Think Locally: Bilateral Agreements to Halt the Expanding Polarization of Health-Care Worker Migration

Introduction

Following the United States, United Kingdom, and other developed countries, Japan has adopted a new policy favoring immigration of certain health-care workers to meet the shortage of supply for such workers in their country. These measures would have a grave impact on the health-care supply in less developed countries, and will drain the limited health-care personnel from those countries which are already suffering from the scarcity of medical resources. Disparity of medical resource among developed and less developed countries is expanding due to these immigration policies.

In May, Japan, which has a long history of keeping minimal immigration, announced a new policy to accept nurses and elderly-care workers from Indonesia as a part of the Economic Partnership Agreement (EPA) to deal with its issues of rapidly aging population and inadequacy of nurses. The importation of health workers would begin as early as July. Similar agreement is also under discussion between Tokyo and Manila. While the Filipino government has been known for its policy to over-produce nurses and other health workers for migration, the number of nurses in Indonesia is hardly adequate. In fact, the *World Health Report 2006* suggested that Indonesia, along with Bangladesh and India, showed the greatest absolute shortage of health workers (Figure 1).[i]

Japan and Indonesia are by no means the only example where an advanced economy is drawing health workers from a country that has already suffered from serious deficiency and are struggling with great disease burden. Many Indian doctors move to North America. Canada, U.K. and Australia draw a substantial number of physicians from South Africa,[ii] which itself imported physicians from its neighboring countries. The magnitude of migration, from the source countries' perspective, is huge. For instance, about one-third of the Nigerian medical graduates move within 10 years upon graduation to North America and U.K.[iii] Ghana also lost as much as double the number of nurses it trained in a year to migration.[iv]

Such phenomenon raises serious issues about the capacity and sustainability of the local health systems in the exporting countries. Human resource for health is often argued as an essential factor to improve, maintain and restore health.[v] Some studies also suggest the density of human resources have a significant impact on the vaccination coverage rate and population health, reflecting in indicators such as maternal mortality, infant mortality and under-five mortality[vi,vii].

Nevertheless, "localization" may be the key. Bilateral agreements between importing and exporting countries which have taken local situations into consideration should be encouraged. Current unilateral immigration policies adopted by certain developed countries, which have aggressively recruited health-care workers from less developed countries, should be abolished.

Immigration policy and brain drain

While the commonly identified "pushing" factors, such as poor working environment and low wage, and "pulling factor", such as wage differentials, are important drivers for emigration[5], immigration policy is another significant factor affecting people's movement. Advanced economies with large number of imported health resources usually have preferential treatment to theses skilled workers in terms of their visa or immigration application. For example, in the United States, while aliens seeking a visa to enter the U.S. for employment purposes are generally excluded,[viii] it has a very favorable attitude toward the international medical graduates (IMG). They are granted permanent residency status under various conditions[ix]. Even after September 11, 2001, Congress still passes HR 2215 and expanded the number of IMG who would be given favorable immigration status (J-1 waivers)[x]. With the authority given by 8 U.S.C. 1182 (a)(5)(A) [xi], the U.S. Secretary of Labor also decided that physical therapists and professional nurses are among the few professions that (i) there are not sufficient U. S. workers who are able, willing, qualified, and available for the occupations; and that (ii) the wages and working conditions of U. S. workers similarly employed will not be adversely affected by the employment, and therefore are permitted to obtain a visa for entrance into the country in order to engage in permanent employment.[xii] As a result, U.S. is the largest country that imports health workers, including those from sub-Sahara Africa.[xiii] One-fourth of the physicians practicing in the U.S are IMG, and 8 % of nurses are also foreign educated.[xiv]

Given the magnitude of the migration of the health professionals and its potentially disastrous impact on the developing countries, few countries have taken measures to slow down the flow. For instance, in 1995, South African made recruitment of doctors from other African Union countries illegal.[xv] U.K., which has imported large number of health workers from previous colonies, also initiated an effort to restrict over-heated brain drain. In 2001, it adopted a Code of Practice that prohibits its National Health Service employers from targeted recruitment of health professionals from developing countries that themselves suffer from shortage of supply, except under special conditions of mutual inter-governmental agreement.[xvi] Yet, such Code did not seem to be very effective except only a brief period of decline in migrating physicians.[xvii] In addition to these passive interventions, some further call for more aggressive measures. For instance, South Africa implored the World Health Assembly in 1996 to take actions to stop the medical migration from poor to rich countries.

Rationale for limitation on migration

Seemingly, policies to impede health professional migration are badly needed. But are they truly warranted? On what basis can we justify such interventions? One line of thought is on the health inequity and human rights. The World Health Organization (WHO) constitution clearly states that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being", and if we accept that shortage of health workers do have an adverse effect on health, particularly for the poor, policies to limit health professional from leaving seem warranted to protect the health of the population in the poor countries. Nevertheless, Article 13 of the Universal

Declaration of Human Rights makes clear that "everyone has the right to freedom of movement" and "everyone has the right to leave any country, including his own."[xviii]. Then, following such argument would lead to an awkward situation where we would need to compare the priority of different rights or decide whether it is acceptable to protect one's right to health at the expense of another's right to migration.

Alternatively, one can also approach such question of labor mobility from a trade perspective. Using the General Agreement on Trade in Services (GATS), movement of health personnel is one of the four modes of trade in health services.[xix] In fact, in most of the policy discussions, migration of the health professionals is assessed under the trade framework as part of the provisions for cross-border labor mobility. Multilateral cooperation on immigration, labor market, and mutual recognition are required in the GATS discussions; in multilateral forums, such as Organization for Economic Cooperation Development and WHO; and regional agreements, such as North American Free Trade Agreement, and the European Union.[19] The bilateral economic agreement between Japan and Indonesia earlier this year is also another example.

Movement of health personnel as trade activities

Trade in health personnel has two forms: temporary and permanent flows. Temporary flows are usually driven by the demand to earn foreign exchange and foster government cooperation. For instance, China and Cuba send health workers to African countries on short-term remunerated contracts.[19] Permanent movement, which is the main concern in this article, is considered to be driven largely by wage differentials and flow from poor to richer countries. Even though as Chanda pointed out that "the net impact of the trade depends on the specifics of a country's national health care system, the regulatory environment, and government policies", [19] there are some general implication of health services in general and specifically health personnel movement that render such activity beneficial. Trade through professional migration on one hand can address shortages of human resources in importing countries, and on the other, help the source countries to create additional resources, upgrade technology, generate employment and remittances, and facilitate skills exchange and transfers. The trade theory further predicts that exporting countries will experience a rise in health services, but the affordability for the higher costs also increases because of the income gains from the exports.[19] But this does not necessarily happen in reality because of the unfavorable distribution against the poor, which Chanda argued as domestic health sector problem instead of issues arising from globalization per se.

There is no doubt that, compared to developed countries in the West, the provision of skilled health professionals can be provided at much lower financial cost in some developing countries. *Prima facie*, this offers a potentially valuable source of foreign exchange earnings to these poorer countries through export. For the developed countries also, the benefit is reasonably clear-cut: in the form of ensuring better access for the patients, or lowering cost, or both.

The neoclassical theory of international trade (e.g. the Hecksher-Ohlin framework) would also suggest that this type of "outsourcing" of health workers provision is a good idea as

it reflects an exploitation of comparative advantage. In line with this reasoning, exports of health personnel would help to expand the developing countries' consumption possibilities frontier beyond what it would have achieved in the absence of such trade. The increased income for exports could, at least potentially, be used to improve access and quality of the health services in the developing countries. In sum, the *formal argument* goes thus: a country that is resource rich in a particular input has a comparative advantage in the production of good or service that uses that input intensively, and thus ought to specialize in the production of good or service, under conditions of free trade to benefit from such an expansion of consumption possibilities. The measure of " resource richness" is the low relative price of medical doctors or nurse in this case. The greater exposure to foreign markets would help expand the provision of health workers, to some extent, just as in car manufacturing, or in the production of toys. There would be win-win situation for all parties concerned.

A modification of Stark's argument that migration promotes human capital acquisition through increased expected returns is also relevant here.[xx] Namely, the potential of providing increased exports of health workers at higher prices would expand individual incentives to acquire human capital in the source country. Similarly, Clemens[xxi] argued that the under-staffing of health section in Africa has nothing to do with migration per se, and the emigration in fact results in a greater production of human resources.

However, the win-win situation does not necessarily emerge under the open trade context. There are several objections that one can reasonably put forth toward the above view:

(1) The relative prices of doctors, nurses, and other health professionals are lower in developing countries, not because people in these areas do not want these services, but because they are unable to pay for them.[xxii] That is, on the contrary, they have a taste for these services, and in fact need them as life savings option. Nevertheless, there is little *effective demand* for these services, and free medical emigration and reduction of human resources for health in this setting will potentially raise the price of health services further, it could actually reduce the access to health care and welfare of the poor.

(2) The health professionals, particularly the physicians, typically come from urban middle class.[xxiii] The remittance generated via heath worker migration, regardless of the exact magnitude, which is largely unknown due to data limitation, would do little help, if any, to the poorest and sickest population.

(3) Emigration of health professionals may still result in a net loss of human capital, rather than an increase. Increased income in the exporting countries is unlikely to be devoted completely toward human capital investment, or even broadly health sector infrastructure. Besides, the increased expected returns from the lucrative migration option might no have a strong enough of impact on human capital acquisition to restore the supply, as Kangasniemi et al showed in the case of physicians.[xxiv]

(4) Skill transfer and technology improvement are also likely to be limited. At least for physicians, it was found most of the migrants never returned.[xxv] Another potential mechanism that the health care quality could be improved at the source is through bilateral agreement that the recipient, typically technologically more advanced, countries send their health professionals regularly to the exporting countries, just as the foreign specialist from Portugal and South Africa are used to staff large hospitals in Mozambique.[19] Yet, such mode of transfer is not particularly plausible and commonly used.

(5) There is also issue with "internal brain drain". Even if the assumption holds true that increase migration opportunity promotes human capital acquisition and "specialize" in the provision of certain types of health personnel, this means that it would draw people from public to private sectors, rural to urban regions, and non-exporting to exporting professions. For instance, Philippines train a lot of nurses and while many migrate, some do stay; however, anecdotal stories suggest that many doctors convert themselves to nurses. This could potentially lead to inefficient skill mix in the health sector. Furthermore, since it is the prospect of working in the advanced economies that incentivizes people, the training of these health personnel would be tailored to the skills required in the exporting countries, not what are appropriate at the needy exporting countries. Because even under open trade, service supply are disproportionally easier traded than the demand. Public goods are not tradable. Private goods for poor people are effectively non-tradable, either because they simply cannot afford it to satisfy their demand in another country. Consequently, the change in skill mix in response to the emigration would compound the unmet demand of the poor in developing countries.

In sum, trade does not necessarily improve the welfare of the exporting developing countries. In short term, the inadequacy of skilled professional along with the economic loss, mainly in the form of human capital investment, generate grave discomfort and impact for the population in the developing countries. At long run, the distorted incentive to produce specific type of health workers might result in an inefficient mix of labor, undermining the sustainable development in health system infrastructure and economy. Even if the average welfare does increase under open trade, attention should still be paid to the worsened situation of the poor.

What should be done?

The trade in health services, specifically the movement of health personnel, doesn't always operate as ideally as we hope, yet it is not our intention to suggest that all trade activities in health should be prohibited. Nor do we think we could or should restrict doctors and nurses from moving. Banning the emigration of the doctors without changing everything else would simply foster a black market, or these professionals could move to other more lucrative occupations.

However, measures still need to be taken to alleviate the adverse impact by the brain drain. In short-term, as a stop-gap measure, bilateral or multilateral agreements should be made not just passively avoid aggressive recruiting from countries already suffer from

serious shortage but to actively help to build up and maintain the health sector infrastructure, including health personnel, equipments, and technology, in the exporting countries. Ideally, monetary compensation from the recipient countries from the rich recipient countries on the subsidies that poor countries devote to the medical education, and perhaps the loss of income indirectly from taxation and personnel inadequacy. Yet, it is not particularly plausible politically for the powerful ones to give away a huge chunk of money unconditionally.

In the long-term, "localization" would be the key. Foreign aid and transfer must be localized into enhance health system capacity. No realization of the health investment can be made sustainable without a concomitant improved underlying health system. And the critical component in the local health system improvement is what Eyal and Hurst advocated as locally relevant medical training.[22] The basic idea of locally relevant medical training is that traditionally physicians are trained around the world according the "best standard of care" which focuses on expensive technology and diagnostics. Nevertheless, a "proper" practice of medicine should take into account the local context. In the poorest regions of the world, emphasis on skills in the teaching hospitals in the U.S. is arguably not serving the best interest of the local population and a cost-ineffective use of the limited resources. Plus, inability to utilize the skills and expensive technology would further increase the health professionals' work dissatisfaction and pushing them toward emigration.

Locally relevant medical training would teach the health professionals how to treat the locally endemic diseases efficiently and cost-effectively in poor settings. So the workers know how to work in a non-ideal condition, for instance, when the supply chain and refrigeration is questionable, what kinds of drugs are safer to prescribe, or what kind of procedures are better for the patients' prognostics if no other physicians are around. This is not only appropriate for the patients clinically, affordable financially, and the locally relevant training would render their skills less transferable to working in the fancy hospitals in the rich countries. Currently, the conventional way of training is becoming as a preparatory education for people to work in the rich countries, then it is unrealistic to expect these health personnel do not leave the ill-equipped facilities in the developing countries.

Conclusion

Movement of health professionals is fundamentally one form of the trade activities. Thus, economic and trade theory are often utilized to understand the impact of such labor migration, and in many cases, are cited to argue for an open trade agreement in health. Nevertheless, as discussed above, whether free migration of health professional could indeed reach an equilibrium where both developed and developing countries enjoy a win-win situation is highly questionable. There are many arguments on the short-term health impact of the brain drain, but what might be of an even greater concern is the "over-specialization" that distorts that skill-mix in the economy and fails the needs of the poor population. How does this manifest itself in the mid- and long-term should be carefully assessed in the future.

Before we have concrete evidence on the long-term impact of an open trade in health, governments should be well advised to be extremely cautious in making any agreements that exacerbate the brain drain in the poor countries. Immigration policies ought not overly favor the health professionals and create an incentive that distorts the labor input in the health sector. As a more sustainable strategy, international communities and the developed countries could work with the local governments to promote locally relevant medical training, which would ultimately contribute to the strengthening of the health systems.

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