EACTS in the future: second strategic conference. The view from the BRICS countries†

Walter J. Gomes*

Federal University of São Paulo, São Paulo, Brazil

* Corresponding author. Rua Borges Lagoa 1080 cj 608, São Paulo, SP 04038-002, Brazil. Tel: +55-11-55726309; fax: +55-11-55726309; e-mail: wjgomes.dcir@epm.br (W.J. Gomes).

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Summary

BRICS is an acronym for Brazil, Russia, India, China and South Africa and has emerged as the symbol of the shift in global economic power, developing at a faster pace than industrialized countries. BRICS accounted for 53% of the entire global GDP growth during the period 2007–2010 and, in the next 40 years, as much as 80% of the world’s economic growth will come from emerging market countries. Despite the fact that infrastructure in BRICS has improved markedly in recent years, these countries have not created a modern, broad healthcare system as encountered in the G7 industrialized countries and extensive regional differences in health expenditure exist between them. Nevertheless, the BRICS countries are quickly taking the lead in encouraging innovation, simplifying devices and processes and applying newer technologies that are more adapted to consumers’ needs and less costly. Cardiovascular surgery in the BRICS countries remains far lower when compared with the G7 countries and the cardiovascular surgical training also varies widely. However, this huge shift in the global economy and the regional discrepancies might represent a unique opportunity for co-operation, interaction and partnership to integrate cardiovascular societies and surgeons all over the globe for the best care of our patients: surely it will contribute to making our world more egalitarian, fairer and better.

Keywords: BRICS · Cardiovascular diseases · Healthcare · Economics · Education

The term BRICS is an acronym for Brazil, Russia, India, China and South Africa and has emerged as the symbol of a shift in global economic power, representing a group of countries that are projected to drive global economic growth and spending power for the foreseeable future.

Whilst the world’s economy and politics have undergone tremendous upheaval in recent times and long-established developed economies are troubled by crises, BRICS nations are developing much faster and making great contributions to the world’s economy. As the new international order is forming, the BRICS countries have become a significant force that will play a larger role in world affairs, and have the potential to evolve into one of the world’s most dominant economies in the next few decades.

With a combined population of almost three billion people—roughly equal to half the world total—and 30% of the world’s land area, it is expected that by 2015 the BRICS gross domestic product (GDP) will reach 22% of global output and build up the largest market consumption and currency reserves in the world [1]. As much as 80% of the world’s economic growth in the next 40 years will come from emerging market countries. BRICS accounted for 53% of the entire global GDP growth of $7250 billion during the period 2007–2010 and, although global economic growth has taken a downturn and affected emerging nations, BRICS economic growth, despite slowing, will continue to expand [2].

China, Brazil, India and Russia are at present ranked, respectively, as the 2nd, 6th, 9th and 11th largest economies in the world. There is also a growing perception that the BRICS nations are becoming increasingly interdependent, as these countries are turning to each other and decreasing their dependence on developed economies [3].

HEALTHCARE IN THE BRICS COUNTRIES

Despite marked improvements in infrastructure in BRICS in recent years, these countries have not created a modern, broad healthcare system as encountered in the G7 industrialized countries. As global integration is occurring at a pace faster than mankind has ever experienced, it is essential that they find common solutions to improving their health systems. Their strategy is to increase cooperation with other countries and organizations; their common interests must be focused on a path to enduring prosperity and stability.

In terms of healthcare, the BRICS nations are not a homogeneous group and extensive regional differences in health expenditure exist between them. As a result, their public healthcare systems are rather different, both when compared with the established rich countries and each other. All five countries have relatively wealthy urban populations that have grown rapidly and the
challenge for these countries is to extend the level of healthcare enjoyed in urban areas to the rest of the population. Many drawbacks tend to linger: not only is the level of provision per head of population generally far below that of developed countries, but quality and training standards of medical staff are usually low. But the challenge faced right now is that of building medical services, to carry forward mechanisms to make their health systems sustainable and to meet the expectations of their populations.

The emerging economies of Brazil, Russia, India, China and South Africa face a common dilemma: how to reduce poverty and social inequality and be more efficient, whilst dealing with the problems of large populations undergoing rapid aging and increasing chronic illnesses, subject to the diseases of both poverty and excess, with obesity and smoking on the rise.

Rheumatic fever (RF) and rheumatic heart disease (RHD) continue to impose a significant burden on the health of lower socioeconomic strata in the BRICS countries. Reliable data on the incidence of RF remain scarce but at least 15.6 million people are estimated to be currently affected by RHD, with one million likely to need surgery in the next 5 to 20 years. The annual incidence of RF in developed countries is now below 1.0 per 100,000 population, starkly contrasting with figures from China with 150 per 100,000 [4]. A recent study on the prevalence of RHD among children in northern India revealed an incidence of 20.4/1000 school children. In Brazil, data from the Ministry of Health estimate the incidence of RF to be around 3% among children and teenagers, accounting for 32% of heart valve operations performed annually in the country [5].

While Brazil has a universal and comprehensive healthcare system, access to such services in India and South Africa is marked by a lack of regulation, while Russia already provides a package of free services to all people. China is taking forward a reform to achieve similar status.

Per capita spending on healthcare and medical equipment in BRICS is a very long way below that in the G7 and this gap is likely to remain for the foreseeable future. Average BRICS expenditure was US$3.1 per person in 2005. There is a wide variation between countries: Brazil’s allocated US$16 per capita, while India spent about US$1. Expenditure in Russia and China is around US$13 and US$2, respectively. In relation to the G7, these levels are miniscule: the USA spent US$276 per capita in 2005, while Italy, the lowest-spending of the G7, spent US$77 [6].

In BRICS countries, total health expenditure—that is, the sum of public and private health expenditure as a percentage of GDP—was well below that of developed nations, according to 2010 data from the World Bank. The extremes varied from 9% in Brazil to 4.1% in India, while corresponding values for the USA and the UK were 17.9% and 9.6%, respectively. (http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS). Although the number of cardiovascular surgeons in BRICS is around one per million, Brazil has an annual training intake of approximately 150, while China trains around 900 specialists each year. According to the World Health Organization, there are around 11 vascular surgeons per million of population in the USA, whereas the corresponding figures for the BRICS countries are 1 in Brazil, 2 in China and 4 in India [4].

Mimicking the situation described for the healthcare system as a whole, cardiovascular surgery figures for the BRICS countries also remain far lower than those for the G7 countries. While these latter countries perform as many as one thousand cardiovascular operations per year per million of population, the figure falls to about 50 in China and India or 350 in Brazil. More accurate statistics are being developed and Brazil has recently begun a National Database for Cardiology and Cardiovascular Surgery, sponsored by the dedicated medical societies in cooperation with the Ministry of Health.

The BRICS countries still have a long way to go in delivering access to cardiovascular surgery to all patients in need, although investments from private and public sectors are on the way to meet the demands. That apart, it is felt that there is a hunger for knowledge in these fast-evolving countries.

Surgical training across BRICS countries also varies widely. In India, training requires 3 years in general surgery and an additional 3 years in cardiovascular surgery. In Brazil, the formal training takes 6 years (2 years in general surgery and 4 more in cardiovascular surgery, thoracic excluded). A newly devised programme abolishes the 2 years dedicated to general surgery and introduces a discretionary extra year on a sub-specialty, as the country is facing a shortage of cardiovascular surgeons to fill the vacant positions. Standardization of training programmes would be valuable and beneficial, facilitating exchange programmes to advance professional knowledge, collaborative research and reallocation of new surgical graduates.

As a take-home message from this presentation: if the world is changing—and faster than we can predict—then extraordinary opportunities for integration lie ahead.

This huge shift in the global economy must not be viewed as a confrontation, but rather a distinctive opportunity for cooperation, interaction and partnership; an opportunity to unite cardiovascular societies and surgeons all over the globe in the interests of the best care of our patients. Bringing together cardiovascular specialists worldwide to share knowledge; uniting expertise and expertise to create exchange programmes for training and education; joint meetings; multipartite trials; developing and refining dedicated journals: all this will surely contribute to make our world more egalitarian, fairer and better.

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REFERENCES