

Human Resources for Diseases Control: Administrative Function or Strategic Priorities

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Abstract - The health sector is one of the most challenged sectors in developing countries given to the shortage of trained manpower particularly in the developing countries. Human resource is a very important aspect of any functioning health system. However this aspect is often neglected in the development of the health system and when it comes to the disease control programmes not enough importance is given to this aspect. Generally human resource in health is often ignored and just seen as an administrative function in disease control programmes. This affects the overall effectiveness of the programmes in terms of its impact on disease control. We observe an acute shortage of trained manpower especially in the developing countries. There are several reasons of such a crisis like situation in human resources in health system. Among them some are like HIV/AIDS Epidemic, Training Capacity, Brain drain, Poor working conditions and Remuneration. Especially the HIV/AIDS control programmes have suffered a lot due the shortage of trained manpower particularly in countries where HIV is among the main health problems. However there are ways in which such problems can be addressed to ensure the sustainability of HIV control and other disease control initiatives in developing world to reach near to the Millennium Development Goals (MDG – particularly Goal-6) in health. In this paper authors discuss the evidence based solutions to the problem of human resource in health sector to combat HIV/AIDS and other diseases in developing countries. Some of the initiative to address the problem may be improving the training capacity, improving use of available skills, staff retention and support, recognizing the health workers rights and putting them first along with taking care of administrative issues involved in the management of the human resources.

Keywords: Health, Health and Human Resource, Human Resource Crisis, Disease Control, HIV/AIDS

I. INTRODUCTION

The health sector is one of the most challenged sectors in developing countries given to the shortage of trained manpower. For instance, the density of total health workforce in South – East Asia is 4.3 per 1000 population. In Africa the situation is even worst where there are 2.3 total health workforce is available for every 1000 population. On the other hand it is 24.8 for America and 18.9 for Europe. In Asia and Africa the majority of these health workers are lowly skilled

workers. The disproportionate burden of disease, disability and death in poor countries is caused by, and aggravated by numerous complex factors. There is a consensus that the inadequate number of health workers is the most important factor in the crisis of health care delivery in poor countries. Weak health systems, rapid population growth, corruption, poverty and poor health financing by central governments only worsen the situation.

Moreover, due to the interaction of widespread poverty, breakdown of health services and the HIV/AIDS epidemic, and several other factors, there has been sharp increase in communicable diseases. At the same time, there has been another rise in cases of lifestyle-related diseases like heart disease and diabetes especially in the urban areas of these countries. HIV/AIDS, the resurgence of TB, and malaria have dramatically increased the number of patients in need of health services. These three diseases alone have increased demand for hospital admissions, and increased the length of stay in hospitals, thus creating more demand for labour-force in health facilities. In addition, health staff themselves have also been seriously afflicted, especially by HIV/AIDS, leading to more staff absence from work or death, hence poor service delivery, especially in sub Saharan Africa. As an illustration, in 1997, Malawi lost 44 nurses to HIV/AIDS, representing 44% of all nurses trained. By comparison, Zambia lost 185 nurses in 1999, representing 38% of all nurses trained in government institutions that year. All these add to the strain felt by the over burdened health workers in these countries, and contribute to the human resource crisis.

The human resource is the first and foremost important aspect of any disease control programme and thus for HIV/AIDS. Many disease control programmes in the developing countries suffer negligence of human resource aspect. HIV/AIDS programme and scaling up of the antiretroviral therapy is particularly such a case in Sub-Saharan Africa and in Asia in this respect. In the context of Asia, countries such as India, Nepal, Bangladesh, Pakistan and Sri Lanka also suffer the shortage of the trained human resources in health.

There is worldwide shortage of the trained manpower in health sector. This shortage is highest in the countries where health problems are more. The health sector is not the priority in many developing countries and the public spending in health is very low. These low income countries have to depend upon the donor agencies for supporting the health programmes. The donors have not shown interest in investing in the human resource problems in these developing countries. The concern of the donors is that they do not want to increase the dependency on the external donations.

The estimation of the global shortage of the health workers is more than 4 million. A recent study reveals that the Sub-Saharan African countries must nearly triple their current number of workers by adding the equivalent of one million workers through retention, recruitment, and training if they are to come close to approaching the Millennium Development Goals (MDGs) for health particularly the HIV/AIDS related MDG (Goal-6). The scenario of Southeast Asia is further more dramatic where there is a shortage of trained health human resource coupled by the mal-distribution of the health work force in rural areas the shortage is more than the urban and semi-urban areas. For instance, maternal health is a major public health problem in India and the role of emergency obstetric care is critically important for reducing mater mortality ratio. Lack of trained professionals to deal with the issues of emergency obstetric care is a major bottleneck in bringing women to health institutions for delivery and there by curtailing the mother to child transmission of HIV in India. India faces acute shortage of obstetricians. The shortage is further more in rural areas . In the recent years India has suffered shortage of all most all cadre of trained human resource due to fiscal difficulties and civil service reform.

According to Charles Hongoro human resources in health is like the heart of the health system in any country, the most important aspect of health care systems, and a critical component in health policies. The country specific sustainable solutions to human resource problems have to be found in order to achieve targets of disease control. In health system in each country is different and the context in which the health system functions is also unique.

The health human resource problems should be seen in the context of a specific health system and local solution should be aimed keeping in mind the future health demand of the population and it should be made responsive to the needs of the people in general and to control various endemic diseases and HIV/AIDS in particular where HIV forms a major health problem. In this manuscript the authors have attempted to

identify the specific reasons of the crisis like situation in health human resources and suggested some means and ways to address these problems in the context of developing counties.

II. METHODOLOGY

The published research work was reviewed on the topic using Science Direct data base. The keywords used for searching the research papers on the topic were – 'health human resource', 'HIV/AIDS and human resource and human resource crisis in developing countries'. The first search resulted in 216595 journal articles, 21184 book articles and 3832 reference work. The research with second keyword resulted in 14569 journal articles, 1967 book articles and 425 reference works. The search with the third key word resulted in 19854 journal articles, 2895 book articles and 691 reference works. This search resulted in several papers which were addressing similar issues under various contexts. Only those papers selected finally for review which were considered more close to the topic. For screening the papers further following criteria were used – inclusion of both qualitative and quantitative research papers, articles of last 10 years, relevant to Africa and Asia and having the words such as health, human resource, crisis, skill etc. This was done manually. As a result of this the number of articles reduced significantly to the tune of 57. The abstracts of these 57 papers were printed and read thoroughly. During this process those papers were marked and selected that discuss about the problems of disease control programmes, HIV/AIDS, human resources crisis and solution to the shortage of trained health human resources in the context of developing countries in Asia and Africa. This further reduced the number of selected articles to the tune of 9. These 9 full articles were downloaded and printed and thoroughly read. Apart from this database search, the some reports relevant to the topic in the context of Africa and Asia were also searched using Google Search.

The authors studied the papers, internalized the findings and commented and interpreted the results based on their field and academic experiences.

III. RESULT AND DISCUSSION

A. Human Resource Situation in Developing World

We search results that there is an acute shortage of all cadres of trained health human resources. The shortage is further acute in the rural areas. WHO (year 2006) estimated that there are 57 countries facing critical shortage of health workers. Over half of them are in Africa and rest in Asia and Latin America. The situation of health workforce in Asia is also similar but relatively better. In Africa there is an acute shortage of human resource for scaling up of antiretroviral

therapy. In India the shortage of trained workforce in antiretroviral therapy is a major constraint and as a result the therapy is available only at the tertiary level of the care. This limits the geographic access of antiretroviral therapy. This also increases the cost of the therapy in terms of loss of wages, transport to the health facility and expenses of patient's companion.

A current situation of the physicians and nurses is shown in some of the developing countries in Asia and Africa in the following table.

TABLE I PHYSICIANS AND NURSES PER 100 000 POPULATION IN SOME OF THE DEVELOPING COUNTRIES IN ASIA AND AFRICA

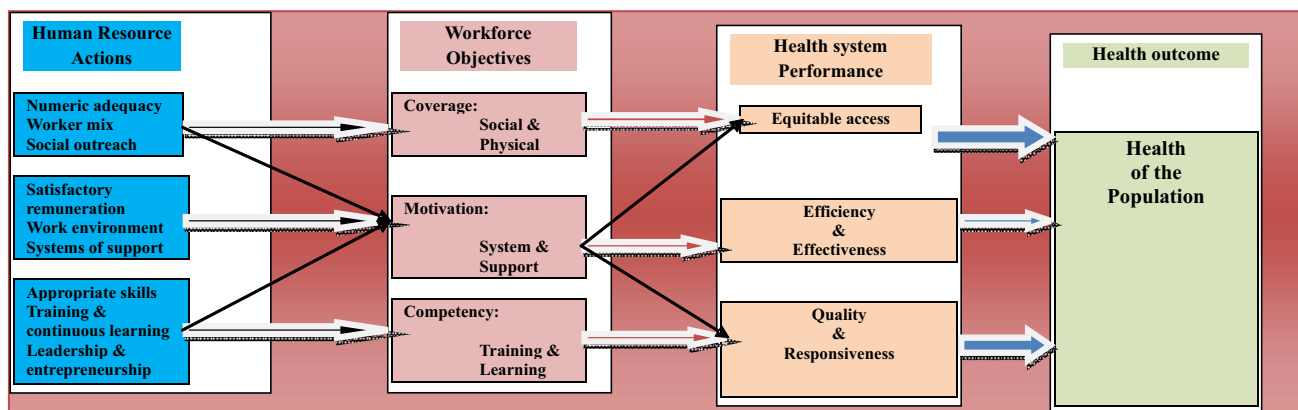
S. No.	Country	Physicians per 100 000 Population	Nurses per 100 000 Population
1	Bangladesh	23	24
2	India	51	61
3	Pakistan	66	47
4	Sri Lanka	43	79
5	Niger	3	27
6	Bolivia	73	32
7	Papua New Guinea	5	53
8	Ethiopia[10]	2.7	22
9	Global Average	170	399

Source : WHO

The table reflects huge disparity in distribution of the human resources in the health across various regions in the developing world. There are some countries like Niger and Papua New Guinea where the number of physicians and nurses are far below the global average. The availability of trained physicians and nurses are far below its peers in the table. In Asia Bangladesh face an acute shortage of the physicians and nurses.

B. Human Resource in Wider Health System

There is a need to see the human resource in the context of wider health systems in a specific context. Health human resource forms the basis of a strong health system and makes the health system respond to health problems of the communities. Figure 1 represents a conceptual framework of the human resource as part of a wider health system and its effects on the health of the people. It reflects how certain actions with respect to improving functioning of health workforce can bring better quality in terms of service delivery, increase efficacy and efficiency and lead to equitable access. This also summarizes that actions aiming to improve human resources improve health of the people in general.



Source: Adopted from Prehospital and Disaster Medicines – Special Report 2007

Fig. 1 Human resource in wider health system

C. Some of the Causes of the Present Situation

1. HIV/AIDS Epidemic

The HIV/AIDS epidemic is killing the work force. The problem is acute in many developing countries. In 1997, Malawi lost 44 nurses as a result of AIDS, which is 44% of the annual number of nurses trained; in 1999 in Zambia 185 nurses died, which is 38% of the annual number of nurses trained in government institutions. Problems of absence from work and reduced productivity associated with the epidemic are also common.

2. Training Capacity

The training capacity is low in general in the region. Two thirds of sub-Saharan African countries have only one medical school. Investment in educational infrastructure and educators is declining. In India in the states such Bihar and other Northern states the number of medical colleges is far below the number required as per the population forms.

3. Brain Drain

The brain drain in these countries is high. This is both internal as well as external. Professional bodies that protect the interests of their members have played a part in defending training that promotes a level of specialization inappropriate to the health needs of low and middle income countries. One of the main reasons of the brain drain (internal and external) is the poor HR policies in the health sector of these countries.

4. Poor Working Conditions and Remuneration

A survey of African health workers intending to migrate or already migrated showed that issues of salary and living conditions dominated, with 80% of health workers surveyed in Cameroon citing living conditions, and 72% in Uganda and 89% in Senegal citing salary as reasons for intending to leave their country. The living and working conditions in Asia and particularly in the countries such as India and Bangladesh are very poor.

5. Skill Imbalance

Skill imbalance is a major issue particularly in the context of the developing countries. The effect of the colonial governments' medical education is prominent. The medical education should be according to the health needs of the people in specific country.

Skill imbalance in the workforce created lot of inefficiencies in many developing countries and these countries should change their plan to develop their workforce that is closer to the public health needs in these countries.

6. Mal-Distribution and Poor Knowledge Base

Across various regions in the developing world, the concentration of the health service providers is around the cities and urban areas. In the rural areas in India the doctors and nurses are very few. The retention of the health workforce in the rural areas is a huge challenge.

The knowledge base of the workforce is poor. It means that the data is lacking with respect to the knowledge and skills level of the workforce. It is a main constraint in planning of the programmes and policy for training and further development of the workforce.

D. Solution to the Problem of Human Resource Crisis

1. Improving the Training Capacity

HIV/AIDS and TB have not only affected the general population but these disease conditions have also affected the health workforce. Malawi has suffered in terms of loss of human resource due the HIV/AIDS. Other factor that affected

the availability of the human resource is brain drain. Increasing the training capacity seems to be promising in terms of improving the supply of the trained manpower. Two important factors that need to be considered are sustainability of the resources for increasing the training capacity and ways and means to ensure that the increased flow of trained manpower is retained and absorbed in the health system of the country.

2. Improving Use of Available Skills

Auxiliary cadres are often less employable abroad, especially if the qualifications involved do not easily translate into those used in the developed world, such as medical assistant or clinical officer. The skills enhancement of this cadre can be useful. In Africa, for example, nurse aids, medical assistants (with more basic training than a nurse), and clinical officers (the equivalent of medical assistants in Tanzania and Uganda) are doing essential medical tasks, especially in rural areas, despite the existence of professional restrictions and regulations. A good example is Malawi, where clinical officers are a major resource in surgical procedures and medical care. Task shifting is a major debate in many developing countries especially in Sub-Saharan Africa. Many believe that it is not a panacea and undermine the health system development and would weaken the health system in long run. Task Shifting and scale up of ART in Malawi through non-physicians clinicians resulted providing lifesaving drugs to 130 488 patients.

Health services such as condom distribution, food and hygiene counseling, distribution of insecticide impregnated bed nets, and nutrition education can safely be provided by trained community workers.

3. Staff Retention and Support

The way the health system is funded, organized, managed, and regulated affects health workers' supply, retention, and performance. There are no universal formula for staff retention and support. In some countries incentive has worked and in some other countries it did not.

The idea of giving incentives to the workers who work in difficult settings is being proposed in many settings. This has shown some good results in terms of retaining the staff. However the legal bonding of the workers to stay in their job has not shown good results in many parts of the world and professional bodies have opposed it. Interestingly these strategies have worked in Thailand to retain the health workers where bonding of the doctors along with incentives was used.

4. Recognizing the Health Workers Rights and Putting them First

The workers are very important for any diseases control program. Strong leadership, sustained finances and political will are needed to ensure that workers get what they need to deliver at the workplace.

5. Development of National Workforce Strategic Plans

All countries should develop national workforce strategic plans to guide human resource development and should examine and increase their investments in appropriate education, deployment, and retention of human resources. National level initiatives need to be taken in this direction and country specific policy on health human resources is necessary.

6. Combating Health Emergencies

Certain health conditions have not only affected masses but also affected a huge number of the health workers. HIV/AIDS and TB are among those health conditions. These two health conditions particularly resulted in increase in the absenteeism and deaths. Safety of the staff against HIV/AIDS and TB is crucial. It is very important that the use of universal precaution is encouraged among the health workers and appropriate environment should be developed for the same.

7. Building Knowledge Base and Simultaneous Learning

It is important that knowledge and continuous learning of the health workers is encouraged and promoted. One such example of building knowledge base at district level health planning and management is there in India. The Public Health Resource Network which is a networking and capacity building programme running in four state of India is a good example. However its impact on retention on the health workers is yet to be evaluated.

8. Non - Financial Incentives

The experiences from the field show that across various countries under different circumstances non-financial incentives in the form of acknowledgement, recognition, career development have helped in increasing the motivation of the staff and retention. This is very important in realizing the objectives of the project.

IV. CONCLUSION

The development of the health system is very critical to address the health human resource crisis. All the developing countries should evolve an appropriate action plan to strengthen their health system. Country specific strategic investment should be made in developing human resources.

There is a need of a national policy on the human resources that clearly defines the strategy to recruit, deploy, retain and develop human resources.

It can be concluded that in the developing countries the acute shortage of the human resource is an important issues with respect to sustainability of the disease control and making health services responsive to people's need. Country specific strategies need to be developed and understood as a strategic function rather than administrative routine.

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