointly by various bodies which included Society of MOHs, Senior Administrative MOs and Society for Social Medicine. There were a lot of discussions regarding the name of the proposed faculty, and, so as not to favor any existing discipline, the term 'community medicine' was reluctantly accepted. In 1972, the Faculty of Community Medicine was founded (Warren 2000).

Unlike in UK, there was no rational context for change in the name of the discipline in India (Singh 2004). Sometime in the mid-1970s, a discussion was held at the annual conference of the newly formed Indian Association of Preventive and Social Medicine in Udaipur. In an attempt to rework the image of the discipline (which was still identified with latrines and

mosquitoes), alternative terms like 'Community Health' and 'Community Medicine' were considered. May be, the word 'community' was preferred by the relatively conservative medical professionals as it appeared to be referring to activity at a local level rather than any national action. It was suffixed with 'medicine' in order to emphasize the clinical nature of the discipline (Krishnan 2016). Interestingly, there was no corresponding change in the academic content of the discipline, or, in the administrative set-up of health care services to accommodate these 'new' specialists.

The term 'Community Medicine' was also popular in US as it could substitute 'Social Medicine', which appeared too close to 'socialism' (Milton 1985). US was so skeptical of the word 'social' that Rosen George had to publish his book on history of social medicine as 'History of Public Health' (Krause 2005). However, the titles of standard US textbooks on the discipline use the term 'Public Health'. In India, the discipline got renamed Preventive and Social Medicine. The journal published by the association is titled Indian Journal of Community Medicine, but the popular textbook ('Park's') is still subtitled Preventive and Social Medicine. Interestingly, in 1989, the Faculty of Community Medicine of UK, which was the reference for the renaming in India, was itself renamed the Faculty of Public Health Medicine. At present, the official website of the Faculty is fph.org.uk ('Faculty of Public Health'). The Journal started by the faculty was initially named 'Community Medicine'. The name was changed to 'Journal of Public Health Medicine', and since 2004, it is called 'Journal of Public Health'. Yet, the aversion to 'Public Health' continues in India. As long as 'Medicine' is the suffix, it hardly matters if it is 'Preventive', 'Social' or 'Community'.

The entry of 'Family Medicine'

The first fundamental change occurred in the discipline, by whichever name we call it, in late 19th Century when the germ got discovered. The second change occurred in mid-20th Century when non-communicable diseases started becoming a significant medical concern. No 'germ' could explain their occurrence, and this baffled ClinMed. Answers were sought from PH people, and they responded with information on individual-level risk factors, analysed using statistical tools employed over data gathered using specific study designs (Stanwell-Smith and Hine 2001). The population perspective and the social determinants got pushed to the background. A third fundamental change is what we are now witnessing in form of Family Medicine (Qadeer and Nair 2005: 69), which is being pushed on to Departments of

Preventive and Social Medicine, Community Medicine, Community Health, or Public Health...whatever we call it.

The idea of 'Family Medicine' began in 1920s in US when Dr. Francis Peabody criticized specialization for fragmenting the healthcare delivery system, and called for return of General Practitioners (Park 2013: 9). In 1966, the Millis Commission Report and Willard Committee Report made similar recommendations. In 1971, the American Academy of General Practitioners changed its name to American Academy of Family Physicians to gain academic acceptance for the new specialty (Park 2013: 9).

There is no doubt that specialization has fragmented medical care and that this needs to be countered. Most of the medical needs of a family should be met close to where the family stays. That's one of the basic principles of primary health care. But is that not what a medical graduate, the 'basic doctor' supposed to do? Why does one need to specialize in general practice? And why on earth should the training in such 'clinical' care be forced upon a department which has a totally different mandate? The department has already come quite far from its original objectives of providing social orientation to medicine. It is anyway in pursuit of establishing itself as a specialty rather than also acting as a bridge. This policy change would only make the task more difficult.

Conclusion

CliMed and PH are different. They are both equally essential, and need to co-exist. The differences and the essentiality of co-existence have to be understood by both disciplines in the context of the respective history of each, and both need to have genuine respect for each other. Departments of PSM, or whatever we call them, have developed this understanding. However, for obvious reasons, these departments have been more aligned to CliMed than to PH. This has prevented them from serving the objectives with which they were established. Besides a lot of other things, these Departments need to interact with PH people outside their own fraternity. Forums like Medico Friend Circle can be one of the platforms for such interaction. This would help them develop a balanced perspective, and may manifest as research collaborations, mutual involvement in education and training, and joining of forces for movements. The rest of PH people need to reflect upon, and question, the dominant disciplinary discourse. At the same time, they need to be sensitive to the strengths and to the weaknesses of these

potential boundary spanners, and need to proactively welcome them.

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References

- Banerji, D., 1973. Social Orientation of Medical Education in India. EPW 8, 485-488.
- Brandt, A.M., Gardner, M., 2000. Antagonism and accommodation: interpreting the relationship between public health and medicine in the United States during the 20th century. *American Journal of Public Health* 90, 707.
- Krause, R.M., 2005. Preventive and social medicine: A Victorian legacy. *Indian Journal of Community Medicine* 30, 104-108.
- Krieger, N., 2001. Theories for Social Epidemiology in the 21st Century: An Ecosocial Perspective. *International Journal of Epidemiology* 30, 688-677.
- Krishnan, A., 2016. Community medicine in India - Which way forward? *Indian Journal of Community Medicine* 41, 5. <https://doi.org/10.4103/0970-0218.170956>
- Krishnan, A., Kapoor, S.K., Pandav, C.S., 2014. Clinical medicine and public health: Rivals or partners. *The National Medical Journal of India* 27, 99-101.
- Lasker, R.D., 1997. *Medicine & public health: the power of collaboration*. The Academy, New York, NY.
- Milton, T., 1985. The Distinction between Public Health and Community/Social/Preventive Medicine. *Journal of Public Health Policy* 6, 435-439. <https://doi.org/10.2307/3342044>
- Park, K., 2013. *Park's Textbook of Preventive Social Medicine*, 22nd ed. BanarsidasBhanotPublichers, Jabalpur.
- politics of pedagogy in public health.pdf, n.d.
- Qadeer, I., Nayar, K.R., 2005. Politics of pedagogy in public health. *Social Scientist* 33, 47-75.
- Rosen, G., 1993. *A History of Public Health*. Johns Hopkins University Press, Baltimore.
- Singh, A., 2004. What is (There) in a name? *IJCM* 29, 151-154.
- Stanwell-Smith, R., Hine, D., 2001. Public health medicine in transition. *Journal of the Royal Society of Medicine* 94.
- Warren, M.D., 2000. The origins of the Faculty of Public Health Medicine (formerly the Faculty of Community Medicine) of the Royal Colleges of Physicians of the United Kingdom. Faculty of Public Health Medicine, London.

Public Health Education in India, 2018 - Does it contribute to Health Equity?

Thelma Narayan

1. Introduction

Public health education grew around core disciplines of epidemiology, biostatistics, with applications to disease control, health promotion, prevention and rehabilitation. The scope expanded over the past century with additional multidisciplinary approaches, including socio-epidemiology and several social science disciplines. The rousing call of the Alma Ata Declaration in 1978 to work towards Health for All (HFA) as a worldwide social goal with a comprehensive primary health care approach, led to a Health for All movement.⁽¹⁾ The understanding required for application of public health as a discipline to real life conditions was expanding. While social justice in health was a core component, this did not permeate adequately into higher educational programmes for medical and health sciences in India. The new economic order which was to underpin HFA was quietly forgotten by all stakeholders. However, efforts at strengthening public health systems, rights based approaches along with the need for social accountability and governance mechanisms were promoted by health movements and groups and have been reflected in the National Rural Health Mission (NRHM) 2005 and the National Health Mission (NHM) 2012, particularly in its communitisation components. How much has public health education contributed to this process and how much has it been influenced by these developments? How deep or effective are the teaching learning processes about health equity in public health education in India? What are the perspectives that inform the formation of human resources for public health practice and research?

2. The scope and range of public health education

Public health education in India encompasses a diverse mix of structured and semi-structured educational and training programmes. These evolved since the early 1900s for different health worker and health professional groups. In its broadest sense it includes training of health workers such as ASHAs (and a variety of community based health workers), ANMs/MPWs/ Junior Health Assistants, Senior Health Assistants, Block Health Educators, Public Health Nurses, and other health workers all of whom form the backbone of the public health system.

The undergraduate medical curriculum (MBBS) incorporated the Diploma in Public Health since the early 1950s based on Bhole Committee recommendations, and a decision that the 'social physician' envisaged should have a public health orientation.

University based post graduate courses include the MD in Community Medicine/ Preventive and Social Medicine/ Community Health established in medical colleges were available only to medical undergraduates. These were rooted largely within a bio-medical paradigm. Professional associations were formed with the Indian Public Health Association (IPHA) in 1956 and the Indian Association of PSM (IAPSM) in 1974 with journals and conferences. Several students went abroad for higher education in public health encountering the newer areas of public health, health promotion and other streams. In 1996 an important review in a report suggested the restructuring and revival of postgraduate programmes, and recommended development of 4 additional regional institutions on the pattern of the All India Institute of Hygiene and Public Health, Calcutta established in 1932 as the first School of Public Health with support from the Rockefeller Foundation.

In a later phase MD Public Health Dentistry; MSc Public Health Nursing; Master's in Public Health Programmes, MPhil. and PhD programmes developed with affiliation to different universities. The HIV-AIDS epidemic, SARS and Avian Influenza led the UN Secretary General to promote the strengthening of public health systems and public health education at the turn of the millennium. The 1999 Kolkata Declaration led to formation of the South East Asia Public Health Education Institutes Network (SEAPHIN) to strengthen and reform public health education, training and research, undertaken through a series of subsequent initiatives. A 2004 report for UNESCAP for the Asia Pacific region focused on underlying societal determinants of disease and strategies to address them. The range of new programmes offered in India over the past fifteen years has grown, including distance education through universities including IGNOU. The Public Health Resource Network (PHRN) developed teaching modules and conducted distance education

programmes for in-service public health staff. Development of lists of public health competencies for different courses (MD, DPH, MPH) by a group for the IPHA as a national initiative was an important step.

The growth and visibility of the sector has also attracted the attention and interest of the private sector in public health and public health education. The implications of this are still unravelling and need enquiry.

Within another stream of work that was more contextually rather than textually driven, the voluntary sector (i.e., the non-profit community based health groups) working over decades with rural and deprived populations evolved alternative approaches including training of community health workers, forming village health committees, and linking health with development over several decades. All these had measurable impacts on health indicators. These new perspectives and approaches resonated with experience in other countries. In the 1980s thirteen community health training programmes in this sector were studied. Resource groups with a civil society focus developed community health learning programmes, and fellowships which attracted many local young people and those from multi-disciplinary streams. A critique of established programmes grew, together with efforts at scaling up of alternate approaches and mainstreaming into academic institutions. Social orientation initiatives such as Nirman (see paper on Nirman in this volume for an account) have also influenced many young professionals to work in remote rural communities.

While health indicators have improved gradually, social justice in health is still to be achieved. The disaggregated data reveals huge gaps.

Public health education in the newer centres have subjects like analytical work on structural and societal determinants of health, gender and health, social accountability, governance, and even newer topics such as post-structuralist frameworks

There is a growing demand and utilization of public health education in all the diverse streams available. In this article however, we focus on postgraduate public health education.

As a thousand flowers bloom, there is a need to reflect upon why and how these programmes evolved, curriculum content, teaching methods, student

selection processes, faculty selection and nurture, social relevance, community engagement during the course, job opportunities for the graduates and their career pathways. However, several other questions can also be raised. Which are the constituencies that public health education responds to? Who are the primary stakeholders? What societal factors promote public health education? Has this changed over the years? What are the economics, and the political economy of public health education in a globalized world? What has the privatization of public health education achieved? Is there a social accountability factor for higher education, particularly for public health education? What are the ethical underpinnings and values underlying public health education in India? Has public health education contributed to health equity in India? What is the definition of public health that forms the core of public health education? In what ways is public health itself changing? If health equity and social justice in health and health care are a core objective, will public health education programmes need a redesign? What platforms exist for serious discussions around this critically important subject?

The medico friend circle (mfc) organized an important annual meeting on the theme "Public Health Education in India - lacunae, challenges and way ahead" in Bangalore in December 2006. The mfc bulletin 320-321 carries articles around the theme.⁽²⁾ A public health movement in support of the people's health movement was mooted.⁽²⁾ Much has happened over the decade since then. The number of postgraduate seats in MD programmes substantially increased. An informal public health education network was initiated in Bengaluru. The mfc critical thinking process engaged intensely for a time around the theme of public health and the specific role of the Public Health Foundation of India which was established in April 2006. Other developments have taken place too. MPH programmes were initiated largely in private academic institutions affiliated to different universities. In 2017 there were 46 MPH programmes, of which 4 were run by PHFI related Indian Institutes of Public Health in Delhi, Gandhinagar, Hyderabad and Bhubaneswar. The number of work or job opportunities for health human resources trained in public health increased substantially. In this context of expansion, the 'so what' and 'what next' questions can be raised. What is the difference that the mfc, its members and the debates make, within this complex scenario? Can there be a solidarity and collective voice expressed while engaging with public health education?

3. New paradigms and ways forward

A multidisciplinary public health paradigm is widely recognized since the early 2000's, with focus on the social determinants of health, and on strengthening public health systems with active communitisation processes. A WHO-SEARO report noted that capacity for public health education "does not lie in medical schools and schools of public health alone but also in the alternative sector such as management and social science institutions, professional associations and civil society which also need to be tapped in a spirit of partnership". (5) In another report they identify organisations representing a new paradigm, such as SOCHARA, CEHAT, PHM, VHAJ and others. They advise that unless these are involved "a large portion of creative energy for public health will remain untapped." (5)

SOCHARA

The Society for Community Health Awareness, Research and Action (SOCHARA) initiated a Community Health Fellowship Programme in 2002-3 based on a twenty-year community health experience and through the CHC (Community Health Cell) since 1984. Members with academic experience in community health since the 1970s worked together to create this learning initiative as space for a newer generation of young professionals from multidisciplinary backgrounds to join the Health for All movement. While recognizing that the state was mandated through the Constitution to promote the health and nutrition of the public, with an implicit major role in the promotion of public health education, it was increasingly understood that the focus, structure and processes of the educational programmes were theory driven, limited by frameworks, often reflecting 'privilege' or conceptual understandings that were not entirely socially relevant. It was felt that a community health approach to public health issues and to public health education was required.

As discussed, earlier decades provided rich experience in alternate approaches to community health, to development and to politics. NGOs, CBOs and civil society groups working with communities functioned with different theories of change underlying their efforts. Documentation and analysis of these efforts gave rise to 10 axioms of a community health approach.(4) A Public Health in India (PHIN) Score and a Wikipedia hosted page www.communityhealth.in are reference points. Emergence of the global and Indian People's Health Movement (PHM)/ Jan Swasthya Abhiyan (JSA) in 2000 as a broader platform

or countervailing power to the dominant discourse in health, economics and development was a milestone. The Peoples' Charter for Health, with a collective perspective, became a rallying point.(3) A shift in perspective and approach to being protagonists through proactive engagement with the public health system and related sectors via multiple strategies for a substantial change in policies and practice created new energies.(8,10)

SOCHARA positioned its community health learning programme (CHLP) within civil society with a health equity perspective. In its third phase SOCHARA through its School of Public Health, Equity and Action (SOPHEA) evolved a 52 week curriculum, several mechanisms and teaching learning material. Experiential community based learning with mentorship is allocated 50% of the course time, with a focus on contextual learning alongside textual learning.(6) There is a rich network of 80 partner NGOs and programmes for student placements. Student and society centered interactive learning sessions use adult learning principles. A conscious decision was made to maintain autonomy without any university linkage to allow flexibility in the teaching learning process that worked through through social immersion. Questions for enquiry and discussion came from a real life social situation and not only from previous research.

A two year postgraduate level Madhya Pradesh Community Health Fellowship Programme (MPCHFP) instituted by SOCHARA was the first in the country to use Hindi as its medium of interaction. The CHLP too evolved through feedback, workshops, mid and end term evaluations of each phase and follow up with participants. The vision of phase three from 2012-13 to 2016 was "to develop a critical mass of community health practitioners cum activists with scholarship, competence and commitment to work towards Health for ALL".(6) As before the programme supported full time and flexi interns. "Capacity building for Health Equity in India - A reason to Hope.." (see www.sochara.org/SOPHEA/CHLP Bengaluru) reports extensively on the 4 year experience. (ibid) Presentations have been made at national and global workshops in 2015. Evaluations raised the need for continuity and sustainability.

Two national workshops in 2016 raised issues of epistemology and national accreditation processes for MPH courses.(6)

Since 2002 over three phases the CHLP has had 375 young professionals as full time or flexi interns. Though these are drops in the ocean, they are significant, and part of a larger groundswell. Alumni workshops, WhatsApp groups and social media platforms keep participants connected. Alumni work in diverse organisations across India as practitioners as well as in leadership roles, working together with

communities and supporting social movements. Solidarity including the support of governing bodies and boards help in facing challenges that are inevitable in this effort.

Mainstreaming

As importantly as the processes described above, mainstreaming efforts played a role in the

Table 1. Select Modules from the MPH (Honours) course, RGIPH, RGUHS (7)

MODULE	BROAD CONTENT
Foundation Course (10 credits, 6 weeks)	Orientation and introduction to public health; Human development and health; Critical analysis and systems thinking; Indian health situation and healthcare scenario; Health systems in India – an overview (public health and medical); National health programs – an overview; Introduction to IT; Life long learning
Value orientation in public health (5 credits, 3 weeks)	Right to health; Equity in health; Gender and health; Ethics/ Integrity in health; Quality in health
Socio-cultural and community health competency – I (5 credits, 3 weeks)	Social determinants of health; Social and behavioral sciences; Health economics; Anthropological perspectives in health; Political economy in health
Socio-cultural and community health competency – II (5 credits, 3 weeks)	Community needs assessment and working with community, including community participation; Social inclusion and vulnerable groups – working children, elderly, people with disabilities, Dalits and adivasi's, sexual minorities; Action on social determinants; Community mental health; Foundations of social care policy
Leadership and governance competency (5 credits, 3 weeks)	Leadership; Governance and decentralization; Harnessing resources; Intersectoral collaboration; Partnerships
Universal Health Policy competency (5 credits, 3 weeks)	Health for All and comprehensive primary health care; Millennium development goals; National Health Missions – NRHM, NHM; Universal health coverage – global experiences; Universal health coverage – challenges for India; Health innovation
Public health laws; Ethics and Human rights competency (5 credits, 3 weeks)	Introduction to law, ethics and rights in public health; Public health laws; Public health ethics; Human rights in health; Regulation and accreditation
Plural health systems competency (5 credits, 3 weeks)	Plural public health systems; Local health traditions; Local healers; Alternative health systems – AYUSH/TCAM; Mainstreaming AYUSH in public health; Transdisciplinary research - an introduction
Ecological sensitivity (5 credits, 3 weeks)	Basic environmental health; Environment, ecology and development – connections and emerging threats including climate change; Environmental sanitation – including safe water, sanitation and waste disposal; Workers health – with focus on the unorganized sector; Research and policy analysis in environmental health

development of a University Grants Commission (UGC) recognized three year MPH (Honours) course by the Institute of Public Health in Rajiv Gandhi University of Health Sciences, Karnataka launched in 2014.(7) Eight modules based on the CHLP (see table below), enhanced field work, exposure to civil society and NGO initiatives along with a research project were introduced.(7)

The first postgraduate batch comprising of in-service doctors and a nurse from the state government health services have rejoined the service having successfully completed the course. The second and third batch with students from all sectors are undergoing the course. Professional links were established with other academic institutions such that modules on values, ethics, equity, gender, mental health, disability, environmental and occupational health, globalization and health, health policy etc. are introduced with cross learning between different programmes.

State governments such as Karnataka have established a Karnataka Jnana Ayoga (Knowledge Commission) which have also made recommendations and contributions to public health policy and public health education. (9) The PHFI established multi-disciplinarity in public health education and also conducted a Diploma in public health management for in service professionals for several state health departments. MFC members were involved in processes leading to the Universal Health Coverage report. Papers at the 2015 first All India Peoples Medical and Health Science Convention covered recent developments in-depth.

In Conclusion

Creative public health education courses located in community with an understanding of social contexts have played a transformative role. The challenge is to use the equity lens across all components of the programme from curriculum content to management of the course. Further mainstreaming of approaches as an ongoing process can ensure that public health education remains dynamic, grounded in societal realities with appropriate conceptual frameworks, encouragement of critical thinking and a dialogical process.

However, the overall political and policy directions promoting corporate influence and commercialization of health care and health science education are active in public health education. The public health movement that was envisaged in 2006 will need to

respond to this challenge through development of strong public health education networks and public health ethics. Will the medico friend circle play a significant role in this?

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References

1. WHO, 1978, The report of the International Conference on Primary Health Care, Alma Ata, Health for All Series No 1. World Health Organization, Geneva.
2. Medico Friend Circle Bulletin, 2006, Issue 320-321, Background articles for the mfc Annual Meet on Public Health Education in India in Bengaluru, mfc Pune, India.
3. Peoples' Health Assembly, 2000, The Peoples' Charter for Health, Savar. The Peoples' Health Movement (PHM). Available from <http://www.phmovement.org/files/phm-pch-english.pdf>,
4. SOCHARA, 2011, Community Health: In Search of Alternate Processes, Report of a Study - Reflection- Action Experiment by Community Health Cell, 1987, Republished 2011, Bangalore
5. WHO-SEARO, 2009, Application of Epidemiological Principles for Public Health Action. Report of a Regional Meeting, WHO-SEARO, Delhi.
6. Narayan, T; Rahul ASGR; Janelle De Sa; Chander S J, 2016, Capacity Building for Health Equity in India - A reason to hope.... SOCHARA - SOPHEA Team 2016.
7. RGUHS, 2014, Ordinance Governing Master of Public Health (Honours), Regulation and Curriculum 2014, Rajiv Gandhi Institute of Public Health and Centre for Disease Control, Rajiv Gandhi University of Health Sciences (RGUHS), Karnataka
8. SOCHARA, 2014, Social Justice in Health, Multiple pathways towards Health for All, a reflective report, SOCHARA - SOPHEA Team, Bangalore.
9. Karnataka Jnana Ayoga, 2013, Strengthening State Public Health Capacity and HRD, Chapter in Towards a Community Oriented Public Health System Development in Karnataka, Report of Mission Group of Public Health, Karnataka Knowledge Commission, Govt. Of Karnataka. p29
10. Narayan.R and Narayan.T, From Alma Ata to Rio: Health for All to All for Equity, WHO South East Asia Journal of Public Health 2012;1(1):4-7
11. Lok Swasthya Vigyan Vol. I, 2015, Medical and health Science Education in India: The emerging paradigms, People's Council of Education, Allahabad, India.

In search for a framework for primary and secondary care knowledge and practice?

Anand Zachariah

Introduction

One of the systemic problems affecting medical education is that most of the training in medical colleges both at the undergraduate and postgraduate levels occurs in the environment of large tertiary care hospitals, technology intensive investigations and treatments, and specialist supports. The framework of knowledge that students learn from textbooks and learning resources are in the format of tertiary care. However, the MBBS doctor at the end of this training is expected to be able to function as basic doctor who can function at primary and secondary level.

This mismatch is central to many of the problems that beset medical education. Since graduates do not have the clinical competence to take care of common problems, their basic training is not sufficient. They therefore require further training through post-graduation to be able to practice. Graduates are not exposed to primary and secondary care during their training and hence do not have the confidence, competence or motivation to consider a career option in such a location.

Competence by default is defined in terms of tertiary care as this is academic medicine's location. Therefore, medicine in other locations, is seen as a step down, something theoretically less significant and less important than tertiary care. How do we describe the competence of primary and secondary care?

Shift towards competency curricula

In the world of medical education and perhaps in all fields of education there has been a movement towards a competency approach to training and curricula. Competency medical curricula are being promoted by the Medical Council of India. The assumption underlying competency curricula is that an occupation can be broken down into a set of competencies. Education in this model is concerned with producing changes in student's performance or behaviour towards achievement of these competencies. The proponents of competency-based curriculum argue that competency based education can set bench mark standards and improve the quality of the Indian medical graduate.

The question is whether the capability of a doctor can be broken down to a set of simply defined competencies? Competencies may lead to oversimplification of complex performance, focus only on observables and is narrowly prescriptive. Accumulated experience and judgment cannot be expressed as a 'competence'. It cannot deal with the

need to acquire a large and unapplied body of knowledge. Competence does not address the contextual elements of a task, the variations and complexities within a given situation. Clearly competency approach leads to oversimplification of the education, pays less attention to the process of and context of training.

An analysis of competence for primary and secondary care

The approach that I will be taking in this article is to examine the term competency for primary and secondary care using a case study approach. The steps involved in the analysis are:

1. Statement of two core competencies required of a basic doctor, one for emergency problems and the other in outpatient care.
2. Description of two cases with these clinical problems that were handled at the level of primary and secondary care. Analysis of the competency required of the doctor to handle these specific situations.
3. Discussion by experienced primary/secondary care physicians and teachers about how the care of these two problems is different at the primary and secondary level.

Case studies

A. Competency of Normal delivery

The doctor should be able to:

1. Manage normal labour, detection of abnormalities and post-partum haemorrhage;
2. Assisting in forceps delivery and caesarean section

Case study:

Case managed by Dr. Ramesh Karki an MBBS graduate from CMC who is currently doing his 2nd year of his service obligation in Okhaldhunga Community Hospital with United Mission of Nepal.

"It was a chilly night in December. I received a call from the delivery ward at midnight. There was an 18 year old lady in labour. When I read the referral letter from the health post, I was surprised that she had been fully dilated for past 24 hours. It took 13 hours to travel, she was carried for 5 hours and then luckily got a jeep for 8 hours drive. I had never seen such a case before. The fetal heart was normal. We made the case ready for caesarian section. It was difficult section with the bladder popping out into the way and a low

lying head. But we were able to deliver a healthy crying baby and the rest of the operation was successful. I am happy that we were able to save the mother and baby despite the challenges."

Commentary (on secondary obstetric care)

Dr. Shylaja, obstetrician in Gudalur Adivasi hospital

"The thing about obstetrics is that many a time the complication is unexpected and you have to intervene immediately. In the secondary care setting, especially in a remote area, all the back up for these interventions may not be available and you must make do. To do this, you must be skilled and mentally prepared. Even after my MD I was shocked at some of the cases we saw here, never having seen those kinds of extreme cases in my life and with no place to refer to. How does one prepare the doctor for this? Get them to be as skilled as possible and give them the confidence that what they do in the best interest is all that the patient is going to get!"

The differences in secondary care obstetrics are that:

- Patients can present late.
- A patient may appear to be normal and can deteriorate.
- You must be prepared to manage a patient with antepartum and postpartum haemorrhage.
- Ultrasound is an important skill. To pick up the position of the head and the placenta.
- Doctors must be able to recognise labour that is not progressing - CPD
- They need to identify high risk obstetrics and refer early.
- They need to be flexible and adaptable.

B. Competency Management of common mental illnesses

A doctor requires the skills to:

1. Recognise common mental illness
2. Identify acute and chronic stress
3. Identify the link between stressful mental events and physical symptoms
4. Identify and manage severe depression, suicidal risk
5. Discuss coping strategies

Case example

The following is case narrated by Dr. Rajkumar Ramaswamy in KC Patty Primary Health Center,

Kodaikanal Taluk, Tamil Nadu¹:

"Chandran is aged 27, married with two children and runs a small business. He has a long history of becoming anxious when he develops palpitations, difficulty in breathing, a feeling of impending doom and chest tightness. Chandran consulted a cardiologist who arranged several tests that quickly cost Rs 10,000. Chandran had to borrow money to pay for these tests. When his symptoms failed to improve Chandran finally visited a trained family physician who diagnosed generalized anxiety disorder. Chandran was seen by a team of staff in the health center who helped him understand how anxiety can mimic cardiac symptoms. Chandran was taught relaxation exercises. Chandran is now well and even if these symptoms recur he knows how to deal with them himself.

When Mumtaz presented to the same skilled family practice physician with similar symptoms she was diagnosed and treated for just Rs 400 expended over 6 months with good results."

Commentary on primary care management of common psychological problems by Dr. Rajkumar

Mild to moderate mental health problems like anxiety and depression are very common in India in all social groups and often mimic physical illness leading to unnecessary expenditure on futile specialised investigations. These illnesses can be diagnosed by a trained family physician with minimal expenditure and does not need a psychiatrist. The family physician can also treat these moderate psychological illnesses at home refer only those with more complex illnesses and doubtful diagnosis to a psychiatrist.

Dr. Rajkumar in an interview said that the following²:

They don't come and say I have depression. They say I have chest pain. The primary care doctor has to look carefully. Is it due to the heart or due to the stomach problem, or is it due to a mental health issue. It needs highly specialised skills. You need to know the person, their family, you need to know the problems they face, so that you can really understand what the problem is. If we treat them wrongly like they have a heart problem when they have a problem due to anxiety or domestic violence, then we can do much more harm by making them waste money on doing unnecessary investigations.

I used to think this is just a simple mental health problem, a worry or anxiety. Other than this, I need to deal with the major things like injuries, heart problems. I soon realised that mental health problems cause so much tragedy in families, there is so much unnecessary expense and so much suffering. I realised that we have got to take this seriously. If people matter, then we need to diagnose mental health problems properly. My

attitude to mental illness needs to change. It is a serious problem. It needs just as much careful care as someone with a heart disease.

In family medicine you have a wonderful skill. There is no other place where you understand the person, the family, and the community they come from. You feel their pain and you feel their joy as well when they get better. When they come to you, you can manage most of their illnesses and their health care needs in a holistic way. You can integrate preventive and acute care and look after them in a way that they want to be looked after. In this way they can continue their treatment if they need to do that.

Discussion

What is the gap between the statement of competence, and the practical knowledge and skills required by these physicians to take care of actual problems at primary and secondary care?

Is competency the best way to describe the practice of secondary care medicine in these cases? The knowledge and practice required are not amenable to the simple description of performing a specific task as described by competency based curricula. Both these cases emphasise that skills required in practical situations are not simple and cannot be easily simplified. Each case is highly individual. It is a very high level of skill that requires bringing their knowledge and practical experience to the requirements of the individual situation or context. The knowledge and skills required are 'contextual'.

In the case of obstetric care, the doctor has to know difference in local presentations, difficult and late cases, use of available diagnostics, making quick decisions on when to intervene and when to refer and the confidence to do the best in the life and death situation. Ramesh's example and Shylaja's description indicate a lot of practical wisdom, experience and commitment in handling difficult cases in challenging circumstances.

Dr. Rajkumar's cases emphasise the commonality of mental distress, and the unique position that the family physician has in being able to understand the distress in the setting of the family and community. Common mental illness doesn't present as a psychological problem, the doctor has to tease it out. The doctor in the majority of cases can look after it on their own and in difficult cases in consultation with the psychiatrist. The care of common mental illness by a primary care physician is contextual, it reduces cost, need for referral and leads to a better patient outcome.

Competency at the primary and secondary care is not just the ability to perform a specific task. It the ability to tailor the treatment to the requirements of the

individual situation. This involves not just the ability to perform the task. But the reading of the individual context- the patient, the family, the community and the limitations or requirements of the health situation. It involves deciding what is the best treatment in the given situation, what is affordable, sustainable and what is the preference of that individual. It is the complex performance or practice that constitutes the essence of primary and secondary care.

Is the word competence adequate to describe this? Probably not. Competence refers to a basic level, a measurement of skills and a minimum pass. Both these examples describe a performance that exceeds the norm. Where the doctors involved brought to bear against the situation more than that which could be considered a normal expectation. It was that bringing everything that they knew to the requirements of the situation which provided for Practice (with a big P). Not just the simple application of a skill in the treatment of a patients (practice with a small p). Something that could be described qualitatively but cannot be subject to a minimum standard.

One of the models that is used in Family medicine is the three stage assessment model of Fehrsen and Henbest³ which involves (1) Clinical - the standard clinical assessment. (2) individual assessment - involves identifying the reasons which brought the patient, their ideas and thoughts, their concerns and their expectations and (3) Contextual - the patients family, work and community context and their influence on the sickness and their wellbeing. This model emphasises the importance of the individual and contextual assessment in primary care. This model provides a simple conceptual framework and practical tool for articulating how doctors apply their knowledge and skills to meet the requirements of context. Clearly the performance of contextual medicine is more complex than the 3 steps of the three stage assessment.

In the standard knowledge of medicine there is the description of the disease, its definition, the epidemiology, the pathology, the symptoms, signs, the use of diagnostic tests, pharmacotherapy, prevention etc. These fragments together comprise the knowledge that constitutes disease, pathology, treatments or medicine as a whole. Knowledge is synthesised in this way in textbooks, manuals, compendia. Doctors use this knowledge in practicing medicine.

Biomedical knowledge has the controlling position where it determines the treatment. Practice (with a small p) in this setting is the uncomplicated practical application of that knowledge. The knowledge is context free. Within this framework, primary and secondary care is an application of tertiary care knowledge. Secondary care is a step down, an adjustment of treatment to the limitations of the

primary and secondary setting. It is less than standard treatment- not the best and evidence based treatment- but a resource limited modification.

In the two cases we have described the practice of Dr. Shylaja and Dr. Rajkumar are not step down treatments, they are step ups. They are based on standard knowledge and require a good understanding of it. But the knowledge of their practice goes beyond that standard and exceeds it. How do we describe a knowledge/ practice where context is the central controlling and determining element- a contextual knowledge and a contextual practice? It is the ability of the Practice to meet the requirements of the situation that determine the legitimacy of the practical knowledge. The knowledge cannot be evidence based on criteria of EBM. On what terms does one elaborate practical knowledge. Do we require a different frame to describe such a practical knowledge ? In other words is there theory to describe the primary and secondary care practice?

What are the implications of a contextual knowledge and practice for medical education?

The learning of the practice of primary and secondary care involves four aspects:

- The setting - rural Nepal/rural Tamil Nadu
- The practical cases - complex cases handled by doctors working at that primary and secondary level
- The teacher working at primary care who can demonstrate this experience based practice
- The participation and involvement by students and junior doctors this type of care

In thinking about contextual knowledge and practice, we have proposed the concept of a contextual curriculum⁴. The concept of contextual curriculum is also based on an understanding that western medical knowledge is not universal. There are gaps and impasses between universal knowledge and the specificity of a local context. The term 'contextual knowledge', emphasises the importance of local medical knowledge and practice that are relevant to the local context⁵. A contextual curriculum is premised on the belief that education to be relevant and effective it has to be aligned to local societal and health care needs.

The contextual curriculum emphasises the importance of context in the process of curriculum design:

1. Prioritising local health problems
2. Contextual knowledge
3. Contextual practice
4. Learning within community settings from role model teachers and contributing to the health care of the community.

Such prioritisation is involved in the different steps of educational planning involved in curriculum development: goal setting, writing objectives, planning course structure and content, choice of teaching learning methods, learning resources, settings of learning and teachers. (See Diagram on next page).

Conclusion

There is need for a framework to describe primary and secondary care in the specificity of context, a contextual framework of primary and secondary care knowledge and practice. Contextual knowledge and practice of primary and secondary care emphasises context as the defining and constituting feature of this knowledge system. It provides for a primacy of the knowledge system of primary and secondary care as a system that is defined by the context, and not defined as a step down from tertiary care. The contextual curriculum model suggests how ideas of contextual knowledge and practice can be woven into and incorporated into the process of educational planning.

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Notes and Reference:

- 1 Towards a Fair Effective and Sustainable Health Care System for India Rajkumar Ramaswamy mfc bulletin/Aug 2010-Jan 2011 74-78.
- 2 <https://www.youtube.com/watch?v=43WLYQYCKvE>
- 3 Fehrson GS, Henbest RJ. In search of excellence. Expanding the patient-centred clinical method: a three-stage assessment. *Fam Pract.* 1993 Mar;10(1):49-54.
- 4 Grant, J., Abdelrahman, M,Y.H. and Zachariah, A. (2013) 2013. Curriculum design in context. Chapter 2. *Oxford Textbook of Medical Education*. Ed: K Walsh. Oxford University Press, Oxford
- 5 This is in contradistinction to and in opposition to the idea of a universal knowledge. This is not to argue against the universality of science and medicine. However the term contextual knowledge and practice, emphasise the importance of the "local", the differences between the local and the universal and the need to find local solutions to local problems.

Medical Humanities: Prospects and Concerns

Amitranjan Basu

A recent research report in India on acceptability and feasibility of integrating humanities based study modules in undergraduate curriculum concluded that, 'the introduction of humanities based study module integrated with bedside clinical teaching in the undergraduate curriculum may be both feasible and acceptable to the students.' (Gurtu et al, 2013) This paper showed that 73% of the students found humanities based study module effective in improving their affective motivational behavior, 82% found it effective in motivating them to learn more about core medical subjects, and 85% wanted its continuation as part of medical curriculum.

This short write-up will first introduce medical humanities. Then I would give a short historical narrative about its emergence and practices. Finally, I will share about the prospects and concerns related to medical humanities in India.

What is it?

Medical humanities is a field of interdisciplinary training for medical students (and or practitioners) which includes literature, philosophy, ethics, history, religion, anthropology, cultural studies, psychology, sociology, health geography, theatre, film, and visual arts and their application to medical education and practice. Its strengths lie in its imaginative, non-conformist educational content.

Most doctors face patients from varied cultural backgrounds, create complex challenges to effective communication. How patients assess or value pain, suffering, disease, disability, and death depends on the substantive moral, political, and religious traditions of which they are a part. So, many problems facing medicine arise from the uncertainty this pluralistic environment creates. Despite the growing social and political tensions facing the medical profession, very little empirical research has focused on the broad range of cultural knowledge medical students need in order to respond to the medical and social environment. Medical students need to be competent not only in the natural sciences but also in the social sciences and the humanities in order to converse intelligently with a heterogeneous health-conscious public (Vance et al, 1992).

History of medical humanities

The first mention of a specific "Department of Medical Humanities" was in 1948, in reference to anticipated medical school reforms at New York University, but the department never came up (Rosen, 1948). The first

Department of Humanities in a medical school was established in the Hershey Medical Center at Pennsylvania State University in 1967. In the first few decades of the twentieth century, the one subject that stands out as providing an added value to the education of a physician - in terms of the number of schools in USA that identified it as a part of their curriculum - is an understanding of the history of medicine.

As the eminent physician and ethicist Edmund Pellegrino wrote in 1974, "the meaning of the word *humanitas*, from which 'humanism' was later derived ... is more properly subsumed under the Greek term *paideia* - an educational and cognitive ideal; and the 'good' feeling - what we would call compassion - is more akin to the Greek concept of *philanthropia* (Pellegrino, 1974)."

The advancement of this field has prompted many initiatives in most of medical schools both in the US and in Europe and is gradually gathering momentum in clinical research and practice. Nevertheless, immediately after its rise in the 1960s, many controversies have arisen about the way in which medical humanities should be understood and characterised as a recognised discipline (Evans and Greaves, 2010).

Indian context

In India, the coming of medical humanities is rather recent though it has taken a good start and some medical institutions have taken a lead. There are two journals that regularly publish articles. The Indian Journal of Medical Ethics regularly carries articles on the issue and the University College of Medical Sciences, Delhi University publishes an online, open access journal completely devoted to the issue named *Research and Humanities in Medical Education*. They also run regular workshops for students, doctors and faculties (<http://medicaleducationunit.yolasite.com/med-hum-history.php>). The Seth Gordhandas Sunderdas (GS) Medical College and King Edward Memorial Hospital at Mumbai runs a department of medical humanities (<http://www.kem.edu/department-of-medical-humanities/>).

Reporting on the GS Medical College programme, Supe has this to say

Every medical college should have a medical humanities cell with a few designated members from the faculty, students, as well as external experts. The concept of MH should be introduced to all faculty and students through various programmes throughout the

year. Sessions may be conducted preferably every month, or once in two months. Involving teachers who are already well versed in the humanities and who use every opportunity to introduce art, history and literature to the students will be more successful than having structured curricula. There should be open discussion after each session, with active participation from students and debriefing by experts. There is a faculty shortage in many medical schools in India and hence, initially external experts may be enlisted for initiating these programmes till internal expertise is available. (Supe, 2012)

The Delhi experience is well documented by Gurtu and his colleagues as previously cited. Other experiments with medical humanities in Delhi also revealed good outcomes (Singh, 2012 and Gupta et al, 2013).

Problems and concerns

However, this starting of medical humanities in India, which shows promises with recognition from regulatory bodies like Medical Council of India, is not without problems as exemplified in the following long quote:

Just a few days ago, while having coffee with a group of elated Interns, who are about to complete their Internship, I had a casual conversation with them. When I asked them, "What made them pursue Medicine", almost all gave a similar reply as "Want to serve the society, the humanity, the country and do good" and some said "Want to relieve the pain". Well, all for good cause, I felt contented. When I probed them for their future plans all of them had the same answer "Right now, preparation for NEET (National Eligibility Cum Entrance Test), to pursue Post Graduation (PG), preferably go for super-specialization". Not very surprised with what I had to hear, I wanted to know why they all wanted to pursue super-specialization only? Again there was the similar response from all "To earn well and settle well". Well, not bad! One has to be ambitious and this generation of budding doctors is high on it. Further, as just a part of a casual conversation I asked them what they learned during Internship? (Here I meant what new competencies they had picked up); and this time the response was a bit surprising - "Who wants to learn Madam, all our concentration was on NEET preparation". Really? Then "How much time do you spend speaking to each patient, on an average?" They said, "There is no need to speak to them. Just ask for any complaints, record their vitals, note them in a case sheet, finish rounds with the consultants and rush back to library to read." This came as too much to handle! But in reality, this is the current scenario in most of the Medical schools in India with most of the students (Patil, 2017).

Patil also points out that, with increasing technologization of medicine the art of medicine has lost its value and the help seeking person is reduced to a case. In another article Majumder (2012) also observed that, most of the medical schools in Asia have traditional, teacher-centred and hospital-based training. To produce 'humane' doctors for the community, medical schools need to review their mechanistic curricula and adopt various approaches to train students e.g. introduction of core curriculum and options, promotion of interdisciplinary learning and teaching, collaboration with arts and sociology disciplines, implementation of problem-based learning and community-based teaching, linkage with international institutes and organizations etc.

Notwithstanding the valuable suggestions given by the above experts it still misses, according to my viewpoint the most crucial issue, that is the political economy of medical education. The mushrooming of private medical colleges across the country and the charges students pay for that is phenomenal. So the basic intention that is inculcated in the students is to recover that money as quick as possible. Words like 'service for humanity' are mere lip service. With this comes the lure of becoming a super-specialist. The ancillary medical industry has also been tuned to such growth and taking cuts has become the order of the day. Morality has withered away and hardly any practitioner suffers from any conflict with his conscience! Even the print, digital and TV media, only propagate the ideology of super-specialists. I don't remember seeing any programme or reading any report that highlights the good work done by basic doctors who are needed most by our masses. Young medicos are even ready to pay the huge bond money to get rid of the commitment to serve the poorer sections of society. Govt. run medical colleges too have tuned in to this neo-liberal economy and the government run institutions have the largest amount of vacancies.

In this kind of a situation medical humanities can be a good resource to build up a medical force that may try to fight the neo-liberal attack and resurrect the values that has been lost. It is not very difficult to develop a curriculum suited to our country's need. There are already plenty of modules developed but what we lack are good committed teachers who would inspire the young minds to innovate combining science and arts. More so the latter, because science never happens in a vacuum, it plays its role in a socio-political context.

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Migrating to the big city: Nurses working in Hyderabad

Mithun Som

There is a huge presence of private sector in the health care scenario of Hyderabad city. There are tertiary level corporate hospitals as well as small private hospitals and clinics serving different strata of patients. These hospitals employ a large number of women as nurses who are important members of the health team needed for the smooth running of the hospital. This paper looks at the lives of few such nurses working in two different kinds of settings, the corporate hospitals and the smaller hospitals, within the framework of rural urban migration. It brings out the vulnerabilities of these women, what work means for them and their families and what binds them to the hospital they work despite the difficult working conditions.

This paper is based on a study¹ done on women migrating alone to Hyderabad pursuing work or education in Anveshi Research Centre for Women's Studies, Hyderabad. The study was to understand the ways in which urbanisation and migration are changing the shape of women's aspirations and the dimensions of their sexuality. For this, fifty in-depth interviews were done of women belonging to different background and strata, including seven nurses. This paper is based on the interviews of these seven nurses working in two different (kinds of) hospitals, a small 20 bedded hospital and a tertiary level corporate hospital.

Continuities and dissimilarities

The nurses we interviewed belong to economically poor families. Of the seven women we interviewed, three were Dalits (two Madiga and one Mala), two Christians, one Muslim (OBC) and another OBC Hindu. Though this is a very small sample, it points to the complex socio-cultural make up of our country

and the position of nursing in it. "Traditionally, amongst Hindu and Muslim communities, the need for female nurses to work outside of the home (including at night), to touch strangers, to mix with men, and to deal with bodily fluids (considered polluting within Hindu and Muslim cosmology) has meant that until recently, nursing was a relatively stigmatised and low status profession" (Abraham, 1996; Somjee, 1991 as quoted in Timmons et al, 2016). However Johnson (2014) notes the growing prospect of migration has changed the image of nursing, and has posed it as a potential career opportunity widening the traditional caste, class and gender boundaries. It is beyond the scope of this paper to see how in the changing scenario and the touching of unclean bodies plays out.

The corporate tertiary hospital caters to the middle and upper class. The smaller hospital is situated in an area inhabited predominantly by Muslims (including a small population of migrated African Muslims) and Dalits. The hospital caters to this population which is mainly lower middle class and poor. The hospitals have different employment strategies. The smaller hospital paid less to the nurses compared to the corporate tertiary hospital. The smaller hospital hired women who have done their Auxiliary Nurse Midwifery (1-year diploma) course. The corporate hospital hired women who have done minimum of BSc nursing or General Nurse Midwifery (3-year diploma) course. The corporate hospitals have women from Kerala, few from Andhra and Telangana region. Of late some women from Manipur are also joining as nurses in these hospitals. The smaller hospital, however had nurses only from Andhra and Telangana and no nurses from Kerala.

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References

- Evans, Martin H., and David Greaves (2010) Ten Years of Medical Humanities: A Decade in the Life of a Journal and a Discipline. *Medical Humanities*, 36, pp. 66-68.
- Gupta, Setu, Abhinav Agrawal, Satendra Singh & Navjeevan Singh (2013) 'Theatre of the Oppressed' in medical humanities education: the road less travelled. *Indian Journal of Medical Ethics*, Vol X, No 3, pp. 200-203.
- Gurtoo, Anil, Piyush Ranjan, Ritika Sud & Archana Kumari (2013) A study of acceptability and feasibility of integrating humanities based study modules in undergraduate curriculum. *Indian J Med Res*, 137, pp. 197-202.
- Kirklin, D (2003). *The Centre for Medical Humanities*, Royal Free and University College Medical School, London, England. *Academic Medicine*, 78 (10): 1048-53.
- Majumder, Md. Anwarul Azim (2012) Should medical humanities be a part of the undergraduate medical curriculum? *South East Asia Journal of Public Health*, 2(1), pp. 68-69.
- Patil, Sunita Y (2017) Medical Humanities in India: Need of the hour. *Al Ameen J Medical Science*, 10(2), pp. 86-88.
- Pellegrino, Edmund (1974) Educating the Humanist Physician: An Ancient Ideal Reconsidered. *JAMA*, 227: 11, 1288-1294.
- Rosen, George (1948) The Place of History in Medical Education. *Bulletin of the History of Medicine*, 22, pp. 594-629.
- Singh, Navjeevan (2012) Whither medical humanities? *Indian Journal of Medical Ethics*, Vol IX, No 3, pp. 166-169.
- Supe, Avinash (2012) Medical humanities in the undergraduate medical curriculum. *Indian Journal of Medical Ethics*, Vol IX, No 4, pp. 263-265.
- Vance, Richard P, Robert W. Prichard, Charles King & Gwendie Camp (1992) Cultural literacy of medical students. *Perspectives in Biology and Medicine*, 35, 2, winter, pp. 281-291.

What brought them here

The nurses working in the smaller hospitals, came from families where farming is the primary source of income, either working in one's own farm or in another's farm. In the case of nurses working in corporate hospitals, the primary income for one family was their father or brother's income as a truck driver, or working in small factory like cashew or in a gas welding shop. The agrarian distress, the poor status of the rural economy and the lack of opportunities as reasons for migration has been well documented. As more number of women are entering into school and higher education in the rural areas, the paucity of jobs in rural areas also lead them to the city.

For the women of Andhra and Telangana, like Anjana and Swapna who had got seats in Bsc nursing, Hyderabad represented the big city filled with opportunities and dreams. The understanding was that if you have to do better in life, city is the place to be. Farzana fought with her mother to escape from the marriage her mother wanted. Farzana threatened to complain to the police; only then did her mother understand her desperation and let her go to the city.

For the women from Kerala, like Ritty, Hyderabad had its advantages: e.g., education fees here were lower than in Kerala and she had her sister here. Ritty continued working in Hyderabad as she feels more comfortable with the work here. The salary is comparatively better and unlike in Kerala here hospitals have aayas to clean the bedpan, etc. Thus, for Ritty a caste practice which employs women from a lower caste to clean human waste makes the work environment in Hyderabad better than that of Kerala, where the nurses have to clean the bed pans themselves.

Swapna, Ana, Ritty had their own sisters or (female) cousins in the city working as nurses and they were able to facilitate the entry of their younger siblings. Others came through an informal network of friends or community people. This highlights the important role kinship plays in this kind of migration. This was in contrast to many of our other respondents belonging to upper caste and class, who had either got a job in the city or looked for jobs through use of internet services.

The conditions of work

Our interviews focused on the various aspects of women's working lives including their earnings.

In the small hospital the nurses get Rs.6000 to Rs. 9000, also depending on the years of service. The nurses working in the small hospital said that to manage with their meagre earnings, they also work overtime regularly. Farzana, a nurse gets Rs. 6000 per month and if she needs more money, she works double shift. Here in violation of overtime rules, where a worker is supposed to be paid double the rate for the overtime duration, Farzana gets paid the same rate

during overtime but she gets Rs.50 extra for food. The nurses also reported that they are asked to sign receipt for a higher amount than they are paid. They do not get any other benefits, not even maternity. When one of the nurses got pregnant, she left her job and rejoined it after two months.

The nurses in the corporate hospital are more educated and they get a salary ranging from Rs. 12,000 to Rs. 17,000, dependent on their qualification and years of working. One of the nurses working for a year reported that they have to do continuous shifts regularly. The interviews were done within the premises of the hospital and even if the nurses didn't speak much about their working conditions, few of them like Swapna, Samantha and Ritty spoke about the tensions and tiredness of work. Ritty who has been working in cardio thoracic intensive care unit (CTICU) for last few years mentions that "We have more responsibility.....doctors will shout at us, patients will also shout at us.....When the patient's condition worsens, we feel the pressure".

One factor that emerged was that the work has taken its toll and they have all lost weight after coming and working here. It needs to be noted that the women themselves did not give importance to it and mentioned it in quite a casual way. Samantha has reduced from 56 to 52 kgs. Anjana was earlier 44 and now merely 38 kgs. Dhanlakshmi, belonging to the Mala community (SC) came here with a weight of 39 kgs and has now reduced to a mere 34-35 kgs. They rationalize their weight loss with excuses ranging from not liking the food to not having time for food, to being in depression due to the loss of a loved one. However, the strenuous work as a nurse in the hospital in long shifts and inadequate nutrition is evident in their losing weight after coming to the city.

The nurses stay in hostels provided by the hospitals which is either in the same premises (in the corporate hospital) or very close by (in the small hospital). The nurses feel safer and it also ensures that they are close to the hospital and can be asked to work if there is a shortage of nurses in any of the shifts. These hostels as other hostels in the city have restrictions in terms of timings for their 'safety'. The long hours in work and retiring to the hostels do not leave enough room for the young women to go out and socialise. Their one day weekly off is spent on doing domestic chores and taking rest. Television in the hostel and also mobiles form a major form of relaxation for these young women as they watch downloaded movies in their native language. On the rare occasions they go out, they limit their visit to nearby markets or places of worship.

What binds them here

However, despite all this, the nurses did not complain about their job, they all liked working in their respective hospitals. They find the hospital and hostel warden (in case of corporate hospital) caring and somewhat like a family. Having come out of their own

families, the portrayal of their work institution as family gives them a sense of continuity and makes them feel comfortable and safe. Anjana, working in the corporate hospital said, "...[M]y feeling is it is a family environment and that is why I am still here... when I face any problem, I am going to the higher authority and immediately they will solve it. That is why I have chosen this work and I am still here".

In both the small and corporate hospitals, the nurses turned to the employers not only if they needed financial help but for any other kind of help in this new city. The hospitals were paternalistic in dealing with these nurses and took care of them in their hour of crisis. The nurses also felt safe and secure. In the smaller hospital, there is always space for the nurses who leave the job and then return as the management is happy to re-absorb nurses who are trained and are willing to work with such a low salary.

The nurses who came to the small hospital (from villages of Telangana and AP) came to the city, they were conversant on in Telugu and gradually picked up a few words in Hindi and English. The Muslim nurse was fluent in Hindi and picked up few words of Telugu and English. However, their ANM qualification and meagre their command of English is not enough to get them a better paying job in a bigger hospital. In the corporate hospital, all the nurses have a working knowledge of English.

Being migrants, they do not have good social and professional networks in the city. Their limited movement in the city does not allow them to form new associations or create a network which will give them a better bargaining power.

What does the city and this work mean for them, their families

These women coming from lower or lower middle-class families send a substantial part of their income home keeping only a small sum for their survival here. This was seen in both the hospitals. One nurse said that she sends about 80 percent of her income home. Another who gets about 15,000 says she keeps only 3000 or at the most 4000 Rupees for herself and sends the rest home. The family utilises this money based on their need. Families such as those of Ana and Swapna depend on their income to survive. Ana's father has had a major illness and he is not capable of working any more. She along with her two sisters who also work with her in the same hospital send a substantial portion of their income home. This forms the family's primary source of income. Her mother still works as a daily wage labourer in local farms. Anjana on the other hand has been working here for the last five years. She has been sending money since her first month and it has helped pay the fees for her brother's medical education. She says, "I am the elder person, and I am looking after my brother and everything else". Then there are others like Farzana, who has finished her ANM diploma, working in a small hospital and at the same time is studying for her

GNM. She is using the money she is getting in the hospital to fund her GNM course and also sends some money home. Samantha on the other hand has finished her Bsc nursing using an educational loan and is now repaying that loan working in the corporate hospital. Ritty's parents in Kerala are saving the money Ritty sends, for her marriage. So in many ways the small income of these nurses is very significant for their families. The women take pride in contributing to their family income. The women from Andhra and Telangana said that they feel respected in their villages. Dhanalakshmi said, "When I go back to my village, some people say very proudly that she is working in Hyderabad. She is a girl but she has also studied well". Interestingly, Ritty from Kerala said that back home her neighbours ask her when she is planning to go abroad.

This job has given them a confidence in themselves. A few talked about having learnt English, learning better communication skills and having gained more knowledge. Interviews with other women from similar backgrounds in our study have also emphasised better communication skill and knowledge which helps them to deal with the outside world better. Their colleagues and roommates also become their support system, though this is temporary as many of the nurses leave after marriage. Back home too, as Farzana and Anjana said, their friends of their own age have gotten married and have children.

Their economic independence and the support they provide for their families has allowed these women to make small negotiations in their lives. Even if an arranged marriage is a planned, they now believe that they can have a say in the kind of husband they want. It would be interesting to study the subtle shifts or creases these women have been able to create in their family as they have ventured out of their family and now support it economically.

Their living alone in the hostel, away from the guardianship of parents also allows these women to explore themselves to some extent. Many of the women talk about the changes in their dressing as they can now wear clothes that would not be accepted back home. The exposure to peers and a new way of living influences their life. They also cherish the small freedoms like not heeding the routine of their home and waking up late on their off days etc., freedoms they exercise while not being under the surveillance of their family. In Kerala, these women do not step out after six in the evening; here they can stay out a little longer. Dhanalakshmi, a dalit, coming from a farming family in a village, is happy staying in the hostel as she has an attached bathroom and continuous water supply in her hostel.

To sum up

There is a steady stream of women who are coming out from the villages and small towns where they have done their schooling and want to do something more.

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Availability of BSc & GNM nurses in Chhattisgarh, India

Fidius Kerketta, Narayan Tripathi, Swapnil Lal

Introduction

Registered nurses are the single largest group of health care professionals in the developing countries (1-3). The state of Chhattisgarh does not lag behind the rest of the world. Having 168 government and private nursing colleges in the state, each year approximately 6565 nursing students are admitted in the nursing colleges. There were 800 nursing vacancies in the 27 districts of Chhattisgarh as on 31st March 2017. All current vacancies can be filled immediately with the locally available trained nurses.

As the state ventures to strengthen its health care system, especially primary health care, through opening health and wellness centers, the quality of healthcare services cannot be improved without ensuring the availability of nursing workforce in the peripheries. Registered nurses are well positioned to assume direct care based on their understanding of patients and system priorities. Here the importance of nurses knowing the local language plays an important role. It can change the treatment outcome of the patients (4). This is the reason why nurses from Scheduled Tribe communities who come under the reserved category will prove invaluable in the adivasi (Tribal) regions of Chhattisgarh.

Nurses provide a means to increase access to high quality primary care. They have key responsibilities for the essential components of primary care articulated by the Institute of Medicine (IOM): integrating medical care and patient wellbeing, increasing accessibility to care, addressing a large

majority of personal health care needs, building sustained partnerships with patients, and practicing in the context of family and community (5). Their proximity to patients in every setting where primary care is delivered provides unique opportunities for nurses to influence health outcomes and cost effectiveness.

The absence of adequate healthcare workforce due to unfilled vacancies in Chhattisgarh force employed nurses to work long hours under very stressful conditions, which can result in fatigue, injury, and job dissatisfaction. Nurses suffering in these environments are more prone to making mistakes and medical errors.

An unfortunate outcome of not meeting the quantitative requirements of nurses is that quality of care suffers, resulting in a variety of preventable logistical and medical complications, including medication errors, emergency room overcrowding, and potentially also increased iatrogenic mortality(6). Therefore, it is an urgent and priority matter to fill the vacant positions of nurses.

What is the situation of supply and demand of nurses? We use the secondary data collected from Chhattisgarh Nurse State Council Registration office and the information available in the Prashaskiye Prativedan Varsh 2016-17 (Administrative Report Year 2016-17, Government of Chhattisgarh(7)) to assess this situation. The data of registered nurses available up to June 2017 from the Nursing Council is included in the study.

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Nursing is one such 'women's profession. As they come to the city and start working, facing a language barrier, and with no social network, they are entirely dependent on the hospital and are not able to stand in complete independence. Due to the precarious condition of their families, the earnings of these women hold a significant importance. The hospital (as do the other sectors) exploits this vulnerability of these women.

However, migrating to the city, earning and contributing to family also gives them a sense of confidence, fulfilment and pride. The hospital extends the feeling of continuum of being in the family with the paternalistic environment and helps the women when they need. Having been able to secure a job where they feel safe and secure, they try and hold on to it.

As these women come to the city to earn for their families, they navigate new lives in the city in the new environment, and with a newfound freedom (though

very much under the employer's patriarchal gaze). This experience engenders (sometimes subtle, sometimes visible) changes in their aspirations and desires. The story of their journey to the city is not confined merely to the economic gains but rather open out a whole new world for them and that is why holding on to it becomes essential.

In the process, they also break the narrative of seamless transition from natal family to marital family. Samantha, aged 22 years says that she wants to get married after a minimum of two years. When asked the reason, she giggles and says, "I want to enjoy life".

¹Team members of 'City and Sexuality: A study of youth living and working in Hyderabad', include Madhavi Mirappa, Madhurima Majumder, Mithun Som, Rani Rohini Raman and Riyaz Unnisa.

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Data on Nurses availability and need

The number of nursing colleges has mushroomed in Chhattisgarh since the state came into existence in November 2000. There are 27 districts in the state. There are total 84 governmental and 84 private nursing institutes in the state. Every district has a presence of either registered government or private nursing colleges except in Bemetra, Balodabazar, Narayanpur, Sukma and Bijapur. Mungeli has a college registered under Mid India Board of Christian Medical Association of India (CMAI). Every year about 2845 GNM and 3720 BSc. Nursing students have been admitted into these institutions. Hence approximately 6565 BSc. & GNM nursing students are trained in the state every year.

The state is further sub- divided into five divisions for administrative purpose. All divisions have either BSc or GNM nursing colleges in the state. Highest number of nursing students approximately 29% of the total nursing students in the state study in Raipur division followed by Durg division which is 28%. Approximately 16% of all nursing students of the state study in Surguja, 15% in Bilaspur and 12% in Bastar Division. Hence all division could have enough trained nurses who can fill the existing vacancies in their respective divisions.

The data taken from State Nursing Registration Council (which keeps a record of available qualified nurses) also indicates that there is an increasing trend in the availability of locally trained and registered nurses in the state. Every year approximately 3000 General Nurse Midwife & BSc Nurses are available in the job market looking for employment. Therefore, there are nearly enough locally trained nurses waiting to get employments.

Bastar and Surguja division are tribal dominated districts and have been extremist affected area. In these districts for every available vacancy there are 2 trained nurses waiting for a job. Over all 50% of the trained nurses belong to schedule tribes in these regions. In Surguja division 68% of all the nurses registered in the State Nursing Council belong to the scheduled tribes. Similarly, in the Bastar region 34% of the registered nurses belong to scheduled tribes. In Surguja region the numbers of registered schedule tribe nurses exceed the number of existing vacancies. Therefore, in the Surguja division there should not be a problem in filling the posts reserved for scheduled tribes. Similarly, in Bastar division 58% of all existing vacancies can be filled with scheduled tribe nurses.

The available data indicates that there are 4 nurses waiting for a job against one vacancy. Even if the local reservation policy for direct recruitment (which is called the Model 100 Point Roster) is strictly implemented, all vacancies including scheduled tribe posts could be filled in the Surguja divisions. On the other hand Durg and Rajnandgaon districts have recruited more nurses than the sanctioned vacancies. The number of trained nurses exceeds the existing vacancies in all except Balrampur and Sukma districts.

Therefore each district has enough local nurses available. So that bringing in nurses from other divisions/ states is unnecessary.

Observations and conclusions

The state of Chhattisgarh produces nearly enough GNM & BSc nurses including from reserved categories from every district. The nurses registered in the Chhattisgarh Nursing Council can fill all existing vacancies even if district reservation policy/ 100 point roster is applied. In case numbers of scheduled tribe nurses fall short in any of the district in Bastar and Surguja division, trained nurse belonging to same division could fill the existing vacancies including scheduled tribe posts. Therefore there is no reason why nurses' vacancy still remains vacant today.

The Public Health need was to fill the sanctioned posts, which are planned according to the need of the community and capacity of the government. Here the need has been overlooked in the race to permit marketized education. The private nursing schools earn money. The government or parents pay this money. However the need remains unmet and the nurses remain unemployed or underpaid.

The availability of the locally trained nurses (including from scheduled tribes) and scheduled castes, all of who are looking for employment, exists in every district. Yet there is a strong tendency by the government to outsource the recruitment process through a private agency who have recruited nurses (even from other district/state/ community) overlooking the availability of the local nurse. Such practices are not only compromising the quality of the services it is depriving the locally available human resources. Locals need employment which can contribute in regaining faith in the local government and restore peace in the region.

Filling vacancies with locally available trained nurses, who understand the local language, and are aware of the specificities of tribal cultures would not only ease the load on existing nurses, but also improve the quality of nursing available to the local populations.

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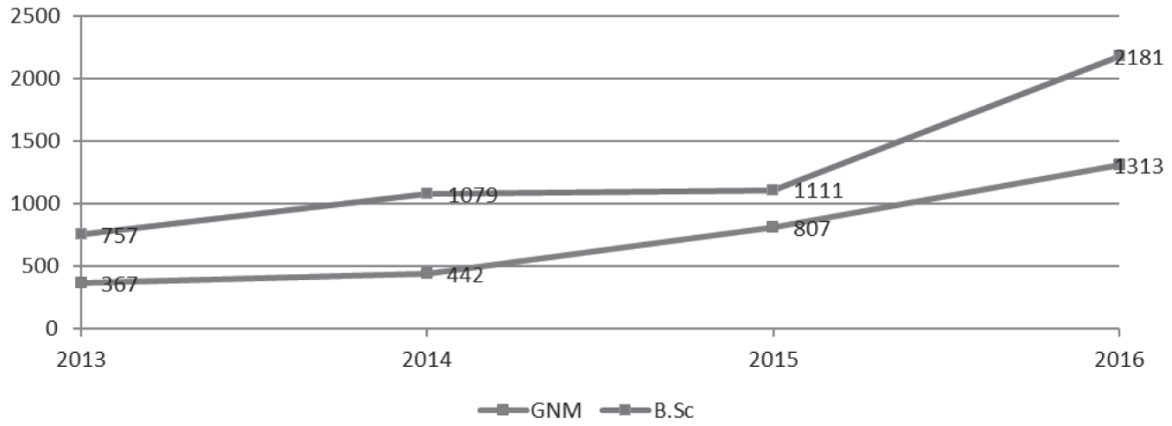
References

1. World Health Organisation. WHO Nursing and Midwifery Progress Report. 2012;
2. Beck AJ, Boulton ML. The Public Health Nurse Workforce in US State and Local Health Departments, 2012. 2016;131(February):145-52.
3. Registered Nurse Association of Ontario. 70 Years of Registered Nurse Effectiveness. 2016;1-5.
4. Schyve PM. Language Differences as a Barrier to Quality and Safety in Health Care: The Joint Commission Perspective. 2007;2-3.
5. National Advisory Council on Nurse Education and Practice. The Roles of Nurses in Primary Care. 2008
6. Keenan P, Kennedy JF. The Nursing Workforce Shortage: Causes Consequences, Proposed Solutions. 2003;(April).
7. Department of Health and Family Welfare Government of Chhattisgarh. Chhattisgarh Annual Administrative Report 2016-17 Prashashnik Prativedan. 2017.

Table 1: Number of nursing institutes and students admitted per year

Division	District	Government		Private	
		No. of Institutes	No. of students admitted/year	No. of Institutes	No. of students admitted/year
Bilaspur	Raigarh	1	25	3	95
	Bilaspur	0	0	6	200
	Korba	1	30	1	30
	Janjgir	1	20	1	30
	Mungeli	0	0	0	0
	Total	3	75	11	355
Surguja	Jashpur	0	0	2	50
	Surguja	0	0	4	130
	Koriya	0	0	4	120
	Balrampur	0	0	2	60
	Surajpur	0	0	1	30
	Total	0	0	13	390
Raipur	Raipur	1	20	14	500
	Dhamtari	0	0	2	50
	Mahasamund	1	20	2	70
	Gariyaband	0	0	1	20
	Balodabazar	0	0	0	0
	Total	2	40	19	640
Bastar	Bijapur	0	0	0	0
	Narayanpur	0	0	0	0
	Jagdapur	1	25	1	40
	Dantewada	1	30	4	130
	Kanker	1	40	0	0
	Sukma	0	0	0	0
	Kondagaon	0	0	1	20
	Total	6	120	57	190
Durg	Durg	1	30	10	390
	Rajnandgaon	0	0	3	120
	Kabirdham	0	0	1	40
	Bemetara	0	0	0	0
	Balod	0	0	1	30
	Total	1	30	15	580
Grand Total	9	240	64	2155	

(Source: Varsik Prashasnik Prativedan Varsh 2016-17)

Chart 1: Year wise registration of nurses in the nursing council

Y axis depicts number of nurses registered in the year

(Source: Chhattisgarh Nurses Registration Council)

Table 2: Tribal nurses Registered from Bastar and Surguja region in 2016-17

Region	District	Current Vacancy	Registered nurses in 2016-17	No of ST Nurses	% of ST Nurses vs. total registered nurses
Sarguja	Jashpur	46	177	166	94
	Surguja	9	73	50	68
	Koriya	13	79	23	29
	Balrampur	67	31	22	71
	Surajpur	39	57	20	35
Bastar	Bijapur	25	30	11	37
	Narayanpur	31	31	10	32
	Jagdapur	2	101	34	34
	Dantewada	15	52	19	37
	Kanker	66	127	32	25
	Sukma	37	16	7	44
	Kondagaon	71	66	29	44

(Source: Chhattisgarh Nurses Registration Council)

Table 3: Tentative availability of nurses against current vacancy in Directorate Of Health Services (DHS)

Division	District	Sanctioned	Recruited as on 31.3.2017	Vacant	Nurses newly registered in 2016-17
Bilaspur	Raigarh	204	130	9	125
	Bilaspur	165	117	10	153
	Korba	116	82	25	209
	Janjgir	171	156	9	148
	Mungeli	52	34	8	26
Sarguja	Jashpur	163	140	18	177
	Sarguja	151	143	70	73
	Koriya	118	103	11	79
	Balrampur	99	58	6	31
	Surajpur	102	78	14	57
Raipur	Raipur	154	153	1	314
	Dhamtari	151	119	7	243
	Mahasamund	116	110	20	155
	Durg	185	183	8	290
	Rajnandgaon	182	180	19	256
	Kabirdham	119	96	15	38
	Gariyaband	84	78	11	51
	Bemetara	91	86	1	30
	Balod	124	121	17	190
	Baloda bazar	128	124	18	120
Bastar	Bijapur	73	60	7	30
	Narayanpur	57	47	4	31
	Jagdapur	105	92	8	101
	Dantewada	78	55	3	52
	Kanker	147	94	2	127
	Sukma	60	46	64	16
	Kondagaon	109	57	27	66
Total		3275	2742	412	3188

(Source: Varsik Prashasnik Prativedan Varsh 2016-17)

Why only nurses go for strike

Santosh Mahindrakar

All the political leaders and health administrators on the nurses' day (12th May) announce that "nurses are the backbone of the health care delivery system". I have attended Nurses day celebration in the President's house in year 2016 and heard the same from Shri. Pranab Mukharji. But nurses are one of the health workers who go on strike very often. Why do they often choose to protest through strikes and stop the functioning of health care institutions? Are they irrationally passionate about this tool or they were forced to do so? The present paper tries to dissect the backbone of the health care delivery system.

A day dream for nurses

Till the beginning of 21st century majority of the nurses who completed their qualifying course were immediately recruited by the public and private health sector in India. At the same time there was also ample job opportunity abroad. Shortage of nurses across the globe brought much hope for the nurses in India. However, by 2006 comes retrogression in many of the developed countries. Dreaming of good life many nurses joined the nursing institutes that mushroomed between 2002 and 2006. During this time nursing institutes expanded by 200 times with minimal or almost no government recruitment. Post 2006 we see an increase in the number of strikes organised by nurses working in the private hospitals and reached its peak in 2010-2011. Now we have United Nurses Association with a claim of 5.2 lakh membership across globe. The question which emerges is did sudden lack of foreign jobs for nurses with questionable quality nursing degree studied with the aid of educational loans lead nurses to fight for their right at the workplace?

Growth of privatization in health education institutions and patient-care.

Nursing professionals were having global demand, especially in developed countries so nursing institutions became a first choice for most of the business people to invest and earn income. Hence we have seen a huge increase in number of institutions as shown in table 1.

Table-1 : Year wise increase in the number of institutions for various nursing courses in India

Courses	2000	2005	2010	2012	2014
ANM	298	360	676	1452	1938
GNM	285	983	2083	2576	2968
B.Sc	30	377	1326	1516	1700
M.Sc	10	59	315	481	582

Source : Snapshots, Indian Nursing Council, 2014

Majority of these institutes were concentrated in the southern part of India, where as actual shortage of skilled man power was faced in northern states. Till 2014 Bihar has only four Bachelorate Colleges and seventeen General Nursing and Midwifery (GNM) institutions. There were many questions which arise here:

1. Why government did not start nursing institutions as per the need, before year 2002. Even though it was proposed in all five-year plan and other policy documents.
2. Why majority of the nursing colleges are in southern states of India?
3. Majority of them were in private sector (only 1, 3, 7, 14 percentage of M.Sc, B.Sc, GNM and ANM colleges were owned by government respectively) (NIHFW and WHO, 2012)
4. Were there enough faculties to teach the students? (Till year 2000, there were only 10 M.Sc nursing institutions but in 2005 and 2010 it increased to 59 and 315 respectively)?
5. During this time what happened to the teaching standard ?
6. Who were the owners of these colleges?

These are questions and need a larger and deeper understanding.

By the time there were few attempts to introspect and analyze the reasons; it had created distress amongst the increased number of nurses who sold their properties or took huge loans for their education with the understanding that they will get back the amount spent and can lead a better life.

National Rural Health Mission (NRHM) started in year 2005, created a space to recruit a substantial number of nurses on contract in public health system but with the salary of Rs.5000-8000/- per month with limited non-financial benefits. NRHM progress report (MoHFW, 2005-2010) states that it recruited 26,793 staff nurses between the periods of 2005-09. NRHM claims the achievement of the health goals but never reveals the injustice done to nurses and other health workers by the meager salary and poor working condition. Even though there was an increase in production of the nursing professionals, vacancy at primary health and community health centre increased more than double from 2005 to 2012 as shown in figure 1. (Rural Health Statistics 2012). This reveals the states negligence in strengthening the public health system.

There are many studies revealing that there are inequalities between the regular and contractual health workers but failed to highlight inequality done within different categories of contractual health workers as shown in table 2. This table depicts that contractual medical officers' salary were almost equal to regular (Permanent Rs. 57,000, DHS contractual Rs. 53,000) but when it comes to other health workers (ANMs, Pharmacist and Lab Assistants) it reduces to almost half of their permanent employee (Permanent ANM - Rs. 26,829, DHS recruited contractual Rs. 11,476).

Unregulated private health industry with a profit motive started to run the hospitals with minimum

number of staff and exploit them with meager salary varying from 3000-8000 per month, long working hours, unhealthy working condition and bond.

Most of the nurses who passed out from private institution during this period, whose standard were questioned by many reports, but these enquiries never reached the actual stakeholders who started these huge institutions without vision. There were many instances which were found to be far below the level of standards. So due to these developments the private sector made huge profits by educating nursing students on the one hand, and saving their profit in the hospitals with low pay and inadequate overworked staff on the other.

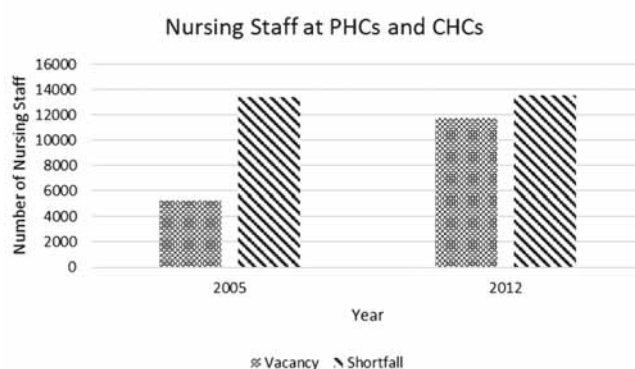
Table-2: Comparison of salary structure of different categories of health care providers in PUHCs (as on 31.7.2012)

Type of staff	MO	ANMs	Pharmacists	LA
Regular staff (pay/month)	Rs. 15,600-39,100+GP 5400/- = total Rs. 57,000	Rs. 5200-20,200+GP 2400 = Total rs 26,829/-	Rs. 5200-20,200+GP 2800= Total Rs.25,972/-	Rs. 5200-20,200+GP 2400 = Total Rs. 22,662/-
DHS recruited contractual staff (pay/month)	Rs. 53,000/- fixed	Rs. 11476/- fixed	Rs. 12,080/- fixed	Rs. 11,476/- fixed
Contractual staff under NRHM (pay/month)	Rs. 43,500/- fixed	Rs. 14,203/- fixed	Rs. 15,410/- fixed	Rs. 14,203/- fixed (for LTs)

*PUHC- Primary urban health center, GP- Grade pay, DHS- Director of health service, NRHM- National Rural health mission, Lts- Laboratory technicians, ANM- Auxiliary nurse and midwife, MO- Medical officer, LA- Lab assistant

Source: Kumar. P et al. A study of Human Resource Policies and Practices for Primary Health Care System in Delhi. International Journal of Medicine and Public Health Oct-Dec 2014 Vol 4 (4).

Figure-1: Vacancy and shortfall of nursing staff at PHCs and CHCs



*Vacant- difference between sanctioned and in position nurses

Shortfall- difference between required and in position nurses

Source: RHS bulletin, 2005 and 2012

(continued on next page)

New Kerala Initiative: Aadram Mission

P K Jameela

Kerala's health sector once celebrated as "good health at low cost" was discussed and studied internationally. * In many respects Kerala's health indices are comparable with that of developed economies. The state has the lowest infant and maternal mortality, highest life expectancy and literacy and the best sex ratio in the country. A well-coordinated effort to address various social determinants of health along with an effective publicly funded health care delivery system had contributed to this achievement.

The health sector had begun to face crises by early 1980's. Due to the epidemiological and demographic transition of the past three decades the state is facing double burden of non-communicable and communicable diseases. The incidence of lifestyle diseases or non-communicable diseases (NCDs) like diabetes, hypertension, coronary artery diseases, cardiovascular diseases and cancer has increased. The society is facing resurgence of communicable diseases like malaria and new epidemics like Dengue, Leptospirosis and H1N1. The incidence of mental

illnesses including suicides and death and disability due to accidents and trauma is also on the rise. The health of marginalized groups like tribals, fisher-folk and migrant labourers is an added challenge to the state.

The inability of the public health system to manage the huge patient load due to its poor infrastructure and human resources, inefficient primary care services, lack of proper referral linkages and excessive privatization had ranked the state as the highest for out-of pocket expenditure(OOPE) in health.

The challenges in health sector of the state calls for a total revamp of the health care delivery system with a sharp focus on a strong primary and preventive care with strengthening of the secondary and tertiary care.

Aadram Mission (Aadram means Compassion) is an initiative taken up by the Government of Kerala in a mission mode under the "NavaKerala" (New Kerala) initiative in 2016. The Mission aims at transforming

(continued from previous page)

Most of the middle and lower middle-class families invested huge money (5-8 lakhs) for the nursing education in private institutions and were not getting better avenues to either apply their skill or earn back money so they migrated to the countries like Libya, Syria and other difficult terrains and in recent past we all read what has happened to them.

Around 2009, there were many young nurses working in private hospital formed an association to raise their voices like Delhi Private Nurses Association, Indian Professional Nurses Association, United Nurses Association, Indian Registered Nurses Association, Nurses welfare Association and so on. Majority of them were from state of Kerala and supported by political parties, those who tried to stay away from this party politics were tortured with police and administration. One among such associations is UNA.

Supreme Court verdict (The Hindu October 16, 2016) to improve the working conditions of nurses working in private hospital gave a ray of hope to nurses that they may sustain the better economic conditions to repay their loans and maintain a minimum standard life but it was not so easy to implement within the central government schemes (NRHM). UNA and other Kerala nurses' associations came on street on large number to implement it in their state but still result are pending.

In government sector, contractual nurses started to protest for their basic rights. Last week of November 2017, nurses from LHMC, New Delhi and 10000 nurses in Tamil Nadu are on road for their rights. These protests are now every day event across the country.

Conclusion

Even though all these developments were apparent, there were few who raised the question and intervened. Why? Was it that most of the nurses were trying to repay the educational burdens and earn bread for the family? or they belonged to middle class families who want a return for their investment? or they do not know their rights? or they were insensitive the health needs of the country? or the government did not notice their skills as vital for our nation? or they were not aware of the health needs of the community?

With this brief analysis we need to dissect further to reexamine who are these nurses? What are their roles and responsibilities in upholding the patient rights? How to create a dignified workplace in the institutions? How to utilise their skills and reduce the brain drain?

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the public health sector into a people friendly one with the target of achieving Sustainable Development Goals(SDG). The 2030 agenda for Sustainable Development Goals adopted by 54 nations in United Nation's Sustainable Development Summit in September 2015 includes a set of 17 SDGs with 169 targets to end poverty and provide good health and well being to all by 2030. The Government of Kerala with the help of various expert groups on health has charted out the core areas in health that the state need to focus upon. The targets and specific goals to be achieved by 2020 and 2030 in sync with SDGs and strategies to be adopted to achieve these goals are also formulated. To achieve SDG 2020 and 2030, the state has to improve the quality of health care delivery at the primary, secondary and tertiary levels by raising resources both human and financial and also address the inequality in health care provision. Through Aardram Mission the state is trying to implement the above strategies to transform public health sector accessible for all citizens especially the poor.

Aardram Mission focuses on four key areas.

1. Transformation of OP services in public hospitals:

Medical Colleges, General Hospitals, District Hospitals, Community Health Centres and Primary Health Centres will benefit from this process. The aim is to change the hospital administration and processes so that hospitals are more patient friendly. Improved infrastructure with adequate seating facility, drinking water and toilet facilities, introduction of conveniences such as advance booking of doctor's appointment, token system, digitization in registration, consultation, pharmacy, laboratory and other investigation areas location maps and signages etc., are to mention a few. When E-health system is fully functional, this will enable Web based appointment system, patient reception and registration, electronic display board for each consultant, improved system for referrals and follow up. The Mission also envisages improving patient management by following clinical guidelines prepared by the expert groups and also monitoring the quality of services provided. To maintain the quality adequate human resources and logistics are to be provided. The Local Self Government (LSG) play an important role in providing both in public health institutions transferred to them.

2. Provision of all basic specialty services in all Taluk level hospitals/General and District hospitals and introduction of Super Specialty services in major General and District hospitals:

Taluk level and District level hospitals are presently delivering secondary care services. Majority of Taluk

and District level hospitals are started before independence or within the first decade of independence. Except a few General hospitals all the above category hospitals are transferred to LSGs with introduction of 73rd amendment. A good leadership of LSG with community participation and governmental support few of these institutions have developed par excellence. Due to various reasons these hospitals could not provide services as expected and moreover there is a huge variation in human resources and services provided by similar group of institutions. This is more evident in backward districts of the state. To address this issue Aardram Mission aims at standardization of different categories of hospitals in infrastructure, human resource and service provision. Modernization of OP services with patient amities, all basic specialty services and standardized investigation facilities, dialysis services and regular supply of drugs as per guidelines will be available in Taluk hospitals. In addition to this major superspecialties like Cardiology, Nephrology and Neurology services will be available in major General and District level hospitals. All Government Medical Colleges in the state will benefit from Aardram Mission through OP service transformation, digitization and conversion to centres of excellence.

3. Provision of basic health care services to marginalized groups in the state:

Tribal communities and fisher folk continue to be marginalized groups in the state. Recently this group has been added with migrant labourers especially in urban slums. Transgenders too are marginalized "in health care provision". Even though the health indicators of the state are better compared to the rest of India, the health indicators of these groups are far below the state average. Each group has varied and unique health issues which have to be addressed as part of their mainstreaming. Aardram Mission gives special focus on strengthening health care delivery services in tribal, coastal and urban areas.

4. Re-engineering Primary Health Centres (PHC) into Family Health Centres (FHC):

Though the existing Primary Health Centres were constituted to provide comprehensive primary care, majority ended up in focusing mainly on curative aspect of health care.

What is Family Health Centre?

The idea of bringing in a new health culture with a comprehensive approach which provides a vision of considering family as a unit for health services delivery plan resulted in the formation of Family Health Centres. Family Health Centre is the most

revolutionary part of Aardram Mission proposed to provide comprehensive people friendly services to all families thereby ensuring universality of primary care. It follows certain basic principles like universality and non-discriminateness, equitability, family based function, comprehensiveness (preventive, promotive, curative, rehabilitative and palliative) Financial protection, quality and rational care, probability and continuity of care, Community participation, protection of patient rights, transparency and accountability and responsiveness. The strategies adopted for the conversion to FHCs are by strengthening the primary health care, improving quality of services, addressing social determinants of health and community participation.

Activities going on all over the state under Aardram Mission in selected Primary Health Centres are standardized infrastructural modification for FHCs and sub-centres, appointment of additional doctors, nurses, lab technician and pharmacists, procurement of equipments and recruitment of community volunteers (Arogyasena). Standard clinical guidelines and treatment protocol has been developed to strengthen curative services through evidence based management of common clinical condition in FHC. Capacity building of Medical Officers, Staff nurses, Paramedical and field staff are going on. Aardram Mission ensures strengthening of field activities with provision for rehabilitative services, improving quality of existing palliative care and integrating volunteer group to improve community participation.

In FHCs OP services will be from 9.00 AM to 6.00 PM. Apart from the existing clinical services a few innovative clinical services are added in FHCs. "SWAAS" (Swaas means breath) programme to manage patients with Chronic Obstructive Pulmonary Diseases (COPD) and Bronchial Asthma and "AASWAS" (Aaswas means relief) programme to deal patients with mental illness especially depression. Counselling services will be ensured by the nurses in FHCs in nutrition, diet management in lifestyle diseases, physical activity, tobacco cessation etc. Another initiative under Aardram is outreach institutional service catering the health needs of inmates in orphanages, old age homes, hostels and provision of basic health care in workplaces, offices and schools.

Health Care Services Delivery Plan in FHCs is based on individual and family health plan which grow out to a ward and panchayath health care plan. The

individual Health Care Plans are developed based as age, gender and disease. Each Health Care Plan ensures all domain of primary care.

Role of Local Self Government (LSG) in FHCs:

The LSGs play a crucial role in the day to day functioning and ensuring quality primary care to every citizen in the area. Identifying the health problem in the community, addressing social determinations of health, developing panchayat specific SDG targets, preparing and implementing panchayath projects based on the SDG target and health issues and mobilization of resources are the most important functions of the LSG. Moreover, the LSG has to develop trained community health volunteer teams (Arogyasena) and empower each and every individual for a healthy living.

For the success of any programme in health sector convergence is essential. Convergence of various departments and other missions in Nava Kerala at the State and District and LSGs level plays vital role in moving forward the mission. Aardram Mission works complementary to the other three missions under Nava Kerala initiative - Livelihood inclusion and Financial Empowerment (LIFE) Comprehensive Public Education and Rejuvenation (universal education) and Haritha Keralam Mission (water and food safety, sanitation and safe disposal of waste and sustainable development of water resources).

Funds for Aardram Mission:

Financial support for the mission is through different sources. Existing governmental support through plan schemes, various developmental funds like NABARD Scheme, MPs and MLAs LAC - ADC funds, LSG projects, National Health Mission funds are streamlined in such a way that the institution master plan is fulfilled in a time bound manner without duplication or wastage of resources. Moreover, funds are allotted under Kerala Infrastructural Investment Fund Board (KIIFB). Human resources in supported by the state government by creating additional posts in various categories.

Thus with a strong political will, good planning and coordinated effort the Aardram Mission hopes to create history and show the world a "Second Kerala Model Development".

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A call for action to treat the untreated million children a year with heart disease

Richard Smith

The Indian state of Kerala is aiming to reduce infant mortality from 12 for every 1000 live births to 8 by 2020 and 6 by 2030¹, and in order to achieve the target it will have to develop services to diagnose and manage children with heart disease. That is because infant deaths from infection and malnutrition have fallen and continue to fall, while children born with congenital heart disease remain constant and so increase as a proportion. The need to develop services to diagnose and manage children with heart disease is global because the Sustainable Development Goals include a goal to end preventable child deaths by 2030.

About one child in 120 births is born with congenital heart disease, and this seems to be constant across the world. That means about 1.35 million children a year, and the vast majority (90%) receive no care as they are born in low and middle income countries where services are sparse or non-existent. Instead they die or suffer severe disability. Most of these children are invisible because their condition is never diagnosed. Yet it's estimated that if the services available in high income countries were available to all then about two thirds of the deaths and disability could be prevented.

In addition about 300 000 children a year develop rheumatic heart disease. This condition has disappeared in high income countries as sanitation and living conditions have improved, but services for these children, including preventive services, are still needed in low and middle income countries.

Children's HeartLink, a US-based charity that has been serving children with heart disease in low and middle income countries for nearly 50 years (and where I'm on the International Advisory Board), has issued a call for action on children's heart disease², which has been covered in a Lancet commentary³. The call for action was preceded by three papers outlining the scale of the problem⁴, identifying barriers to improvement⁵, and exploring the need for sustained investment⁶.

About a quarter of children with heart disease need surgery in the first year of life, and so a comprehensive response demands building surgical capacity. This means not just surgeons, nurses, and anaesthetists but paediatric cardiologists, intensive care, blood transfusion, and other sophisticated services, including continuing chronic care. The whole system demands exemplary teamwork and continuous quality improvement. This is a high bar to reach, and no

country in SubSaharan Africa has reached it apart from South Africa. The US has one paediatric cardiothoracic surgeon for every 3 million children, while in Africa it's one to every 38 million. Yet reaching the high bar brings benefits to other kinds of patients as well.

But in order for surgeons to be able to operate on children the invisible have to be made visible, which means that all children must have access to primary care services, and those services have to be able to detect children with likely heart disease. Children's HeartLink's Call for Action calls for investment in primary care as well as specialist care. Primary care guidelines should help clinicians recognise that common symptoms like lethargy, poor growth, and shortness of breath may be the result of heart disease. Again developments in primary care will benefit children with other conditions.

Shortage of doctors, nurses, and other health care workers is one of the main barriers to universal health coverage, and the Call for Action calls for the creation of a paediatric cardiac workforce. After initial work providing services in some low and middle income countries, Children's HeartLink moved to building capacity, mainly by creating partnerships between centres in developed countries and hospitals in low and middle income countries. The 13 partnerships in China, India, Brazil, Malaysia, Vietnam, and Ukraine have treated around 100 000 children. The aim is for all the hospitals to become self-sustaining and to be regional training centres. It's a long road to become a centre capable of training others, but four of the 13 hospitals have managed it. Children's HeartLink has set itself the ambitious goal of creating 50 centres treating a million children by 2030.

Financial investment is clearly needed and not only in centres, primary care, and capacity building but also in low cost technologies, research, data collection, and quality assurance. The invisibility of the children and poor or non-existent surveillance systems in low and middle income countries mean that ministries of health may be unaware of the burden of disease resulting from heart disease in children. Surveillance and data collection need to be improved, and all hospitals offering care for children with heart disease should participate in the International Quality Improvement Collaborative for Congenital Heart Surgery in

Developing Countries. Participation in the collaborative leads to reductions in mortality and hospital infection.

It will be a major effort to reach many more of the roughly one million children born each year who do not receive care, and the Call for Action sees a role for multilateral funding agencies, WHO, national and

BMJ Opinion. Follow this link for original article on the BMJ Opinion website: <http://blogs.bmj.com/bmj/2017/04/07/richard-smith-a-call-for-action-to-treat-the-untreated-million-children-a-year-with-heart-disease/> published on April 7, 2017.

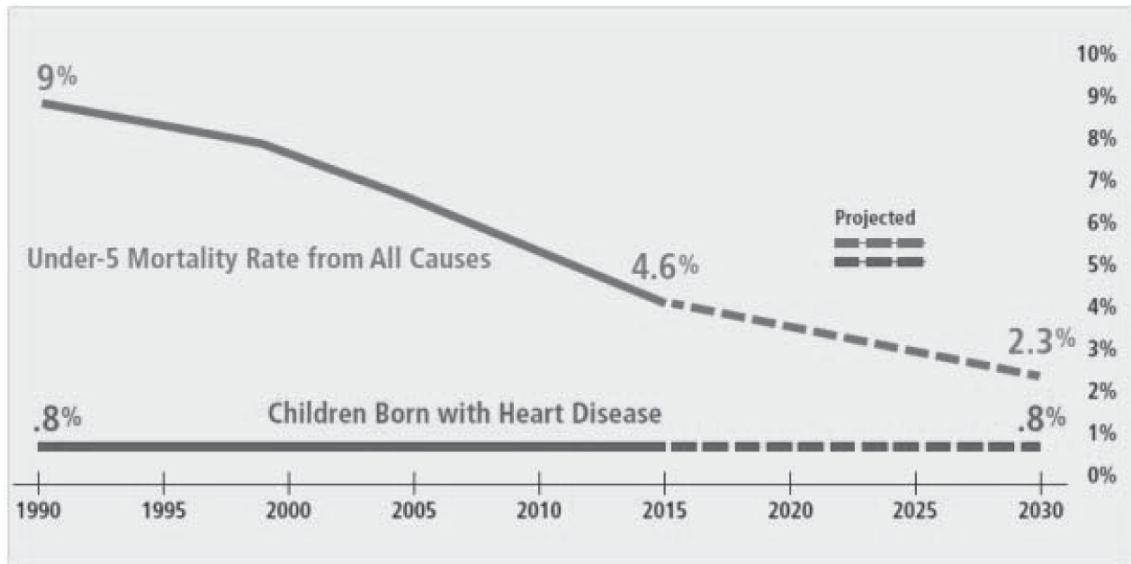


Figure taken from the call to action.⁷

local governments, research and teaching institutions, civil society, and the private sector-the familiar "Whole of government, whole of society" approach that many of today's complex problems need.

Children's HeartLink will continue its capacity building, experimenting with new ways of doing so, but also step up advocacy for these invisible children. One next step might be to assist individual countries in developing systems to detect and manage children with heart disease.

The result should be that countries in low and middle income countries and states like Kerala, which is working with Children's Heartlink, will be able to achieve the ambitious aim of ending preventable deaths in children by 2030.

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Competing interest: RS is an unpaid member of the International Advisory Board of Children's HeartLink. He has his expenses paid to attend annual meetings.

We are grateful to Dr Richard Smith for permitting us to reproduce his essay. We are also grateful to BMJ for permitting mfc bulletin to reproduce this essay from

Notes:

- 1 <https://timesofindia.indiatimes.com/city/kochi/reducing-infant-mortality-rate-kerala-has-its-task-cut-out/articleshow/56903044.cms>
- 2 <http://theinvisiblechild.childrensheartlink.org/The-Invisible-Child-Brief-Four.pdf>
- 3 [http://thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)32185-7/fulltext](http://thelancet.com/journals/lancet/article/PIIS0140-6736(16)32185-7/fulltext)
- 4 <https://childrensheartlink.org/wp-content/uploads/2017/06/The-Invisible-Child-Brief-1.pdf>
- 5 <https://childrensheartlink.org/wp-content/uploads/2017/06/The-Invisible-Child-Brief-2.pdf>
- 6 <https://childrensheartlink.org/wp-content/uploads/2017/06/The-Invisible-Child-Brief-3.pdf>
- 7 <https://childrensheartlink.org/wp-content/uploads/2017/06/The-Invisible-Child-Brief-4.pdf>

Social Security of Indian Workers

Amitava Guha

Social Security of the workers is inbuilt in the Decent Work Report (1999) and Declaration of the Fundamental Principles and Rights at Work (1998) agenda of International Labour Organisation. In a country where precarious working conditions and violation of fundamental principles of work are wide spread, social security measures are unseen if not unknown to workers. Yet workers, through their battle for decades, have earned some social security measures from the Govt. Certain compulsions also forced the private employers of provide meager social security for the worker in the domain of organized work. An overwhelming majority of workers in the unorganized sector is left aside.

Definition of Social Security:

Germany was the first country which in 1880 adopted statutory universal social insurance system, which implied a definition of social security. Thereafter differing social, political and economic relations had made the definition of social security differ from nation to nation. In the recent times, increase in the number of informal sector workers, globalization, economic crisis, and unprecedented migration caused by military invasion have all dented social security systems in both developed and developing countries. Countries in Europe have adopted austerity measures forcing workers to come out on the streets in protest.

However, the International Labour Conference in its 100th session in the year 2011 adopted following definition.

Irrespective of whoever assumes the ultimate responsibility for the exercise of the human right to social security, the principal objectives nevertheless aim at:

- reducing income insecurity, including the eradication of poverty, and improving access to health services for all people, to ensure decent working and living conditions;
 - reducing inequality and inequity;
 - providing adequate benefits as a legal entitlement;
- while
- ensuring the absence of discrimination against nationality, ethnicity or gender; and
 - ensuring fiscal affordability, efficiency and sustainability.

This generic definition guides countries to formulate their own definitions. While introducing draft 'labour code on social security and welfare', Ministry of Labour & Employment, GoI had given us a questionable definition which says:

What is Social Security:

Social Security- Definition: A programme that requires workers to make regular payments to a government fund which is used to make payments to people who are unable to work because they are old, disabled, or sick. Most essential to features of Social Security are (a) mandatory (b) government provided and (c) has provisions of rights and enforcements.

Government should acknowledge that the social security system is a continuous lifelong benefit to a worker when he is in work or out for any reason whatsoever (not just age, disability or sickness). This wrong attitude and deliberate disregard of the main tenets of benefit show the tendency of the government to deprive workers of comprehensive social security benefits. It is necessary to analyse the present state of the social security system existing in our country, however limited it may be.

Funds:

In the recent time, government has embarked upon slashing budgetary allocation heavily on many projects in the social security system.

The Rural Employment Guarantee where every rural person is to be legally provided with minimum 100 days work is now suffering a fund crunch. In 2014-15 revised estimate, the scheme's allocation was slashed from Rs. 34,000 crores to around Rs. 31,000 crores. In 2009-10 the scheme had an allocation of Rs. 39,000 crores at which point it was slashed to Rs.34,000 crores.

The scheme's performance in 2014-15 has been dismal, with less than 3% of the households completing the promised 100 days of employment, over 70 percent of the wages being delayed, and the majority of the households being provided employment for just over one third of mandated 100 days.

Overall, the 2015-16 budget of Rural Development Ministry in 2015-16 has been slashed significantly by around Rs. 10,000 crores as against the 2014-15 budget estimate.

The Unorganized Workers Social Security Act passed in 2008 was aimed to provide welfare measures related to old age, health, maternity, disability, etc. but till now not a single scheme has been formulated under this Act. It only 'provided' ten already existing social welfare schemes to the unorganized workers. This too will be applicable to those who are below poverty line threshold, which is defined so low that more than 20% of the unorganized workers are excluded. The trade unions demanded constitution of a National Social Security Fund. In 2010-11 a meager Rs. 1000 Crores was allotted, even that was not utilized. Present government had slashed several budgetary allocations in nearly all social security projects, such as AIDS Control, National Health Mission and the Plan outlay by around 15-30%.

Even if fund is adequate, one of the poorest performances is found in utilization of Building and Construction Workers Welfare fund. Here Government's role is to disburse the fund generated from cess on the employer's investment. Very little of this fund collected for the benefit of the workers is utilized. An amount of Rs. 32,480 crores is lying with the state government. Till now after 21 years of the operation, only Rs. 7286.52 crores have been spent.

Scope of Health Schemes:

All informal workers and workers under BPL are offered health benefit under RSBY scheme. The scope of this scheme is confined to Rs. 30,000 for whole family in a year and does not cover all diseases. Even this fund is manipulated in such a manner that private hospitals and nursing homes enjoy the lion's share in providing health care benefits and the public institutions do not.

The other workers (above BPL) can avail ESI benefit. This scheme is controlled by the centre in collaboration with the states. It is functioning needs more administrative reform. The Employees State Insurance Corporation has developed a top heavy infra structure which is described below.

Employees State Insurance Corporation

- No. of Establishments/ Factories covered under ESCI - 7,85,000
- No. of Employees Covered in ESIC - 1.89 Crores
- No. of Insured persons - 2.13 Crores
- Total No. of ESI beneficiaries (including dependant family) - 8.29 Crores
- Total Amount of cash Benefits paid in a year - Rs. 704 Crores

- Total Amount Spend on Medical Benefits in a Year - Rs.6113 Crores
- Total Amount Spend for ESI Benefits in a Year (Cash and Medical) - Rs.6816 Crores
- Total No. of ESI Hospitals established in the Country -151
- Total No. of ESIDispensaries in the country -1626
- Total No. of ESI Branch offices -628
- Total No of Cash Benefit claims Paid in an year - 32 Lakhs
- Total Fund Corpus in ESIC - Rs 50,000 Crores
- Funds Ear Marked As Specific Reserve Funds - Rs.17,500 Crores (For Pension and otherlong term Liabilities)

The problem which is not yet seriously considered is that there is a wage ceiling on availing ESI benefit. Anyone who crosses this ceiling of Rs. 25,000 per month (which is quite low in present days wage pattern of the workers) would have no statutory provision of health care.

The other important benefit is EPF that has also developed an amazingly high quantity of fund. It is last resort for a worker at the end of his working life. EPF after modified in 1995 will not allow the workers to get full return of their lifelong accumulation of earning and normal bank interest thereof.

Therefore, a vast amount of fund generated in EPF every year is expanding to an enormous corpus.

Employees Provident Fund Organisation

- No of Establishments Covered under EPFO - 9,26,000
- Total No. of EPF Member Accounts (as on 31.03.2016) - 17.14 Crores
- No. of Monthly Pensioners in EPFO - 51 Lakhs
- Total No of PF Claims settled in a year - 76 Lakhs
- Total Amount of benefit paid to PF members in a year - Rs.50,000 crores (including Pension, Provident fund and Insurance)
- Total Corpus in EPFO - Rs,8,75,000 Crores (Rs. 6,20,900 crores in Provident Fund, Rs.2,38,500 in Pension Fund and Rs.15,600 Crore in Insurance Fund - As per Annual Accounts of EPFO for FY 2014-15)

The scheme is so skewed that old age pension of majority was allotted to Rs. 100 or below. Finally, the Govt. has decided to increase it to Rs. 1000 minimum per month. The trade unions argue that this should be proportionate to actual wages earned per month and should be linked to wholesale price index. Low disbursement of EPF to the pension earners had generated to accumulation in the corpus Rs.8,75,000 crores. Obviously, the vulture's eye has not escaped this enormous amount. PFRDA created for the purpose of amassing this fund is now pouring 15% of this fund to start with and that will be gradually enhanced in the speculative market without providing the workers an option to refuse, thereby making the fund and their livelihoods vulnerable to collapse in the share market.

There were 15 different welfare schemes available for workers of different sectors. Now the government has merged all schemes in a Labour Code on Social Security and Welfare but had not explained whether the benefits will remain available in future. This code proposes to constitute a supreme forum called National Social Security Council with much power and authority. All the members of the council will be nominated by the government. There will be only two from the employees whereas for example, in EPFO, the governing body of ESIC representatives from all the prime six central trade unions have been included since decades. Similarly, there will be state security councils where the state governments will nominate a few members from employees. Thus, representation of the workers in the council will be low making it easy to decide, almost unilaterally, against the interest of the workers.

The other most serious issue is occupational safety and health issues of workers. This is a severely neglected area in our country when industrial accidents and occupational diseases are on the rise. India has an antiquated occupational health policy that has become redundant long ago due to changes in the industrial pattern and the use of new work methods. A tripartite task force constituted by the government prepared an updated policy which is not yet put to action. Some of the taskforce's certain recommendations like banning the use of asbestos; measures for protecting against silicosis, vital security measures to protect the workers life are not yet attended.

International Labour Organization in its Conventions 155 and 187 'has described the basic need of occupational safety and health. The Government of India had not yet ratified these two conventions. Add to this the Ministry of Agriculture has disputed the coverage of agricultural workers under Convention

155. On the brighter side, the move of the Ministry to exclude workers in IT and ITE sectors from coming under this convention was resisted by the trade unions. Therefore, work place safety standard in India remains far below the average global standard.

Implementation of any regulation and control depends on an effective and strict inspection system. Again, for the purpose, ILO Convention 51 provided a basic guideline for an inspection system. This of course is ratified by the government. However, in October, 2014, Prime Minister of India announced that to end 'Inspector Raj' for ease of business, inspection system will only remain confined in a random computer-generated list. This gross violation of the ILO Convention 51 was taken up by the trade unions before the Committee on Application of Standards of ILO. The argument of Indian government was pulverized in the hearing in the International Labour Conferences held in 2015 and 2017 where the Committee directed government to strictly follow the ILO Convention. There is however virtually no inspection system working now and ignoring this vital process has resulted in recent increase of fatal accidents reported every other day in the newspaper.

This is evident that workers' health benefits and safety at work place is being trampled for the benefit of the employers.

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Nirman: a case study

Ashwini Mahajan

Introduction

In contrast to the current discourse against compulsory rural service for MBBS doctors, in recent times, parts of rural Maharashtra, specifically Gadchiroli, has seen many young doctors willingly coming forward to do their Government rural service. Many have chosen most remote and difficult parts of Maharashtra with a spirit to bring change. Many have worked with various NGOs to learn more about rural health care challenges. NGOs like SEARCH in Maharashtra, Jan Swasthya Sahyog, Shaheed hospital in Chattisgarh, Swasthya Swaraj, Bissuamcuttak Mission Hospital in Odisha, et al., have seen many young doctors joining them enthusiastically to change the situation around them and wanting to add to their efforts for people's health.

Nirman

This article wishes to introduce about Nirman, an educational process which sensitizes youth about many important issues around them. Being a part of this process from earlier batches I will be mainly sharing a participant's perspective.

Nirman is a youth initiative started by Dr. Abhay and Dr. Rani Bang, at SEARCH Gadchiroli, Maharashtra to identify, nurture and organize the young changemakers to solve various societal challenges. It is an educational process outside the regular professional education system to train youth to take up crucial issues and problems in the society. Nirman provides guidance, expertise, and environment to inculcate self-learning and encourages youth for social action. (1)

Background

Dr. Abhay and Dr. Rani Bang, founders of SEARCH (Society for Education, Action, and Research in Community Health), have been striving to deal with many public health challenges in a most difficult part of Maharashtra since 1986. But both of them knew that people's health cannot be viewed in isolation; health has many socioeconomic and developmental determinants. Unless these are addressed, the dream of 'Aarogya Swaraj' will not become a reality.

On the other hand, they could see talented, skillful and sensitive youth. Youngsters who feel disturbed by issues of poverty, malnutrition, injustice, lack of infrastructure around them but often fail, or do not know how, to respond to these issues.

The Nirman Educational Process

Nirman has a unique educational process where youngsters from different regional economic academic backgrounds can become a part of the process. Aspirants go through a selection process where they are asked to fill an introspective questionnaire and interviewed personally to understand their personal characteristics goals, dreams earlier experiences with societal reality.

Such preselected candidates go through series of three residential camps over a year organized at intervals of six months. Each camp is of about eight to ten days organized at SEARCH, Shodhgram, Gadchiroli. An average of 75 young persons are selected for each batch.

At the time of writing, Aug 2017, enrollment for the eighth batch of Nirman is on. Through past 7 batches, a total of about 870 youth are associated with Nirman. Geographically spread, these youth are from 34 out of the 36 districts in Maharashtra. Education wise, there are around 365 doctors, 232 engineers and a mix of lawyers, journalists, filmmakers, teachers, farmers, science-arts-commerce graduates, etc. (1)

In the initial camp, we first try to understand ourselves. Youngsters are encouraged to explore and understand more about their body, gender roles, personal characteristics, dreams, etc. These sessions are creatively designed to make a young person less hesitant while exploring himself/herself. The consecutive camps try to make Nirman alumni look outward and help them understand their environment along with its many societal challenges.

A Nirman doctor who worked in Gadchiroli describes "The process that was initiated over a year ago did one unique thing that had never happened before. It made me to question myself. The first camp made me ask why? The second camp was all about what? And the camps concluded with a how? Nirman acquainted me with these questions and with social reality and helped me see the connection between my answers and their social relevance."

Many social activists, professionals, founder of NGOs, scientist, eminent journalists from all over India come down to speak with these young minds and share their learnings and experiences of societal issues.

Listening to their experiences we could understand how problems existed and how they worked toward the solution. But their enthusiasm and sparkling eyes also kindled our aspirations to take up challenges. The closeness of experience sharing of many eminent social change makers starting from Dr. Abhay and Rani Bang was very inspiring. It made us realize that we can also take up the work they have started and could find a joy of living fully the way they have done.

The whole process makes us reflective more than give out readymade answers. Various group activities like role play, discussions over a given situation, or sometimes staying in villages for four days at a time as part of the local family, raised many questions in our mind. It gave us a glimpse of the harsh challenges people face and helped us to connect with them.

Nirman is a platform where many like-minded people come from all corners of Maharashtra. Although participants are from varied backgrounds "a wish to do something meaningful" bonds them together. The lively and intense discussions happening amongst these youngsters helps a lot. Becoming a part of such group gives the feeling that 'you are not alone', gives the courage to make different choices.

Along with the camps, study visits, educative sessions, reading assignments, internships, fellowships, individual mentoring, group actions and various other activities are carried out. They help sensitize the youth towards societal challenges through exposure and experience. In this intermediate period between the camps, the participants keep in touch with each other and build further understanding of social issues through self-initiation and self-learning activities.(1)

Nirman process is rightly timed targeting youngsters at the right stage of career. Where they are still in process of acquiring professional skills but also concerned with where they are going to use it.

Another uniqueness is, it does not expect a much time commitment at the initial stage, unlike fellowship programs. In various fellowship programs, you receive exposure and mentorship only after you commit at least a year. Nirman first orients and empower the youth through camps of limited duration and then mentor them to take up any challenges of their interest.

After the Camps - Starting Their Work:

Usually after gone through the process of Nirman camps many stays in close contact with other fellows NirmanI, Nirman team and various resource persons associated with Nirman.

Frequent discussions helps an individual to narrow down his/her own interest area and where one can contribute meaningfully. It directs youngster to many opportunities where they could start off. These choices are not easy at the initial stage as family and society consider it as a deviant behavior. The Nirman network stands strongly as a parent to give guidance and emotional support. As of February 2016, around 100 Nirman youth are working full time on specific social challenges in different parts of Maharashtra (1) even as there are many who are committing time for part of the time as part of Nirman network.

A functional team of Nirman alumni works continuously to make the process more lively and meaningful. They visit many institutions including all the medical colleges in Maharashtra in search of sensitive potential fellows for the Nirman Programme. It takes the word to every young mind that there is a tribe called Nirman and it is inviting them to join hands.

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References

1. <http://nirman.mkcl.org/about-nirman.html>
The following two short documentaries that further explain the idea of Nirman.
2. Nirman: Youth for Purposeful Life
<http://www.youtube.com/watch?v=3P4dMaHmVWM>
3. Nirman - Ek Shodh at <http://www.youtube.com/watch?v=c8z3bKwcHjw>

For more videos about Nirman, visit the channel www.youtube.com/nirmaanites

Cross Practice

Priyadarsh and Dewal Sawarkar

Introduction

Cross practice is an established norm in the medical fraternity and, in fact, very few doctors practice purely one system of medicine [1]. There are multiple reasons that can be cited for this. The lack of MBBS doctors in PHC has led to the posting of AYUSH doctors in PHC who then are compelled to use allopathic medicines. The proportion of health budget spent on the healthcare work force, growing market forces and pharma industries' easy-to-use products distributed to the general practitioners supplemented by the ease of such prescriptions and the lucrative business of the practice of commission helps cross-practice stay and proliferate. There is also the well neglected fact that during the time of admission into medical school, almost all aspirants want to get seats in MBBS [2]. But very few of such aspirants are able to gain admission in this degree. Those who take admission in the other branches of medicine still harbour the desire to practice allopathy. But, as mentioned at the very beginning, it is not only AYUSH practitioners that engage in cross-practice, a majority of allopathic doctors also do the same, though it often escapes much-needed scrutiny.

Defining Cross Practice

To understand 'cross-practice' better, it may be useful to first understand the principles that govern the various systems of medicine. They have been briefly defined below:

The Allopathic system of medicine is based on the causative theory of diseases which itself is a highly scrutinised rational science.. It is highly dependent on research and data and is slowly moving towards more comprehensive evidence-based medicine. This system relies on facts and studies rather than on sacred texts and verbal records of verses. There are of course, exceptions as facts and findings are sometimes twisted for the benefit of the pharma industry or for either money or fame[3].

The Ayurvedic system of medicine is more of a holistic approach and focuses on maintaining the balance of 'tridoshas', namely, Vata, Pitta and Kapha in the body. It also has its extensive form of data on the treatment of patients and its own pharmacopoeia, and it is a rapidly developing system of medical care. But it believes in scriptures and its validity sometimes cannot be questioned due to belief in its sacredness. But the

claims that based on these principles countless number of patients had been treated are, to a fair extent, true [4].

Homeopathy is based on the principle of 'Similia similibus curentur' meaning 'like cures like'. It talks about four humours - phlegm, blood, yellow bile and black bile, and the corresponding imbalance of these humours in the body[5].

Siddha medicine means medicine that is perfect. It emphasizes balancing dysfunctional organs with focus on Dosha, Vaadham, Pitham and Kabam balance. [6]

Unani is based on ancient Greco-Roman medicine which came to India with the Mughals. It discusses the various states of the body, when it is healthy or not and means by which health is likely to be lost and to be restored. The humours are the same as in homeopathy. [7]

Cross practice is "when a doctor practices an alternate form of medicine other than the one in which s/he has been educated". As the appointment of AYUSH doctors at PHC, RBSK and other levels means that it is generally ayurvedic doctors that are compelled to practice allopathy, the state of allopathic and ayurvedic fields is discussed in detail.

Present facts for Ayurvedic field

College level The syllabus for ayurveda has subjects such as pharmacology along with anatomy, physiology, community medicine, etc. The students join various coaching centres to learn the allopathic concepts of pharmacology, pathology, medicine and so on. The average student of ayurveda joins some ayurvedic practitioners' clinic from the second year of his/her study and learns the system through 'learning by doing'. But many others join some allopathic hospital and learn the basic allopathic system by observing and monitoring the patients and during doctors' rounds. This is a very common practice among ayurvedic college students [2].

Internship In Maharashtra, ayurvedic college students have to do their compulsory internship for 6 months in their system of study and spend 6 months in PHC and Rural Hospital or District Hospital. It is here that they get accustomed to allopathic medicine and find it easy to use[2].

Professional level Studies show that more than 60 % of ayurvedic practitioners practice cross-path, while the rest practice either pure ayurveda or pure allopathy. A comparative study reported that 48% of drugs prescribed by ayurvedic doctors are allopathic medicines. [1]

Present Facts for Allopathic field

College Level No exposure to ayurvedic or other drug systems apart from a page or so in the pharmacology textbook about other systems of medicine.

Internship No exposure in AYUSH department of the college hospital.

Professional Level Study in a tertiary care hospital has shown that 67 % allopathic doctors practice cross-path. The substances prescribed are very precise and account for less than 20 preparations in general. The most common drugs being Liv 52(39%), Syrup Cystone (12%), Syrup Shatawari (13%), laxatives, Syrup Adulsa (10-13%) etc. The medicines were prescribed for Liver ailments (34%), Arthritis (18%), Cough and cold(13%), Kidney stones (11%) and Piles (10%). A comparative analysis study showed that 12% of drugs prescribed by allopathic doctors are traditional AYUSH Medicines. [8]

Laws

The Indian Medical Council Act, 1956(18) and Indian Medical Council Regulations, 2002(19) do not encourage allopathic doctors to prescribe traditional medicine. The Supreme Court, in various judgements has made it quite clear that "a person who does not have knowledge of a particular system of medicine but practises in that system is a quack. Where a person is guilty of negligence per se, no further proof is needed." But as health is governed by the state rather

than the centre, there are various laws in different states which regulate medical practice and allow or disallow cross practice. The Indian Medical Council Act of 1956 finds cross-practice punishable with up to a year in prison and a fine of Rs 1000 , though it is different for different states as per amendments [3,10].

Indian Medical Council Act 1970 governs issues related to allopathy. Similarly, Indian Medicine Central Council Act, 1970 governs issues of ayurveda, unani and siddha. Homeopathic Central Council Act, 1973 governs homeopathy [11,12,13].

Facts

Without indulging in blame game, let's look at the current facts. Health in India is a state subject and even if the Supreme Court has laid several rules against cross practice, the states can pass required laws to either allow or disallow the practice. Many of the states have appointed AYUSH doctors at PHC level. Many of the PHCs have AYUSH doctors who are the only doctors available to serve the patients. The medicines available in each PHC and RH are mostly allopathic medicines. The PHC doesn't have a separate fund to purchase ayurvedic preparations right now. Almost all the doctors in Bharari Pathak {Flying Squad} for special and tribal areas in Maharashtra are ayurvedic doctors. All the emergency 108 ambulances in Maharashtra have ayurvedic doctors working who are also trained in allopathic emergency medicines and procedures for stabilising patient at scene and while transporting. All the doctors in Rashtriya Bal Suraksha Karyakram which serve children in Anganwadi, schools and ashram schools are ayurvedic doctors. They are provided with a kit of allopathic medicine by the government and they treat common ailments in school and refer children if needed. [2,13,14,15]

Table- 1: State wise contractual appointment of AYUSH Doctors(2014) [9]

State name	Percent	State name	Percent
Andhra Pradesh	3%	Manipur	1%
Assam	3%	Maharashtra	6%
Bihar	13%	Odisha	12%
Chhattisgarh	2%	Punjab	2%
Gujarat	7%	Rajasthan	9%
Himachal Pradesh	1%	TamilNadu	4%
J & K	4%	Tripura	1%
Karnataka	6%	Uttarakhand	1%
Kerala	7%	Uttar Pradesh	17%

Table-2: Some facts regarding cross practice

Facts	
1	Urban rural ratio of allopathic practitioners is 80-20 %
2	Non - allopathic practitioners cater to the health services of more than 75 % of the rural population.
3	AYUSH doctors are appointed in PHC, 108, RBSK, and given Allopathic medicines by the government. They are trained accordingly.
4	Their syllabus doesn't have the subjects of modern pharmacology, pathology , medicine , surgery , etc and its knowledge is not evaluated in their exams.
5	The non - registered practitioners also form a major chunk of service providers in rural area.
6	More AYUSH doctors are ready to work in rural areas as compared to very few MBBS doctors.
7	Cross practice is labelled by doctors as a holistic way to treat a patient. Very few doctors know it is illegal and can account for medical negligence without any proof required.

Reasoning against cross-practice

The complexities of cross-practice endanger the life of the patient. This is the main issue to be addressed.

The law forbids the practise of any other medicinal system in which we are not formally trained.

The knowledge gained in short training or after hearsay is often insufficient to understand the complete nature of the medicine and the disease.

Each system follows various principles and gives medicines according to that. To just give medicine on simple symptomatic assumptions will be a grave negligence of patient's health.

Some studies reported more use of injections, antibiotics in prescription by ayurvedic doctors.

Other studies pointed out more injudicious use of irrational fixed dose combination by ayurvedic doctors.

Reasoning for cross practice

The health for all is a distant dream. We are facing acute shortage of health personnel at PHC and at rural hospitals. The urban to rural doctors' ratio for allopathic doctors is 80%-20 %.

The health services in rural area are mostly provided by non-allopathic doctors, both in public and private sectors. A considerable chunk of these services is provided by non-registered practitioners who have not had formal training in any of the branches of medicine.

Considering the lack of human power, the state government opts for diplomatic positions where it doesn't allow nor deny AYUSH doctors to cross-practice.

The cost for having an AYUSH doctor is much lesser than that of a MBBS doctor.

Allopathic doctors have started to discover that there are benefits in ayurvedic medicines and hence are beginning to prescribe such formulations which will, apparently, do no harm but only benefit the patient.

The appointment of more AYUSH doctors on a temporary basis by citing rules and regulations decreases the burden on government budget in forms of salary and future benefits like GPF and pension. It's in their interest to keep the status quo and play safe.

When we allow ASHA and ANM, MPW to practice medicines for general medical conditions in field, the AYUSH doctors' training is nearly equivalent to an MBBS doctors' training in terms of duration and difficulty level.

AYUSH doctors often have pharmacology in their syllabus and they do their compulsory internship training of 6 months in PHC, RH and District hospitals, where Allopathic treatments are practised.

In some studies, AYUSH doctors did fairly well on a scale for appropriate Allopathic prescriptions.

Why AYUSH was Integrated?

The main objectives for the integration of AYUSH were

1. Utilize AYUSH to endorse good health and spread out the outreach of healthcare to our people (mainly to those who cannot afford or reach modern health care facilities) through preventive, promotive, mitigative and curative approaches.

2. To provide affordable AYUSH services and drugs which are safe and efficacious; To ensure the availability and genuineness of raw drugs as required by pharmacopoeia standards to help improve quality of AYUSH drugs, for domestic and/or export purposes. To incorporate AYUSH in healthcare delivery systems and national programmes, and to ensure the best

possible utilization of the huge infrastructure of hospitals, dispensaries and physicians.

3. To offer full opportunity for the expansion and development of ISM and utilization of the potentiality, strength and revival of their glory.

Way outs

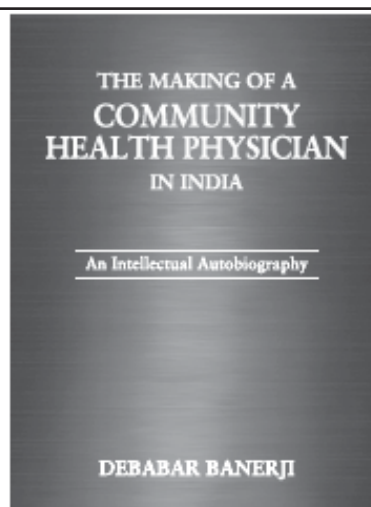
The way-out from it is too complicated, as it sometimes seems. And the solutions offered don't cover all the dimensions, and leave out one or the other. But solutions are needed which can address most of these issues without undermining and neglecting any stake holder, and then it will be a big boon for Indian health sector. Many different solutions are offered like compulsorily teaching all systems of medicine to all students, alternatively developing one integrative education system of all the systems, compulsory training in different systems of medicine for some necessary specific subjects, banning cross practice altogether with the help of the law, allowing holistic practice, neglecting the safety concern of cross practice as it is an exaggerated response to maintain one's hold on medicines, etc. What and how it will work will be interesting to see. But right now there is no denying the fact that it's there and it's either a failure for all of us, or perhaps the stepping stone for the next holistic level of care.

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References:

1. Verma U, Sharma R, Gupta P, Gupta S, Kapoor B. Allopathic vs. ayurvedic practices in tertiary care institutes of urban North India. *Indian J Pharmacol.* 2007;39:52-4
2. Bada-Math S, Moirangthem S, C Naveen Kumar. Public health perspectives in cross-system practice: past, present and future. *Indian Journal of Medical Ethics* Vol XII No. 3, July-September 2015.
3. Dr. Mukhtiar Chand & Ors. vs. State Of Punjab & Ors. (1998) 7 SCC 579
4. Samhita C. Sutrasthanam. In: Sharma PV (ed). *Charak Samhita*. Varanasi: Chaukhamba Orientalia, 1985;1:126.
5. Bellavite P. Complexity science and homeopathy: a synthetic overview. *Homeopathy.* 2003;92(4):203-12.
6. Subbarayappa BV. Siddha medicine: an overview. *Lancet.* 1997;350(9094):1841-4
7. Nadkarni KM. [Indian materia medica]; Dr. KM Nadkarni's Indian materia medica: with Ayurvedic, Unani-Tibbi, Siddha, allopathic, homeopathic, naturopathic & home remedies, appendices & indexes. Mumbai: Popular Prakashan; 1996.
8. Gawde SR, Shetty YC, Pawar DB. Knowledge, attitude, and practices toward ayurvedic medicine use among allopathic resident doctors: A cross-sectional study at a tertiary care hospital in India. *Perspect Clin Res* 2013;4:175-80.
9. Samal J. Situational analysis and future directions of AYUSH: An assessment through 5-year plans of India. *Journal of Inercultural Ethnopharmacology*, 2015, Vol 4: 348-354.
10. Indian Medical Council Act 1956 [Internet]. New Delhi: MoHFW; 1956 Dec 30. Available from: <http://www.mciindia.org/ActsandAmendments/TheMedicalCouncilAct1956.aspx>
11. Indian Medicine Central Council Act, 1970. New Delhi: MoHFW, GoI; 1970 Dec 21. Available from: <http://indianmedicine.nic.in/writereaddata/mainlinkFile/File221.pdf>
12. Homeopathic Central Council Act, 1973 and Schedules. New Delhi: MoHFW, Government of India; 1973. Available from: <http://www.cchindia.com/hcc-act.htm>
13. Rao, K. D., Sundararaman, T., Bhatnagar, A., Gupta, G., Kokho, P., & Jain, K. (2013). Which doctor for primary health care? Quality of care and non-physician clinicians in India. *Social Science & Medicine*, 84, 30e34
14. Rao, K. D., Sundararaman, T., Bhatnagar, A., et al. (2010). Which doctor for primary health care? An Assessment of primary health care clinicians in Chhattisgarh. Chhattisgarh: PHFI, NHSRC and SHRC.
15. Gopichandran V, Satish Kumar Ch. Mainstreaming AYUSH: an ethical analysis. *Indian J Med Ethics.* 2012 Oct-Dec;9(4):272-7.



Book-review: A self fulfilling autobiography of a lonely public health stalwart

Anant Phadke

Debabar Banerji, *The Making of Community Health Physician in India. An intellectual Autobiography.* Lokpaksh Publications, New Delhi, 2017. Pages - 326, price Rs. 695.

Reviewing this book is a challenging job because it takes some efforts and patience to separate the valuable in this book from the superfluous. On the one hand since the author is a renowned pioneer scholar in public health in India, there is a lot that the reader can get from this intellectual autobiographical account, about the shaping of some of the key public health issues, policies in the last 60 years and about the author's contribution to this field. But on the other hand the whole account is very much coloured by the author's peculiar personality because of which he is all praise for himself and barring a few exceptions, is very critical about all others. While I doggedly read it till the end, some readers may become weary of the peculiar colouring and writing style seen in this account, of the repetitions and in the process may gloss over the valuable insights in it.

Debabar Banerji (DB) has been renowned primarily due to his pioneering contribution in developing the National Tuberculosis Programme (NTP) in the late fifties; his attempt to extend his pioneering perspective (interdisciplinary, bottom up epidemiological approach, informed by a distinct sociological perspective and political economy angle) borne out of his work on the NTP to the various public health problems in India; his leading the JNU's Centre of Social Medicine and Community Health (CSMCH) and on account of his incessant trenchant critique of the dominant trend in the field of Public Health in India. This review would try to take a brief overview of these aspects as reflected in this autobiography.

Recalling his days in the medical college in Kolkatta during 1948-53 as a bright student, DB shares that right from the student days he had a "persistent urge to outgrow the boundaries". Despite doing very well in medicine in his one year of house post after graduation, DB responded to his inner urge of going beyond the conventional medical career and chose a job as a medical officer in western Tibet. This job gave him an opportunity to see from close quarters the lives of ordinary hardworking people living in adverse, remote circumstances which shaped their health and health culture. In the latter part of the book he attributes his "bottom up approach" and attitude of 'learning from the people' partly to his explorations during his journey in Tibet. However this chapter does not contain any

concrete information about how this happened beyond the observation that DB was able to see the lives of ordinary people and interact with them from close quarters. During his seven months' stay in Tibet, apart from making some insightful observations about the impact of high altitude on the health and physiology of the local population, all that we learn is that he "got considerable time to indulge in thinking under different conditions", which led to a great "extent and depth of thinking which enabled him to think "on a wide variety of issues"; all this led to "rudimentary thinking about what later came to know as cultural anthropology and epidemiology".

The path-breaking work - the National Tuberculosis Programme

DB eschewed the option of getting into medical practice in the footsteps of his grandfather or pursuing a career as an expert clinician or as a researcher in a conventional research set up. In 1959, he opted for a job in the National Tuberculosis Institute (NTI). It is in this stint in the NTI that one sees his intellectual breakthrough in his pioneering work on tuberculosis in the community as a public health problem. In these days the hegemony of British experts was being replaced by that of the American researchers. The views, work, advice from these 'foreign' experts was regarded very highly by Indian researchers and policy-makers. However, these foreign experts tended to bring with them strategies from the West unmindful of totally different conditions in India. The Indian counterparts were by and large inclined to accept their advice uncritically given the overall atmosphere of awe about these 'foreign experts'. It is to DB's great credit that though he learnt many things from them, he was undeterred by this prestige and awe of these WHO, American experts. He stuck to his own "bottom up approach" and started arguing his views with these senior experts. These WHO experts were arguing for Mass Miniature Radiography (MMR) of all Indians to detect tuberculosis which they argued can be done even at the asymptomatic stage. However even the pilot attempt to implement this strategy showed that this proposed strategy of detecting TB in the population involved too high a level of expenditure, was logistically almost impossible to implement all over India and its effectivity was questionable. DB explored an alternative strategy. This was based on studying "tuberculosis in the community as a problem of suffering, as a felt need of suffering of people." A meticulously planned and executed survey was designed to find out what do people do who develop

chronic cough or any of the other cardinal symptoms of TB. The survey revealed that 95% were aware of the symptoms, did not consider these as normal, 72% were worried about it and 50% went to some government centre to seek some relief but all of them were sent back with a bottle of useless cough mixture. DB argued that if the health care system took people seriously, investigated these symptomatics, a large proportion of TB cases can be diagnosed. He proposed a TB control programme based on clinical assessment starting from analysis of symptoms and using sputum microscopy which was already available at the Primary Health Centre. Thus the bulk of the diagnostic work would be done at the PHC level itself by using resources already available at PHCs. This detection of TB cases would be supported by x-ray facility at district hospitals for sputum negative patients who have symptoms suggestive of TB. This approach to TB diagnostics involved 'going to the people', giving sociological dimension to epidemiology and giving social orientation to medical technology wherein paramedics used medical technology effectively to serve people's needs. It did not involve introducing any new facility, technology or experts or developing any new facility. The treatment consisted of giving the patient monthly quota of anti-TB medicines to carry home and this domiciliary treatment was buffered with supportive supervision. The National TB Programme (NTP), which was to address the biggest killer of Indian adults, was not to be a special programme requiring any special, additional facilities, technology, human power but would be carried out as part of the general health services and therefore had the most widespread applicability and impact. Primarily it required proper running of the general public health services and therefore it would "sail or sink" with the general health services. This sturdy strategy suggested by DB to address TB as a public health problem was adopted by NTP. The NTP was a "nationally applicable, socially acceptable and epidemiologically effective" programme. To successfully carve out a TB control strategy relevant to Indian conditions in face of the pressure of the WHO experts (who had other ideas) was indeed a great pioneering achievement by any standards. DB's paper on this strategy, written in collaboration with his senior colleague Stig Anderson, was published in the Bulletin of the WHO in 1963 and this meant international recognition also.

There are some issues in the Indian scenario which were not addressed by the NTP - dealing with the role of undernourishment in TB (as rigorously argued by Dr. Anurag Bhargava), increasing role of private practitioners who indulged in grossly unscientific practices in diagnosis and treatment of TB, the controversy around the zoonotic aspect of TB.

However, the development of the NTP was certainly a huge, innovative step forward and this book tells us this story from the horse's mouth so to say.

Alternative Approach to Public Health Issues

In the chapter - 'An Alternative Approach to Health Takes Shape' DB discusses the importance of the method adopted by DB in devising National Tuberculosis Programme (NTP) and how he extended this method to deal with other public health problems in India. DB underscores the point that the NTP was devised through a interdisciplinary epidemiological approach which took into account sociological dimension of a health problem in a community understood as a problem of suffering of the people to which people respond in the given circumstances in which they are placed. It does not try to tell people what to do but to tries to understand what people do and why in the given circumstances. The NTP would "sail or sink with the general health services" and underscores the importance of strengthening of the general health services. Further, DB was impressed by the argument of his senior colleague Stig Anderson in favour of using the technique of Operational Research (OR) to optimise the use of available resources to put them to the most productive use. Similarly he was convinced of the use of Systems Analysis as a corollary of OR. Use of these techniques would involve "---- analysis of the interactions of the key variables within the system, identification of the data needed for the formulation of possible alternative changes that could be brought about to make the system work more effectively, choosing the optimal solution, subjecting it to test run and feeding it into the system to enhance it's performance." This approach takes us to health economics which would help in finding ways to make most of the allocations made for a programme.

Elated and emboldened by the success of this interdisciplinary method employed in the NTP, DB tried to extend this method to other public health problems. It is here that DB's success story ends and he encounters a series of 'failures'. Failure not in quality of his intellectual work but in convincing his colleagues and superiors in various government funded agencies to adopt and implement the above mentioned inter-disciplinary method DB had evolved in devising the NTP. The rest of the book is the story of these failures, his disappointments and the bitterness that arose out of all this.

Critique of Public Health Policies in India

DB analysed other important Public Health problems in India through the lens he had developed while devising the NTP and his analysis of political economy health and health care. As a step towards this, he joined

the National Institute of Health Administration and Education (NIHAE). But in all his attempts he did not get the co-operation from his colleagues, superiors. DB attributes this primarily to incompetence of the concerned personnel and their lack of commitment to the declared objectives of the public health institutions. At one level perhaps this may be true. But at another level, wasn't it a political naiveté to expect that the various public institutes and their officials would seriously try to achieve the declared objectives of these institutes in a consistent manner? One has to read between the lines while going through the lofty ideals seen in various official pronouncements starting from our constitution and the Five Year Plans. These lofty statements were partly influenced by the expectations, idealism of a few people, borne out of the freedom struggle. But it was punctured by the harsh reality of paucity of resources and of vested interests at local, national and international level. In this process the government bureaucracy had acquired tremendous operative power. Hence if by way of exception if any capable technocrat or bureaucrat wanted to genuinely follow the declared objectives or adopt genuine scientific policy, there was some limited leeway for it especially in the fifties and sixties. This is what people like DB did in their small way. But by and large public institutions in India had to faithfully serve the interests of the local and international elite. Whenever people benefited from government policies, this was more of a side-effect, a corollary.

In the field of Public Health, after Independence, setting up of Primary Health Centres, improved water supply, sanitation, and launching of some public health programmes to tackle malaria, filarial etc. were beneficial to people. But over a period of time, this was overshadowed with the infamous family planning programme (read population control programme) which was based on the myth of 'population explosion'. The fact that this population control programme became the most important priority of the health department is most revealing. Secondly the government was not at all committed to creating a system to provide health care for all as per the recommendations of the Bhole Committee report. This is because there was very little pressure from the poor for it and the moneybags have been getting young cheap labour despite high child mortality and high adult morbidity. So barring exceptions, bureaucrats who had internalised or have compromised with these two basic constraints of the government policy would rise to higher positions. Thus while the system required conformists and yes men, DB expected public functionaries and government funded intellectuals to be true to the declared objectives of the public institutions in India.

It is a little naive to expect pro-people policies to be planned and executed as a priority of the government in a consistent manner. This is because only those policies which benefit the poor but do not threaten the ruling elite and on the contrary increase the market and hegemony of the money-bags will receive support from the government officials. This does not mean that no good, pro-people work could be done through government agencies. Many sincere, competent people including DB have done such work. But all within the overall constraints mentioned above. Some experts have pushed forward progressive, pro-people work through government agencies, have engaged with the contradictions of the government policies, have made certain criticism of some aspects of the government policies, while still working with the government as experts on various committees. The method, extent of such engagement has varied. Those who do not want to make any compromise what so ever have come out or stayed away from this system and from the various benefits that entail by staying in the system.

Coming to the analysis and criticism of DB of the various health policies of the government and of the various officials who toed the official policies, the reviewer would tend to broadly agree with many of the points made by DB. (My rider is - I would take note of the contradictions and nuances of the social-political realities so that one is also able to formulate specific measures, demands to improve matters within the given constraints.) I would specifically mention my concurrence with one important element of his criticism, since many a time it is not adequately emphasised - his criticism of the health department being led by bureaucrats from IAS cadre who have no training and commitment to public health. The earlier policy of Public Health personnel trained in administration also being in charge of the Public Health department should have continued in the new set up that was formed after independence. This was not done. This 'mistake' led to many deleterious decisions in the field of Public Health in India. About his criticism about various measures of the government in the field of health, one would only point out that similar criticism has been made in the various discussions in the MFC in its annual meets, in the MFC Bulletin and in the various discussions, publications of the Jan Swasthya Abhiyaan. Unfortunately DB does not make even a passing reference to MFC or JSA. Some of the critical papers, pieces circulated in these activist circles were not in an academic framework. But many have substantive arguments based on empirical evidence and offer many insights. Thus DB is not the lone warrior in the battle against unscientific, anti-people policies which affect the people, though he may be one of the few who consistently launched scathing criticism while still

working in a government funded institute, in his time including in politically sensitive times such as during the emergency.

Questionable criticism of colleagues in CSMCH

His criticism of his erstwhile colleagues in the Centre for Social Medicine and Community Health (CSMCH) in the Jawaharlal Nehru University (JNU) needs some discussion. In view of his outstanding work in NTI and the specific approach he developed to engage with public health issues in India, he was offered the post of chairman of the newly founded CSMCH. Like other centres in JNU, CSMCH was meant to be a centre of excellence and DB as chairman of CSMCH, had freedom to foster interdisciplinary work around public health problems in India. One would agree with DB that because the Centre was entrusted with the responsibility to run post-graduate courses also instead of focussing entirely on post-doctoral research, this affected adversely its original mandate. But his criticism of his junior colleagues in CSMCH on grounds of competence is very surprising and questionable. It is surprising to read about DB complaining about deficient quality of his own faculty members whom he had selected and led. For example, DB tells us - "None of them shared my deep commitment to the cause of the un-served and the underserved. I also found them to be very much intellectually inadequate." (page 165). "All of them combined could not come anywhere near in terms of the creative work I had been able to do till that time." (page 200). It is possible that there may be some problem about some staff members in certain respects even in centres of excellence. But to make such a sweeping statement is extremely unusual and cannot be accepted at its face value. Many of us know some of these faculty members in CSMCH for many years and have been interacting with them on various fora like MFC. Along with the writings of DB, we have been reading their writings also on various issues ranging from universal iodization of salt, family planning programme, polio-eradication etc. Based on this experience I cannot agree with DB's criticism about the capacity of these faculty members. Just to give a very concrete example, if one reads DB's paper- 'Global Programme of Polio Eradication in India' - and that of his colleagues in CSMCH, - 'Polio eradication initiative in India: deconstructing the GPEI' - (Sathyamala C, Mittal O, Dasgupta R, Priya Ritu published in the International Journal of Health Services. (2005;35(2):361-83), one does not find that the latter is inferior. It seems that these remarks are borne out of DB's inability to deal with differences of opinion with CSMCH colleagues rather than any deficit in quality/commitment of his colleagues in CSMCH. This is clear from DB's own account. On

page 169 DB says - "I encountered difficulties when I found that my views materially differed from that of the faculty. -----ironically such clashes of ideas with the Centre boomeranged back to me with the painful message of the quality of teachers I have left at CSMCH after I retired." It seems that from DB's perspective, if somebody differs from him, it is because of the deficient quality of that person! The second source of his criticism of the quality of his colleagues seems to be the fact these colleagues did not appreciate DB's work as much as he expected. On this same page DB tells us - "One of the aspects that pained me most was their lukewarm attitude towards the many innovations I had brought in public health thinking after painstaking research work. I distributed copies of my published works to them. I had to tell 'them' 'why don't you exclaim 'wah! wah! when you read such creative pieces of work?'. Such statements, read in the context of DB's overall attitude and style of self-praise, leads one to question DB's assessment and complaint about his colleagues in CSMCH. In general DB does not seem to read appropriately, silences from his colleagues or silences of other people with whom he shared his views.

I wish that the book had a good editor. There is a lot of repetition and self-praise and one has to make an effort to read the book to the end. It requires some efforts, back and forth reading to understand the pioneering, outstanding contribution DB made in his NTI-work. As regards his original contribution on other issues in Public Health in India, this 328 page volume does not give any clear idea. It gives DB's position, criticism, general argument on a number of issues. But in this book there is hardly any rigorous, evidence-based step by step building up any solid case as expected from a scholar. May be it is there in his various papers he has referred to. But such substantive analysis could have been accommodated in this 328 page book if repetitions were avoided. Readers will have to overlook, keep aside these deficiencies and focus on DB's first person account of the outstanding contribution DB made primarily in developing the National Tuberculosis Programme, the specific 'bottoms up interdisciplinary epidemiological method with a sociological lens' that he developed in analysing public health problems in India and his incessant, radical critique of various health-policies in India.

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Book Review: Paul Kalanithi, *When breath becomes air: what makes life worth living in the face of death* (London: Penguin, 2016)

Tashi Choedup

When Breath becomes Air is a memoir by Paul, a young neurosurgeon who has been diagnosed with terminal lung cancer.

As a young thinking adult Paul's journey begins with literature and philosophy to the point where he comes to a realization that "the questions intersecting life, death, and meaning, questions that all people face at some point, usually arise in a medical context. In the actual situations where one encounters these questions, it becomes a necessarily philosophical and biological exercise." Throughout his life he pursues this theme, which he terms 'Biological Philosophy'.

Paul describes his burden as a Neurosurgeon as not merely regarding the life and death of his patients, but as the need to arrive at a decision about "what kind of life is worth living?", and, "what makes life meaningful enough to go on living?" For Paul, neurosurgery is not challenging merely because of the difficult skill required to operate but because it "presented the most challenging and direct confrontation with meaning, identity, and death."

After years of work and attempts at finding answers to various questions that had arisen during his practice as a doctor, in his pursuit of truth and the meaning of life and death, the day finally comes when Paul is diagnosed with cancer, and it is then that all the questions he has explored so far from the location of his patients becomes his own questions to be addressed.

Paul starts feeling excruciating back pain, which he ignores for some time, blaming it on the common ailment of many young trainee resident surgeons due to standing for many hours. As symptoms worsen he suspects cancer but again ignores them, despite being a doctor and a person of science, as he is only 36 years old and the possibility of cancer seems unrealistic.

When he writes about his excruciating pain in the prologue - "I knew a lot about back pain- its anatomy, physiology, the different words patients used to describe different kinds of pain - but I didn't know what it felt like", Paul points out the experiential limitations of a doctor's relationship to and understanding of the actual pain of their patients which they are trying to address.

Even before being diagnosed Paul finds that despite his extensive medical training he is unequipped to accept the fact of his own disease and death.

Paul's memoir is not simply a book about death: it is about the relationship between life and death, and is a first-hand narrative of their co-existence. This is one of several relationships Paul explores, and in the process, he introduces the reader to different landscapes of relationships: the relationship between two lovers (him and his wife) which has been strained by their busy careers and has gradually arrived at a point where they would joke with close friends saying things like 'the secret to saving a relationship is for one person to become terminally ill.'

At another point, he tries to understand the relationship between the responsibility of a doctor to his patients and the burden of this responsibility - "Those burdens are what makes medicine holy and wholly impossible: In taking up another's cross, one must sometimes get crushed by the weight."

Narrating one of his first visits to a doctor before the diagnosis of cancer, Paul ponders, "Why was I so authoritative in a surgeon's coat but so meek in a patient's gown?" and this marks the beginning of his role reversal from a doctor to a patient. This is the first of many places where he explores the dynamic relationship of power and vulnerability between doctors and their patients, and the beauty of it is that it is not done intellectually but at the very personal level of his own experience of being a doctor and then becoming a patient in the same hospital where he worked.

Paul describes how he deals with his sickness both as a doctor and as a patient. "As a doctor, I was an agent, a cause; as a patient, I was merely something to which things happened." "As a doctor and scientist, data helped me, as a patient it did not."

For Paul, who believed that, "being a resident, his highest ideal is not saving lives - everyone eventually dies - but it is guiding a patient or their family to an understanding of death or illness", the need to provide himself with similar guidance came sooner than he expected. In his words, "Here we are together, and here are the ways through - I promise to guide you, as best as I can, to the other side".

Paul's talks about his pursuit of truth and meaning with a simple approach that helps the reader to connect and relate to it in a very personal way. At no point does he attempt to present any profound philosophical view on death and life. He makes a very honest attempt at presenting his constantly evolving understanding of life and death as he lives each day facing his mortality whilst juggling his roles as doctor, husband, friend, and then patient and father.

The second part of the book talks about Paul's post-diagnosis. As Paul puts it: 'Guiding so many patients on this path, I see no path for myself from here on, everything is blank'. The beauty of this memoir is Paul's truthful narration of his fear of imminent death and the terminal illness that shattered his life and dreams, without taking any high pedestal as a doctor who dealt with death on every day basis.

Viewing Paul's world through his words and perspective, where at one point he writes, "I thought that the language of life as experienced - of passion, of hunger, of love - bore some relationship, however convoluted, to the language of neurons, digestive tracts, and heartbeats", and where later he says how doctors "see people at their most vulnerable, their most sacred, their most private", the reader's journey becomes more and more intimate with this person who they have never met and of meeting whom there is no possibility anymore.

Ironically it is through Paul's death that his story and his life has touched many strangers around the world.

Having witnessed and lived through the death of people close to me, I thought that I knew death, but after reading "When Breath becomes Air", I feel that the truth may be different from what I thought, and that I may never know death as it is until the day I face it myself.

We the living talk about death and the dead as if it does not concern us or at least with a strong sense of certainty that it is a very distant thing. Paul Kalanithi's *When Breath becomes Air* breaks these assumptions and, in a very plain and simple way, bringing us closer to the realization of an often ignored facets of being human: the uncertainty of life, and the unpredictable nature of death.

"We all plan our life, unaware, never suspecting our own fragility"

Paul seeks to make people understand that, rather than fearing the fragility of life, we should cherish the

preciousness of it and make the most of it, pursuing its meaning joyfully.

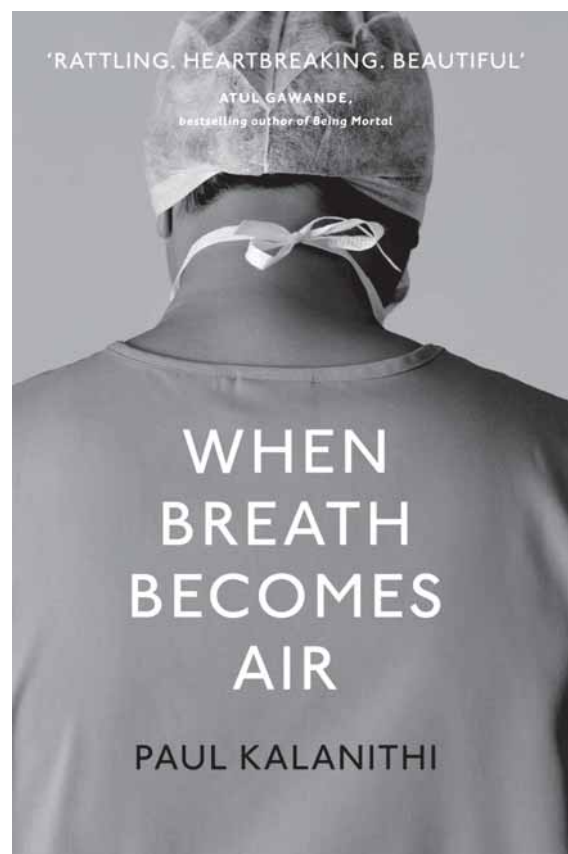
As Paul says, "Pain and terminal illness alter the identity of the patient", and he says that his oncologist "hadn't given me back my old identity. She'd protected my ability to forge a new one."

With great courage and conviction, Paul arrives at a point where he can say "shouldn't terminal illness be the perfect gift to the young man who had wanted to understand death?" It cannot get any more powerful and heart touching!

To end this review with a quote: Human Knowledge grows from the relationships we create between each other and the world!

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The mfc perspective

The Medico Friend Circle (mfc) is a nation-wide platform of secular, pluralist, and pro-people, pro-poor health practitioners, scientists and social activists interested in the health problems of the people of India. Since its inception in 1974, mfc has critically analyzed the existing health care system and has tried to evolve an appropriate approach towards health care which is humane and which can meet the needs of the vast majority of the people in our country.

The existing system of health care is not geared towards the needs of the majority of the people, the poor and the rural segments of our society. Thus, it requires fundamental changes. Since the health care system is only a part of the total system, these would occur as part of a total social transformation in the country. We believe that, to achieve this goal, measures however small have to begin here and today, in all spheres of human social life. mfc is trying to build a nation-wide current committed to this philosophy. Briefly outlined here is mfc's position on the existing health-care system in India.

After independence there has been a rapid growth in health care services organised by the government. Yet, the private sector has increasingly become the major provider of medical care in India. However, like any other commodity in the market it is accessible only to those who have the money to pay. Medical care now resembles any other commercial sector and therefore, medical professionals are increasingly becoming driven by profit rather than by concern for wellbeing of people. Commercial competition and personal interests of doctors lead to several kinds of malpractice.

This behaviour is encouraged and promoted by profit-oriented drug companies, which dump many useless or even harmful drugs on to the consumer through the doctors. All the above tendencies will be exacerbated with further privatization of medical services and medical education.

We believe that medical and health care must be available to everyone irrespective of her/his ability to pay. This requires strengthening of public services. Also that medical intervention and health care be strictly guided by the needs of our people and not by commercial interests.

Medical practitioners are concentrated in cities and towns, because of the greater purchasing power of the people in urban areas as compared to the rural, the professionals' own upper class and caste background, and their need for infrastructure which is often lacking in rural areas. This overcrowding of doctors in urban areas is also partly responsible for the overgrowth of specialists. This has resulted in the denigration of the role of basic doctor to just a 'cough and cold' doctor.

The training of doctors is also responsible for this situation. Hospital based training by westernised and urban-oriented specialists produces a graduate conditioned to urban and hospital practice. Therefore, even after prolonged expensive training in a medical college, such a graduate is still not capable of dealing with the situation in rural areas.

We, therefore, attempt to work towards a pattern of medical and health care adequately geared to the predominantly rural health concerns of our country and a medical curriculum and training tailored to the needs of the vast majority of the people in our country.

Though there has been an explosion in medical knowledge on the one hand, a number of innovative field-experiments have shown that many common health problems in India can be taken care of by community-based health workers if they receive limited yet good quality training. A system of health care based on such health-workers and supported by referral services of doctors is more appropriate, more so far a developing country like India. This would also demystify medical knowledge. In India however, health care remains doctor-based and doctor-dominated.

We, therefore, work towards popularisation and demystification of medical science and the establishment of an appropriate health care system in which different categories of health professional are regarded as equal members of a democratically functioning team.

Commercial interests demand a growing market for drugs and medical therapies and this is partly responsible for medical practice being reduced to curative services. This denigrates the primary role of preventive and social measures. Drugs, surgery and even vaccines have so far contributed only marginally to the improvement in people's health in different countries. In spite of the primary role of socioeconomic development in improving the health of our people, a wrong belief is promoted that medical interventions – use of drugs, surgery, etc are primarily responsible for maintaining people's health.

We believe in giving due importance to curative technology in saving a person's life, alleviating suffering or preventing disability, even while we stress the primary role of preventive and social measures to solve health problems on a societal level.

The government health sector is not commercial and PHC doctors are supposed to emphasise preventive medicine. However, this sector has not changed the basic pattern outlined above. The doctor working in a PHC is inclined and trained to do mainly curative work. Preventive and promotive measures, when undertaken, are therefore reduced to pure technological and administrative measures without any social content, and are then thrust on the people.

A large part of the resources of the PHC is spent on family planning programmes (read population control), which targets women and pushes invasive female contraceptives in a hazardous manner. Women are seen only as child bearers and health-programmes for women are geared only towards maternity and contraception. It is no wonder that people look upon PHCs mainly as centers for immunization or family planning. For their ailments, most people approach the private sector, whatever its quality and price, and at the cost of their present and future wellbeing.

We therefore demand a sensitive and comprehensive public health system which caters to all health-needs of the people, and for mechanisms of active participation by the community in planning and carrying out preventive and promotive measures.

Medical practice in its existing form reflects and reinforces some of the negative, unhealthy cultural values and attitudes in our society, for example, glorification of money and power, division of health-workers into intellectuals and manual workers, domination of men over women, of urban over rural, and of foreign over Indian.

We, therefore, work towards health care services based upon human values, concern for human needs, equality and democratic functioning.

In the present health care system, non-allopathic therapies are given an inferior treatment. Allopathic doctors call non-allopathic practitioners quacks, without knowing anything about their system of medical care. Equally unscientific are the claims of success made by some non-allopathic practitioners and drug companies. Prejudice, ignorance and self-interest have prevailed over open-minded scientificity in this important area of medical care.

We insist that research on non-allopathic therapies be encouraged by allotting more funds and other resources and that such therapies get their proper place in our health-care system.

MFC thus tries to foster among health workers a current that upholds human values and aims at restructuring the health care system. It believes in deep and inclusive debate and discussion and offers a forum for dialogue/debate and sharing of experiences with the aim of realizing the goals outlined above and for taking up issues of common concern for action.

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