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Study of health human resource migration in India

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ABSTRACT

Background

Human Resource for Health (HRH) migration is an emerging concern in the development paradigm due to the critical importance to sustainability of health system in India. Being the largest human resource supplier to the world, it is important to analyze the consequences of the migration of HRH in the delivery of healthcare services to the country's population. The study evidences limited to examine the size, distribution of the existing human resources or trends or patterns in migration. The consequences of migration have its implications to the healthcare delivery mechanism which needed to be critically analyzed.

Review Methodology

The methodology adopted in the paper is descriptive design. The critical review used to evaluate the existing evidence and to develop conceptual framework. The process involved the setting of the inclusion and exclusion criteria to select the articles. It included wide range of articles from the world development reports to specific studies oriented on the HRH scenario of the country. The search strategy comprised both form of studies qualitative and quantitative. The study utilizes the official data set published as report form.

Main Findings

The data on the migration in context of India, not systematically updated in the existing evidences. The availability of data on migration limits to few reports i.e.(World Health Organization) WHO's Joint Learning Initiatives and studies which combines census data of Organization for Economic Cooperation and Development (OECD) and results in the number of foreign born health professionals.

1. **A major proportion of the research studies reviewed describes the disparity in distribution of HRH between rural-urban and public-private. Few researches focused towards the policy environment of the source and destination country for the migration.**
2. **There is pool of literature explaining the factors of migration but it margins when to analyze the significant implications to healthcare delivery mechanism and health outcomes for the source country.**

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Recommendations

The paper recommends with the strategic initiative requisition for the live data records to update the HRH situation in the country. The imperative need of additional HRH training, retaining and recruiting is essential for the health system. The country specific human resource policy is vital for the strengthening of the healthcare services and regularizing of movement of health professional within and out of the country. The study gives an insight on emerging concern towards the HRH movement and considers the consequences rationally on the public health system of the country.

Conclusion

The research paper results into giving an idea to understand the present scenario of HRH in India. Though the present HRH information system is generalized description of the number of health professionals registered with the respective councils. It does not explain the exact quantification of the extent of the HRH migration, even though it is common among the health professionals. It is important to establish relation among the variables of migration and its consequence to the health system. The need for developing greater understanding for the long term consequences of migration on the source country is essential factors to be analyzed. The study limited to the secondary data analysis on HRH migration.

Keywords: Health Human Resource, Migration, Health System Challenges, Implications on Health System, Health Financing, Human Capital Management

INTRODUCTION

Migration has become an important feature of global health system and development paradigm. The migration of highly skilled health professionals from emerging economies to the industrialized economies is matter of concern due to the critical importance due to sustainability of health system in the emerging economies. India, being the most notable diasporas among the educated, 4.3 percent of Indian tertiary educated population living outside India.[1] Thus it is important to analyze the consequences of the migration of Human Resource for Health (HRH) in the delivery of healthcare services to the country's population. Being the largest physician provider to industrialized economies, by the end of 2004 India supplied 59,523 physicians to world and contracting to the fact India stands among top for its worse health indicators the migration is matter of great concern. The existing disease burden, the changing demographics and disease profile of India is a serious concern for strategic planning of HRH to achieve health goals of the country. A key component of the public health system's capacity to deliver services is human resources.[2,3] National Rural Health Mission (NRHM), a programme designed to provide improved health services to rural populations, estimates that India would require 175,000 SCs (Sub Center) and 27,000 PHCs (Public Health Center) to meet population based norms.[4] It reflects need for more HRH to achieve the Millennium Development Goals (MDGs). The World Health Report 2006 identified that 57 countries as facing HRH crisis (health workforce density ratio below 2.3 per 1000 population).[2] Six countries are enlisted from south east region and India stands with Bangladesh, Bhutan, Indonesia, Myanmar and Nepal. The Global Health Workforce Alliance strategy (2013-2016), report clearly point outs that "the HRH crisis is still an acutely limiting factor in countries' attempts to reduce maternal and child mortality, to control priority infectious and non-communicable diseases, and to attain the broader target of universal health coverage. World Health Organization (WHO) 2004 report on World Health Assembly 57, section 19 resolutions and decisions evidently reports that migration of health workers may result in financial loss and weakens health systems in the countries of its origin. The critical review research provides an in-depth analysis and information on the migration of health workers and the repercussions this

phenomena has on health system at various level i.e. communities, societies and the nation level.[5]

MATERIALS AND METHODS

The critical review process involved the search of following literature databases: PubMed, The Lancet, Google Scholar, Economic and Political Weekly as well as the BioMed Central 'Human Resources for Health' on-line Journal. The list of key words used for search were:"push-pull', 'stay-stick', 'motivation', 'incentive', 'brain drain', 'medical migration', 'health worker migration', 'implication on health system', 'health professional', 'nurses', 'doctors', 'retention', 'policy', 'worker satisfaction' and 'developing countries'. Research studies prior to 2000 were excluded and various government and other authentic reports were also reviewed for analysis purpose. The critical analysis of twenty research articles and five reports on HRH migration from ministry of health, department of family and child welfare, Center for Bureau of Health Intelligence (CBHI), Global Health Workforce Alliance, and WHO were referred from the Indian perspective on the issue.

The methodology adopted in the paper is the critical review to identify, appraise and collate evidence from studies to understand various aspects of migration in emerging economies as well as to describe and evaluate the gaps in the research studies in context of healthcare human resource migration. The critical review used to evaluate the existing evidence and to develop conceptual framework. The process involved the setting of the inclusion and exclusion criteria to select the articles. It included wide range of literature from the world development reports to specific studies oriented on the HRH scenario of the country. The search strategy comprised both form of studies qualitative and quantitative. The study also incorporated the official data set published as report form.

The quality of the research articles selection based on those which are methodologically most sound. The inclusion criteria are:

1) The article states clear objectives relating to the healthcare worker's migration,
2) Migration factors, implications, policy situation or recommendations,
3) Research articles dealing to emerging economies context.

Also selections were based on the weather statement of study aims and the methodology was appropriate. If either of these questions were not satisfied, the study was excluded from the review on the basis that it would not be useful in terms of understanding the study itself or comparing and collating the study within the review as a whole. The other exclusion criteria were the research study was not conducted prior to 2000.

Twenty studies met the inclusion criteria and five major reports were identified specific to migration. They consisted of a mixture of qualitative and quantitative research studies. These are salary and incentives, career development, continuing education and training, hospital infrastructure and resource availability, recognition/appreciation, demand in OECD countries, implications on health system and policy situations in source country. Limitations applied to the critical review were published between 2000 and 2013 and migration of healthcare human resources from developing countries to developed countries (not between two developed countries or two developing countries).

FINDINGS AND DISCUSSIONS

The review of articles gives understanding on the subject of "brain drain" the phenomenon of well-educated professionals permanently migrating from emerging economies to industrialized economies, has been observed among health professionals in India. This migration may be attributed to a number of factors- a colonial mentality, economic need, professional and career development, and the attraction of higher living standards. Common reasons for migration is due to the low and variable wage rates of HRH which do not allow them to earn decent living wages.[1] The country specific data on the migration is not systematically updated in the existing evidences as councils are not updated with live data records of human resources availability within the health sectors. It only quantifies the total number of health human resources registered with

the respective councils. The literature limits to few reports i.e. World Health Organization (WHO) Joint Learning Initiatives and studies which combines census data of OECD and results in the number of foreign born health professional which comprises Indian born HRH too but it is no where accurate to say the exact number of HRH worldwide present from India.

There is a pool of literature explaining the factors of migration but it margins when to analyze the significant implications to healthcare delivery mechanism for the source country. The lack of evidence on consequences on health system and establishing rational and relation among variable like availability, accessibility and quality of services are found a major challenges in the critical analysis. Even though Government initiatives in the public health have recorded some noteworthy success over the time (eradication of polio, guineaworm, decline in leprosy and malaria cases).[6] But the health outcomes are moderate in terms of international standards, India stands 118 among 191 WHO member countries for overall health outcomes.[7] The availability, productivity and performance of HRH in accordance to minimum standard for HRH is also major area of research which under looked by the researchers. The investment in health human capital and its implication to public health should be foremost significance of research studies to develop improved view towards the public health system. The studies related to para- medical professional's migration are equivalent to nil. And the data supporting to the availability and requisition for the health system is mere and unauthentic. The para medical professional are the supporting structure of the health system which has been neglected in all research evidences. The magnitude of existing para medical professionals in the public health and forecast for the future preparedness is most significant feature to deliver quality of health services. There are some themes under all findings can categorically identified-

HRH Movement

Migration phenomena is an older phenomena, it existed even before the independence. And also not to forget to state that it is an existing and evident phenomenon.

There is no specific data with the country which imply the availability and migration of HRH from the country except few research studies based on the OECD country census data. A study that analyses various census data and sample surveys to develop an understanding on the availability of HRH in the health sector. The number of available HRH contradicts with the employed human resource and support the observable fact of migration.[8]

There are mostly three sectors in the skilled migration from India substantiating i.e. 1.) Information Technology, 2.) Health and 3.) Higher Education.[1] The article on the crisis of human resources for health, describe the human resource migration from health sector affecting low and middle income countries and also explain the increasing rates of migration of qualified health professionals to high-income countries.[9] The analysis of the article shows that emerging economies human resources are not at the mercy of industrialized economies market forces. Weis (2007) contributes similar perspective on migration from emerging economies to industrialized economies.[10] A study describes the high end physician migration from India.[11] Another study focuses on various migration pattern of HRH from different settings of training of higher education system in country. It comes to a conclusion that in India migration seems to be substantially higher for graduates from the best medical colleges. The systematic review includes the results of a study at India's premier medical college between 1989 and 2000, shows that 54% of graduates left the country to developed countries.[12]

Determinants of Migration

There are certain push-pull stay- stick factors associated with the HRH migration some are like salary, incentives, job promotions, family welfare and better continuing medical education. Some colonial factors like industrialized economies are having best environment to give services are also determining facts. The training and retaining capacities are inadequate to provide employment to the trained healthcare providers are another major factor of migration. Some studies reflects various issues and reason in the international migration also critically evaluates the policies of the source and destination

countries and the socio-political environment of the countries are the major contributing factor of determining migration scenario. The author clearly states that 40% migration take place from emerging economies to industrialized economies and India to be a potential source of human capital for skill deficit countries by 2020. The determining factors for migration are job opportunities, lucrative wages and better livings and working standards at destination country.[13,1] But some contradiction exist within the country also, Kerala states development applauded with the industrialized economies but some research on migration specifically focused on skilled healthcare professional's movement from Kerala perspectives[14,15] describes phenomena of doctors and nurses migration from the state. The study covers wide range of factors including the policy environment for the migration of HRH. Kerala state evidently shown higher rate of migration of HRH compare to other state which is a contradiction of the situation.

Widening disparity in access to healthcare

The public sector is the main provider of preventive care services but 80% of outpatient visits and 60% of hospital admissions are in the private sector.[12] Most health workers (70%) in India are employed in the private sector. Most allopathic doctors (80%), practitioners of ayurveda, yoga and naturopathy, unani, siddha, and homoeopathy (80%), and dentists (90%) are employed in the private sector.[16] A study on health care and equity in India attempts to explain existing phenomena further, even though there is an improvement in access to health care, inequalities are related to socioeconomic status, geography, and gender, and are compounded by high out-of-pocket expenditures, with more than three-quarters of the increasing financial burden of health care being met by households. It is clearly indicated in the article that government made some structural policy to address the need of the hour but only able to raise the inequalities in the uniquely featured demography.[17] A review critically evaluate the situation by using existing council data, about 27 000 graduate doctors passed every year from Indian medical colleges. But, evidence says more than 75% of Indian doctors are based in cities, whereas about 70% of patients in this country are village-based, which clearly make out the distribution inequality in the health system.[18] A study on distribution, disparity and migration raises several questions that are of interest to the Indian healthcare system and health policy. However India has either a shortage of HRH or a geographically inequitable distribution of HRH in the health system.[8]

HRH and health outcomes

The disease burden and health profile of the country is detroiting and health human resource according to WHO bench mark is still a far milestone for the country. The Global Health Workforce Alliance Strategic Initiative report clearly points importance of investment in human resources for health and its later impact on health outcomes. Government estimate (based on vacancies and sanctioned posts) that 18% of primary health centres are without a doctor, about 38% are without a laboratory technician, and 16% are without a pharmacist,[19] which clearly indicates the public health system is lack with the human resources. It reflects to the outcome of health targets, the tuberculosis burden and leprosy burden are some major challenges with total disease burden on the country. A study The Growth Generates Healthcare Challenges In Booming India, author brings the contradictory analysis of situation by the experts that India's health care sector is both booming and moving quickly to resolve many of the endemic structural problems. The availability pattern of the HRH in different setting of healthcare delivery mechanism also determines service opportunity for various section of the society.[20]

Human resource policy

The policy paralysis specific to development of health system as well as human resource development is widely acknowledged. Policies have driven demand for health workers that has exceeded national supply over at least some period in OECD countries, and policies can intervene to reduce the degree of immigration of health workers from low and middle income countries. To avoid exploitation of the training expenditures of emerging economies, industrialized economies need to bring into balance the demand and numbers of training resources. India's human resource policy suggestions are not sufficient for regulating movement of HRH. The international policy instrument also promotes the

HRH demands of the industrialized economies. A study delves into the issue by offering a descriptive explanation of India's medical education system and the drivers of the emigration phenomenon.[21] The research done explores the economic aspect of migration from source country perspective. Both authors come down squarely on the side of curtailment and concludes by offering policy guidance intended to discourage emigration from both the supply and demand ends of the equation. The researcher draws concerns about the situation of health equity, poverty reduction, and the wise use of public resources, which have led to skepticism about migration.[22] A similar research done through light on the under status of WHO benchmark for HRH in the country and server implication due to low resources for the public sector and have promoted a laissez faire healthcare system in the country. These boomerising of private sector and weakening of public health sector due to the shortage of HRH for the vertical programs of the government. The study identifies migration as one determining factor of the consequences to health system. The policy gaps brought disparity in all areas of the health system whether it widened urban rural or public private disparity in context of HRH availability.[23]

Strategic initiative

The lack of international strategic initiative for the HRH migration is also evident in many studies and also reflects lack of projection by the industrialized economies for training resource development to curb the immigration of HRH from resource constrained emerging economies. The analysis comes to evident that there is lack of harmony between various stakeholders of health system in India which impedes the quality of service delivery and managing migration pace. Research on health professionals' migration in emerging market economies: patterns, causes and possible solutions, describes the patterns of migration of health professionals' in the emerging economies and explores two types of discrepancies in India i.e. between health needs and healthcare workers: (i) within country (rural–urban, public–private or government healthcare sector–private sector) and (ii) across countries (south to north). Article shows the deep policy concern of resource constrained country like India, training health workers to export them overseas and reap the financial benefits of remittances on other hand may weaken the health system of the country.[24] So the policy initiatives to be taken to find the alternative model to deal the HRH challenge. As occupations within this industry tend to be very mobile with health professionals moving overseas to seek better opportunities, emerging economies will be producing HRH for migration. Also it enabled to understand the policy situations of both receiving and source countries. The Global Health Workforce Alliance[25] and WHO Global Code of Practice on the International Recruitment of Health Personnel's[26] are some considerable planning by international bodies on HRH issues of migration.

RECOMMENDATIONS

The paper recommends with the strategic initiative requisition for the HRH training, retaining and recruiting for the health system including the policy recommendations. The country specific human resource policy is vital for the strengthening of the healthcare services. The study gives an insight on emerging concern towards the HRH movement and the consisting consequences by giving rationally incorporating evidences to the public health system of the country. The recommendations denote some initiative to strengthen the health system.

The HRH challenges of availability weaken the universal access to health care in India. It is important to scale up relevant interventions in producing adequate HRH to meet the health standard norms. A strong human resource policy must be developed to cater the challenges of migration. Also policy should have scope of multilateral dialogue among various decision making stake holders of the health system at globally and within national level. The strategic planning initiatives should be taken before hand to deal with the demographic transition, and consideration of disease profile of the country for the estimation of human resource need to meet the health goals.

The mechanism should be placed for training, retaining and regularizing the health human resource is vital for the development of public health system. Similarly United Nation and partner agencies should

support to develop a system of coordination among various industrialized and emerging economies to standardize the migration flow between two countries. The demand and supplying both groups of countries should increase the training capacity of HRH with a qualitative approach by increasing and improving the training institutions.

The HRH strengthening strategy must evolve the identification of stronger roles for the alternative healthcare providers and must recognize the role of community health workers in the achievement of immunization and reducing disease burden. Within the health system a model should be developed to appraise performance of HRH in the system and ensure better healthcare services to the population by client centric approach.

FUTURE RESEARCH CONSIDERATIONS

Although the critical analysis enface the migration implication to the country but lack of research work availability hampers the main objective of the study and limits to developing understanding within the perspective of migration phenomena. The grave implications to the health system should be analyzed by critically viewing in-depth studies which comprises the greater validity of variable related to implications. The present study gives scope for understanding migration impact to the source country's health system by segment analysis of various HRH migration study for a long period of time and comparing outcomes with the health outcomes of the country with the same time frame by analyzing the existing human resource. This approach will enable researcher to develop an understanding whether there were statistically significantly difference impacts before and after over the period as present study is limited with the time frame.

Critically reviewed studies focuses on dimensions like migration data, trend, patterns, push-pull stay-stick factors, remittance, socio-political environment, international and national migration policies etc but somewhere lacks with the alternative job generations (like part time jobs), link between migration and booming private health sectors are few which needed to understand with deep sense dynamic health labor market. Also some research direction should emphasis towards the existing disparity of availability of HRH within the country. The study should focus towards contributing how these disparities could be imparted and bring equity in the healthcare services.

SUMMARY AND CONCLUSION

The research paper results into giving an idea to understand the present scenario of HRH in India. Though the present HRH information system is generalized description of the number of health professionals registered with the respective councils. The research data incorporated in various study limits to the distribution pattern of HRH in the country and support the findings of health ministry that there is lack of HRH to implement the National Rural Health Mission. The availability of HRH in different sectors like public, private and other sector to cater the healthcare needs of the population is not evident in the research studies. The High Level Expert Committee Report of the planning commission depicts that there is more requisition trained health human resources to deal the present health demand of the country. It does not explain the quantification of the extent of the HRH migration, even though it is common among the health professionals. It is important to establish relation among the variable of migration and its consequence to the health system. The research studies rounded around the fact of migration magnitude establishment and determining factors of migration. Research should be taken to understand the relation between the disease burden and human resource availability, quality of service and HRH and best practice models suitable to the country environment for better service provisions are few aspects to be explored. The need for developing greater understanding for the long term consequences of migration on the source country is essential factors to be analyzed. The study limited to the secondary data analysis on HRH migration.

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