Towards a Fair Effective and Sustainable Health Care System for India

- Rajkumar Ramasamy [1]

To improve India's health parameters a radical strengthening of primary health care is needed with a revised health delivery system more than just extra health care funding!

Newspapers carry frequent news about increasing government spending in health care and the availability of increasingly more specialised hospital care in India. While facilities in private and government hospitals have improved significantly, relatively little improvement has occurred in primary health care (PHC). India's current hospital based health care system produces an unsustainable and spiralling health care expenditure on the Indian Government and poorer people. Sudden health care expenditure is already the most common cause of huge debts in poorer people. This article shows through case histories why this health care delivery system has to change and suggests what these changes should be. (I have used the terms 'family physician', general practitioner' and 'primary health care practitioner' to have the same meaning).

Everyone has the right to sustainable and accessible health care that they are comfortable with.

Critical Role of PHC Through Case Studies

These comparative stories are based on true events which have been changed to not identify individuals.

Chandran and Mumtaz's Story

Chandran is aged 27 and 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 generalised anxiety disorder. Chandran was seen by a team of staff

[1]*Family Physician, KCPatty Primary Health Center, Kodaikanal Taluk, Tamil Nadu 624212. Email: <ramasamy.rajkumar@gmail.com>*

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. 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 do 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.

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. Unfortunately in India existing private and government primary care doctors are not trained to practice primary health care. In countries with a sustainable health care system, 50% of postgraduate medical training is in primary health care, a recognised field of medicine given respect as a speciality in its own right. In India the number of primary health care postgraduate training seats is a woeful less than 0.5% of all post graduate medical training seats! There is not even a well developed modern syllabus in primary health care. Most government PHCs are staffed by specialists who both know little about PHC and waste their specialised skills there. Worse, primary health care or family medicine training is often confused with community medicine or social and preventive medicine. While PHC practitioners will need to draw relevant preventive skills from community medicine they need a wide range of clinical skills best taught in smaller hospitals and oriented to primary health care by ample practice throughout their training in a well functioning primary health unit. Unfortunately in desperately trying to encourage family medicine training the government is wrongly allowing big urban speciality hospitals to train doctors in family medicine.

Mani and Selvi's Story

Mani aged 14 months was the 3rd child in a family of poor agricultural daily wage earning parents. When he developed fever and cough one day the parents took him as usual to a local MBBS doctor with no primary health care training. As in previous illnesses Mani received an injection and some expensive tonics costing Rs 160. Unfortunately Mani became worse that night and developed difficulty breathing. He was taken to some spiritual healers the next day. 2 days later the child was taken to a large hospital where he was diagnosed to have severe pneumonia and survived after the parents borrowed and spent Rs 10,000 for his hospital expenses.

Selvi is of similar age and background to Mani. When she had developed fever in the past Selvi's mother Rubini takes her to a health center staffed by doctors and health workers trained in primary health care. Normally when Selvi had similar fevers she only received paracetamol and advise on how to feed a child with viral illnesses. The health workers also took time to explain to Selvi's parents why viral illnesses do not need antibiotics or injections and Rubini now understood that. However on this occasion the doctor showed Rubini that Selvi, though not yet looking ill, had a faster respiratory rate. The trained family physician also knew up to date clinical guidelines supported by the World Health Organisation that a small child with fever and fast breathing should be treated as having early pneumonia in a primary health care setting and that the most rational antibiotic is penicillin. Selvi was started on penicillin and then asked to return for review from home the next day. Since Rubini was

familiar with health workers in the health center who were local people and since the health center was also close by she had no difficulty in returning the next day. Selvi was much better the next day and the treatment was completed now with oral antibiotics. The total cost was Rs 100 and Selvi's life was never at risk. It is highly likely that Mani could also have had less danger and costs to his family if he had been treated by a skilled family physician at first. In the past when he had simple viral illnesses he would also have not had useless injections and tonics which would have both reduced expense on useless medicines and prevented the emergence of increasing antibiotic resistance. Even when pneumonia is severe, a hospital working closely with a PHC can refer patients back to a PHC early once the patient is better, reducing costs. It is also essential for PHCs to work as a team of doctor, nurse and local health workers. Not only will the weakest sections of the community (poor and uneducated or elderly) use them because they are located closer to their homes but also because the familiar staff means they are not afraid to use PHC services. Communication difficulties between busy doctors from urban backgrounds and poorer rural people can lead to misunderstandings and wrong diagnoses. Health workers can bridge that communication gap and provide explanations for treatment given that are then likely to be accepted and completed. Health workers can also be trained as health educators based in the PHC who visit schools and villages to provide health education in radical ways that motivate and encourage people to understand when to see health professionals and how to prevent disease.

My health center! Patient and health worker from local community: removes fear of coming to the health center

Parameswaran and Karthik's Story

Parameswaran, aged 38 years, met with a car accident. He was taken bleeding from multiple wounds and unconscious 45km to the nearest specialised hospital. There he was found to be in shock from blood loss. Though he had no major brain injury needing neurosurgery he suffered irreparable brain damage and is severely disabled simply because the low blood pressure from loss of blood severely increased the damage to the brain. The costs of such disability are enormous.

When **Karthik** had similarly severe injuries he was first taken to the local PHC. The trained PHC team also know how to stabilise and safely transport critically ill persons. His bleeding

was stopped with simple pressure bandages and fluid replacement stopped his blood pressure dropping. These critical interventions took only 30 minutes after which he was then taken to major hospital 50km away where he made a full recovery. Even in emergencies local PHCs in rural areas can provide the crucial stabilisation that allows later specialised care to result in a good outcome. For example emergency treatment called thrombolysis after heart attacks needs to be given as soon as possible if it is to be effective. PHCs with trained family physicians can initiate this treatment near the home and then refer patients to a specialised hospital.

A critically ill patient stabilised at a PHC so that he can be referred with a much better chance of survival to the base hospital

Murugan and Ravi's Story

Murugan is a small farmer aged 46 years who had a sudden stroke and was rushed to a specialised hospital. He made a good recovery but was found to have hypertension. He was sent home on several medications but after 6 weeks he could not afford to continue these. He also felt well and did not understand the need to continue the treatment. 12 months later he had a further stroke and since then he has tragically remained paralysed on one side.

Ravi aged 43 had a similar stroke and was brought to the primary health center. His family were informed of the diagnosis and the costs and benefits of a hospital admission. He made a good recovery in hospital. His also had high blood pressure and he was advised not to stop the medication to prevent further strokes. The health workers explained how high BP is often silent and just because he was feeling well he should not stop treatment. The PHC has a 'chronic disease register' and a recall system to ensure that people like Ravi receive on going monitoring through home visits to ensure that treatment was understood and continued. When Ravi did not come after 6 months of regular treatment to collect his drugs the PHC staff informed Sumathy the HW who visits Ravi's village. Ravi told Sumathy that the medicines prescribed in the hospital were too costly. Sumathy arranged for a joint consultation at the PHC with the family physician. The daily cost of medicines was Rs 9. The family physician knew the relative merits of each prescribed medication and after discussing the merits with Ravi in simple language, it was decided that 90% of the protection from further strokes was provided by just 4 medicines that cost only Rs 1.50 per day which Ravi could now afford. Ravi remains well on regular treatment 4 years after the initial stroke. Ravi's stroke was also partly due to his smoking and the health worker held a meeting with all the young men in the village who smoked and allowed Ravi to tell them how lucky he was to survive and how smoking harms them. Home visits and recall systems maintained in PHCs can encourage

preventive care and ongoing care of those with chronic illnesses. Failure to implement this aspect of PHC will relegate preventive care programs to nobody's responsibility even though preventive health care can save enormous amounts by preventing disease. A young smoker who stops smoking will save his family an average Rs 5 lakh through prevention of illness and lost working days, yet these interventions cannot be done through hospital based health care delivery. Targeted home visits also ensure that weaker members of the community are not neglected and that it is not just those who come to the health center who receive holistic care but also those who for whatever reason **do not come to the health center also receive importance –** an alien concept for most doctors but essential if health standards are to improve through preventive care!

A cardiac patient visited at home by a health worker to encourage continued treatment and follow up.

Jayanthy and Mariammal's Story

Jayanthy sold flowers at the market. She was pregnant with her 3rd child and her 2 previous children were born normally. She felt she would deliver normally again and on this occasion did not have any antenatal care. However near the time of delivery she had swelling of her face and ankles and at the time of labour pains suddenly had a convulsion. Her terrified family rushed her to a large hospital where she was found to be very anaemic and had high blood pressure which caused fits. It was after blood transfusions and an emergency caesarean operation that she survived but the baby died. The treatment cost Rs 20,000.

Mariammal was also poor like Jayanthy and pregnant but was too busy to see a doctor for antenatal care. However in her regular home visits Health Worker Sumathy identified Mariammal as pregnant and regularly gave her iron tablets and checked her blood pressure. When the blood pressure was found to be high Sumathy patiently explained to the family the dangers facing Mariammal. She saw the family physician who started Mariammal on treatment and informed that a hospital delivery was safest. Arrangements were made to see the obstetrician and fears about hospital delivery were removed through explanations. Mariammal delivered a healthy infant normally in hospital and had access to timely obstetric interventions should she have needed them. Preventive primary health care had saved lives and costs by removing the need for blood transfusions through simple iron tablets in pregnancy and the early detection of raised blood pressure in pregnancy. Regular antenatal care where iron is given to pregnant mothers can halve maternal deaths in India.

These histories show that primary health care by a trained PHC team can prevent illness, help manage emergencies better, reduce costs of acute care and yet be accessible to the poor and weak as well as the rich. However for primary health care to be effective we need a health care team with doctors trained in primary health care. We also need a system that stresses the pivotal role of PHC in the health care delivery system and the government needs to realise that private practitioners must supplement its own primary health centers in providing primary health care because 80% of health care in India will remain through private hands. Broadly 2 steps are needed to improve PHC in India:

- first improve the quality of primary health care and then
- change the health delivery system so that primary health care plays the pivotal role in it, creating a fairer affordable and hence sustainable health care system for India

What the Government should do to improve the quality of primary health care in India?

1. Make a regulation that henceforth all those entering general practice must undergo a 3- year post graduate training program in primary health care just like surgeons do similar specialised training. The Government of India should recognise primary health care as specialised field in its own right.
2. Develop an up-todate and modern family medicine syllabus suited to India. The existing syllabus in family medicine of the National Board of Examinations and others are outdated and designed by hospital specialists and community physicians. Family physicians should develop these syllabuses.
3. However since there are tragically inadequate numbers of trained family physicians in India available to train others, the government can still enforce appropriate family medicine training by ensuring that the final examination in family medicine tests skills that are appropriate to primary health care. Earlier in many other countries too it was not the selection of training centers that improved the quality of care but the quality of the final examination that doctors had to pass. Examinations based on those of the Royal Australian and UK colleges of General Practitioners provide practical examples of relevant exams that ensure that candidates will learn skills relevant to family medicine. These exams could be adapted to Indian conditions and include how to select sustainable health care instead of blindly implementing treatment regimens available only for rich countries. The aim should be to know what is ideal but also how to adapt it to what a family can accept and sustain.
4. Recognise training programs in family medicine that include a rotation in recognised general hospitals for 2 years followed by 1 year in a primary health practice with one day weekly reorientation classes in family medicine throughout the course. Later when there are adequate trained family physicians reaccredit training in family medicine to only those centers that are genuinely practicing family medicine. The aim should be to create an equal number of family medicine post graduate training seats to the existing hospital specialist post graduate seats in India!
5. All those practising at primary health care levels in government and private health centers, whether vocationally trained or not in family medicine, must do compulsory continuing medical education (CME) and be allowed to reregister every 3 years only if they have acquired the needed CME points. It will not be difficult to set up an

internet online CME learning system for general practitioners by adapting and using the excellent online interactive CME programs developed by the Australian and UK colleges of general practitioners and many other family medicine/ primary health care on line educators. Hence the lack of trainers in family medicine in India need not be a hindrance to enforcing CME and therefore improved quality of primary health care in India.

6. Encourage similar developments in nursing where there can be primary health care nurse practitioners. Further modernise the primary health care health worker syllabus for health workers supporting nursing and medical staff in PHCs.
7. In rural areas encourage and fund existing primary health centers that have an extended role and greater need for a multidisciplinary team.

Regulating the Health Care System to be PHC-Based

Now that the quality of primary health care is secured, it is necessary to remove the chaos created by specialists and primary health care providers working with no coordination together and no one being in charge of the health care of families.

1. Ensure that every Indian citizen is registered with a recognised family practitioner who will be the sole primary health care provider for that person. Encourage private and government hospital specialists are seen by patients only after a referral by this family physician except in recognised emergencies such as severe chest pain or trauma. This policy will ensure that essential diagnosis/ investigations are completed at primary care level and more appropriate referrals only are made to the correct specialist, saving time and expenses. For example patients who make direct self referrals to specialists can be made to pay charges while those referred via family physicians may attract a government subsidy. Specialists should also be encouraged to discharge to family physicians the ongoing medical care of patients with a proper written management plan after diagnosis and stabilisation instead of trying to provide simple ongoing care themselves. Overall government health expenditure will markedly reduce because of reduced expense at hospital levels.
2. Provide subsidies to PHC practitioners when they show evidence of preventive care activities in their target registered population. For example when a high percentage of infants in their care achieve full immunisations, when antenatal mothers receive at least monthly health worker and a family physician or obstetric specialist checks in their pregnancy, those under 30 years have smoking and alcohol intake recorded and are given appropriate smoking and alcohol prevention interventions (of which there are many effective evidence based interventions now available); those above 40 years have their BP checked at least twice yearly and those on BP treatment achieve target blood pressures, etc. This system may need monitoring through the creation of area-wise family medicine boards but it will markedly reduce the nation's overall health costs by preventing illness.
3. In the long term have an accreditation system where private and government health centers having necessary equipment and staffing are recognised. Criteria used for accreditation can be -having a multidisciplinary team, a chronic disease and preventive health care recall register for their target populations to ensure continuity of care in chronic illnesses and preventive activities are systematically implemented, ability to stabilise and safely refer those presenting with emergencies. Accreditation

should then allow a government subsidy for each visit a target population member makes to the accredited primary care practitioner for emergencies, recognised preventive care activities like yearly health checks, antenatal care etc. This system will ensure that the reliance on the government alone to provide primary health care services is removed because that is simply not practical for a country of India's size.

The alternatives to these necessary radical changes will be an unsustainable health care system in India that is also of limited use for those weakest sections of our community most in need of health care. Medical practitioners interested in their own welfare will resist these changes because the current chaotic system benefits doctors' income. However an elected government concerned with the needs of every member of the nation must act now if later government bankruptcy and suffering of the community is to be prevented.