

PREVENTING AND REVERSING PAKISTAN'S MEDICAL BRAIN DRAIN THROUGH DIASPORA OPTION AND DIASPORA NETWORK

Fahad Khan Afridi¹, Qadar Bakhsh Baloch², Verdah Qadar Baloch³

¹ Abasyn University Peshawar -Pakistan

² Department of Management Sciences, NUML, Peshawar-Pakistan

³ Rehman Medical College, Hayatabad Peshawar-Pakistan.

Address for correspondence:

Dr. Fahad Khan Afridi

Research Scholar, Abasyn University Peshawar-Pakistan.

E-mail: hhmdpk@yahoo.com

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ABSTRACT

Brain drain is the flow of skilled and qualified man power from a home country to host country leaving the former, socio-economically underdeveloped. The role of Pakistani medical diaspora in improving the health care system and socio-economic development of the country through brain circulation is discussed in this paper. Different secondary sources such as published research studies, government reports, newspapers and published interviews were consulted to gather information. The data collected was analyzed by using documentary and content analysis. Diaspora option can be used as a strategy to reverse and prevent the harmful effects of medical brain drain through brain gain and brain circulation. The government can play its vital role to facilitate the diaspora network between home and host countries. Diaspora networks should be mobilized to transfer knowledge, skills and ideas to their home country. However, diaspora networks are successful when home country is equipped with infrastructure, and with economic and political stability and strategic policies.

Key Words: Medical brain drain, Diaspora option, Diaspora network, Brain circulation

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INTRODUCTION & DISCUSSION

Human capital is of critical importance for a nation's economic development other than technology and investment¹. However, this human capital if flown out in large quantity from a home country to host country leaves the former, socio-economically underdeveloped. Diaspora is the actual spread out of a community as they migrate. This is a physical diaspora. Along with this they take their brain and intellect and use it for the benefit of another country or community and this is an actual brain diaspora which is conventionally called "brain drain". The brain still is active at work but is no longer usable and useful for the community who produced it. The phenomenon of brain drain has serious negative impacts on the economy of a sending country such as loss of skilled human labor that resultantly slower down the economic development of the country². Research studies were conducted to minimize the harmful effects of brain drain by suggesting certain measures or strategies such as taxation imposed by host country on skilled emigrants and imposing restrictions to prevent their movement³. However, such measures have not been proved to be effective due to their limitations. In the beginning of the last decade of twentieth century, scientists and technical migrants from less developed and

developing countries connecting with each other and through their native countries gave birth to the concept of diaspora network⁴. Such diasporas could play their role in reversing and preventing the brain drain by converting it into brain gain through brain circulation. As knowledge and skills were transferred and circulated in two dimensions from host to home and home to host countries, hence, benefitting both.

Pakistan being a developing country having seventh largest diaspora in the world can also be benefited from the fruits of brain circulation of its diaspora especially in field of medical sciences by reversing and preventing the medical brain drain⁵. On average 4000 medical doctors are produced every year and out of these almost 50% migrated to advanced countries of the world⁶⁻⁷. Such exodus of medical practitioners from country, already deficient in health facilities, can further lower down the socio-economic development of the country. Hence, the potential of Pakistani diaspora ought to be utilized at optimum level by motivating and mobilizing them to transfer their knowledge and skills and technology to Pakistan. The research article aims to investigate the role of Pakistani medical diaspora in improving the health care system and socio economic development of the country through brain circulation. The article comprised of three portions, in first part of the study the con-

cept of diaspora network and its evolution is discussed. Second part comprises of work of different researchers for reversing the medical brain drain of Pakistan. While, third portion of the article consists of measures and strategies in the form of recommendation for reversing and preventing Pakistani medical brain drain through brain circulation, using scientific diaspora. Different secondary sources such as published research studies, government reports, newspapers and published interviews were consulted to gather information.

Evolution of diaspora network

In early 1990s, a new concept of diaspora network was emerged through immigrants from less developed and developing countries having a network among them and between their home countries. Through such network diasporas could transfer their ideas, knowledge, skills, technology and investment to their country of origin. It was named by different titles such as intellectual diaspora networks, scientific diaspora, technological and scientific diasporas, scientific, technological and economic diasporas and diaspora knowledge networks. Those studies concluded that diaspora should be connected through technology such as internet, email and web-based community among the members and between their motherlands for knowledge and idea sharing. It was found that transfer of technology and information may bring innovation and technological advancement in the country of origin, however, maintain a transnational network of highly skilled labours⁸. It was also suggested that consistency and effectiveness are also important factors for required output of diasporas⁴. Some research studies suggested that infrastructure in home countries was essential and prerequisite for diaspora contribution in home country as only those sending countries were benefitted from their diasporas having established and congenial policies at their strategic level⁸.

Medical diaspora

In a study on medical diaspora conducted by South African Migration Program concluded that physicians should provide facilities such as medical training, funds and arrangement for short term medical visits and modern technology such as telemedicine for better and effective network with home country. A project was jointly undertaken by International Organization for Migration and African countries such as Ghana, Somalia, Congo and Ethiopia in 2012 with an aim to mobilize African medical diaspora in the Netherlands and United Kingdom. Training and medical assistance to staff in African hospital, provision of internship in the Netherlands were achieved from the project. However, a deteriorated security situation in the home countries was the main challenge to be faced⁹. Indian medical diaspora being the second largest diaspora of the world

has achieved a remarkable success by mobilizing its members inside the home country and establishing a strong network with their home countries to transfer their skills, technology and investment by establishing corporate hospitals in different cities of India and reviving medical tourism¹⁰. However, the role of Ministry of Overseas Indian Affairs can also not be overlooked that facilitated its diaspora by providing infrastructure in home and mapping out concrete policies and strategies for overwhelming participation of its diaspora. The programs and facilities it offers to its overseas Indians are Overseas Citizenship of India Scheme, Scholarship programs for diaspora children, overseas Indian youth club. Besides, in order to motivate its overseas man power several awards such as Pravasi Bharatiya Divas and the Pravasi Bharatiya Samman Award are offered for their contribution in the socio-economic development of the country¹¹.

Brain drain and Pakistan

According to WHO, Pakistan stands at 122nd, lagging behind India and Bangladesh which are having Global Health Ranking of 112th and 88th respectively¹². The doctors per patients ratio is 0.078/ 1000 that is alarming if compare it to China having 1.5/1000¹³. Hence, Pakistan cannot afford the shortage of medical doctors in the form of medical brain drain. However, migration of doctors is rapidly continued as every year 4000 doctors are produced and out of these 50% leave the country⁶⁻⁷. The phenomenon of brain drain of medical doctors in Pakistan was investigated by many researchers¹⁴⁻¹⁶. All those studies identified economic push and pull factors as the reasons for brain drain of doctors. They recommended income and employment opportunities, research facilities and grants, better living conditions, and government role for providing congenial atmosphere for doctors to stay or return back to home countries. Some discussed the role of intellectual Pakistani diaspora network in economic development, however, unable to explain the modalities through which diaspora can transfer knowledge and technology to home country¹⁷.

Brain gain through brain circulation: using medical diaspora network

Pakistan having the world seventh largest diaspora consisting, 4.2 million Pakistanis, residing in different countries of the world and according to Ministry of Overseas Pakistanis it reaches to more than 7 million Pakistanis^{5,18}. These diasporas are interconnected through web sites and web based communities. Different communities and associations of professionals such as physicians, business executives, women enterprises and common overseas Pakistanis are also formed. However, the focus of interest is Pakistani medical diaspora.

Association of Physicians of Pakistani Descent of North America, a leading association of physicians and

medical doctors was formed in 1977 having 17000 Pakistani doctors and health care professionals of USA and Canada¹⁹. It aims to connect its members and sharing information and knowledge among them. Besides, it helps to promote medical education and transfer technology to Pakistan through raising funds in the form of donations. However, it largely focus on the promotion, establishment and capacity building of its members i.e. Pakistani descent medical professional and students.

After analyzing these communities and associations by accessing the contents of their websites, it has been revealed that the aims of these communities were to provide a platform where diasporas' members may connect with each other, share information and knowledge, develop the capacity building of the professionals and to some extent provide services, in their relevant field, to contribute to their motherland. It is a good omen that they focus on the mobilization and inter-connectivity of the members. However, their contributions towards their home country, in true sense, are negligible. As the concepts of diaspora network, diaspora option, and science and technology diaspora are aimed to circulate the brain between the home and host country by sharing knowledge, expertise, transferring skills, investments to home country, however, such essence is missing in the activities of those diasporas. Although, Pakistani medical diasporas have proved to be sincere and committed to help out their country of origin through their activities by harnessing better health care facilities in home country. However, due to lack of effectiveness and consistency of diaspora networks they are not attaining the required results⁴. Above all diaspora networks are successful when home country is equipped with infrastructure, economic and political stability and strategic policies in sending countries⁸. In case of Pakistan, as home country, such prerequisites are lacking. The Ministry of Overseas Pakistanis unveiled its first ever national policy for overseas Pakistanis in 2013 mainly focusing on the rights of its labors abroad, overseas scholarships, and voting rights of overseas¹⁸. Although, beneficial but not sufficient to exploit the capabilities of its diasporas, especially medical diaspora, in terms of knowledge transferring and innovation.

CONCLUSION

Diaspora option can be used as a strategy to reverse and prevent the harmful effects of medical brain drain through brain gain and brain circulation. The government can play its vital role to facilitate the diaspora network between home and host countries.

RECOMMENDATIONS

In the light of above discussion, some suggestions and recommendations to the government and Pakistani diaspora are mentioned. These suggestions can be ad-

opted by the government as policy guidelines regarding exploiting the opportunity of diaspora option.

Pakistani descent physicians should form an organized, well connected, mobilized, technology based medical diaspora with an aim to contribute to their home country in terms of technology transfer such as telemedicine technology for improving health care system in Pakistan.

Such diaspora should keep a close liaison with ministry of overseas Pakistanis for provision of funds for research and development. Besides, they should maintain or re-establish their links with the professionals of their home country for exploiting opportunities not only in improving health care system in home country but also exploring other avenues such as reviving the tourism industry by contributing through their professional expertise, technology and investment. As tourism industry would leads to creation of jobs for medical doctors, hence, it would help in prevention of medical brain drain to some extent.

Pakistani medical diaspora can provide assistance in medical education and promoting research through becoming the member of the medical educational board and X and W category medical research journals.

Government of Pakistan should include the diaspora option in its overseas policy framework. India and China are the successful examples to be followed.

Pakistani descent physicians are the brain and valuable human capital for our country. They not only serve as a source of financial gains in terms of remittances but also participating in country' health care system. So due attention should be given by the government in terms of facilitation by providing required infrastructure and financial support so that they may implement their plans for national health care development.

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CONTRIBUTORS

FKA conceived the idea, drafted and revised the manuscript. QBB critically reviewed the manuscript. VQB helped in literature review. All authors contributed significantly to the submitted manuscript.