

## Assessment of access to health products, technologies and services among the BRICS through their health indicators and their participation in global health policy



<https://doi.org/10.56238/globalhealthprespsc-067>

### Rosa Leonôra Salerno Soares

PhD – Full Professor at the Department of Clinical Medicine at the Faculty of Medicine of the Federal Fluminense University-UFF-Niterói-Rio de Janeiro-Brazil.

E-mail: rosaleonora@gmail.com

### ABSTRACT

In the WHO Constitution, the preamble states that the health of all peoples is fundamental to the attainment of peace and security, and that the achievement of any state in promoting and protecting health is of value to all. Thus, the global health issue is part of all discussions of global diplomacy in the 21st century. Since 2001, identified as the main countries in their regions, Brazil, Russia, India and China have grown in economic terms in addition to adopting activist foreign policies. Identified as a geopolitical bloc since 2006, the BRICS believe they have the right

to play more relevant roles in the management of the global order in the 21st century. Despite exhibiting many regional differences, the member countries of the BRICS strive to be recognized as members of the same group through some strategies such as participation in international institutions and the effort to create connections between development and foreign policy. Many analysts suggest that the BRICS are more active in global health. Recently, this group of countries increased their cooperation in the field of social development, environmental protection and health, institutionalized regular meetings of their ministers of health, with stated objectives to address emerging health threats, both for their populations and globally. Thus, we consider that the presentation of a comparative panel of health indicators of the countries that make up the BRICS is useful for researchers in the area.

**Keywords:** BRICS, health diplomacy, global health, health indicators.

## 1 INTRODUCTION

The numerous challenges of the twenty-first century seem to require a reassessment of old paradigms and the creation of innovative mechanisms to deal with the world's most complex challenges, from climate change to financial instability, through failed states and nuclear proliferation, problems of the passportless, which cannot be solved at home, require new forms of cooperation. Classified as a difficult undertaking, managing this geopolitical transition is the biggest challenge for global governance. 1

Since 2001, Brazil, Russia, India and China have been growing in economic terms (China has an economy that is equivalent to 80% of the American economy), as well as adopting activist foreign policies. Thus, they believe they have the right to play more important roles in the management of the global order in the twenty-first century. Although the acronym BRIC (Brazil, Russia, India and China) was first coined in 2001 by an economist at the investment bank Goldman Sachs, these countries



identified themselves as a geopolitical bloc in 2006. They held their first meeting in 2009, repeated annually since then, in 2010, BRIC became BRICS when South Africa was invited to participate. 1.2

Despite exhibiting many regional differences, BRICS member countries strive to be recognized as members of the same group, through some strategies such as participation in international institutions and the effort to create connections between development and foreign policy.

Although some authors question the narrative that the emerging powers alter this pre-established order since fundamental differences such as nuclear regime, financial terms, role in global trade, role in peace operations, force us to remember the limitations of the concept of emerging powers. Others seem to agree on the fact that the rise of emerging countries is irreversibly changing the international system, creating a true and inexorable trend toward multipolar age. 2.3 However, in the face of global challenges it will become increasingly important to investigate the ideas and preferences of emerging powers. 1 One such effort lies in increasing influence in various areas such as global health, via its domestic health and international assistance programs, and its activism in international for a.4

In order to assess the prominence of the BRICS in the global health arena, we justify the preparation of this work that includes a diagnosis of the health area and its progress in these countries, focused through the description of their health indicators and their advances in the influence of the BRICS in global health diplomacy.

## **2 REGIONAL HEALTH ACTIONS OF THE BRICS COMPONENT COUNTRIES THROUGH THEIR ECONOMIC INDICATORS**

The BRICS have historical differences, different political structures, vary in population size, and exhibit variable progress in economic growth and social development. However, although politically, culturally and demographically diverse, these countries share specific health challenges: large populations (within the regional and global perspective), high incidence of infectious diseases, including HIV, and chronic diseases that constitute a high financial burden. From the individual nuances in the challenges in the health area, the BRICS behave as a group, in the construction of a viable system of Universal Health Care (UHC). 5,6 In this context of contrasts, the ongoing construction of the UHC offers a current comparative experimental model of a set of actions, examples of ambitious middle-income countries, trying to make their mark on the global scene. From here we will describe the socio-demographic and health indicators of each member country of the BRICS group, offering with this data, a comparison and convergence panel for readers. It is also worth remembering that health indicators are present in five items of the eight Millennium Development Goals. They are: 1-Eradication of hunger and extreme poverty; 2- Achieve primary education universally; 3- promote gender equality and increase women's power; 4- reduce infant mortality; 5- improve maternal health; 6- Fight HIV/AIDS infection, malaria, and other diseases; 7 - ensure environmental sustainability; 8-



Develop global development partnerships. This fact adds to the importance and contribution of the study of the models under construction of UHC in global governance processes. 6,7,8

## 2.1 BRAZIL

Brazil has a total population of 198,700 million, with 8,515,767,049 surface area in square kilometers, a population density of 23 inhabitants per square kilometer with 85% of the total population living in urban areas. It is a federal republic with 26 states, a federal district and 5564 municipalities. The current Brazilian constitution established that health was a universal right of all citizens, which led to the unified health system (SUS), financed mainly by the federal government and by the states and municipalities, through taxes and social contributions. Health services are provided by public and private providers. The private sector is dominated by a growing health insurance market, although coverage is uneven and higher in wealthier areas, covering an estimated 25% of the population (48 million people). In 2010, the Brazilian private health market was estimated at about 36 billion dollars, slightly lower than the 38 billion by public providers. Access to the health system has increased in recent years, with the introduction of the Family Health Program (PSF), which, however, has expanded substantially in the less wealthy regions of the country and does not offer easy access to secondary and tertiary health sectors. The great benefit of the FHP is well defined in primary care and prenatal programs, in popular pharmacies and in the national immunization program, in addition to the national transplant program. Individual payment (by the user himself) in the purchase of medicines and use of procedures varies between income groups. The most disadvantaged users are those from the lower middle class, who cannot afford health insurance and spend much more out-of-pocket expenses for diagnostic procedures. The private sectors are more widely used at the expense of the public sector, and evidence suggests that the size of the private sector creates unfair competition, which contributes to inequality, inefficiency and low effectiveness. Evidence also suggests that the Ministry of Health is working to correct distributive health inequalities, both of doctors and infrastructure, but faces strong opposition from medical associations. This opposition is often related to the low remuneration of the doctor and also appreciation of his career. In addition, the redistribution of these professionals to some geographic areas of the country demands complementary actions related to socio-economic, infrastructure and security development. The main challenges of Brazil to obtain universal health coverage are associated with its rapid demographic and social transition, with the increase of the elderly population and consequently of chronic diseases. Private interest groups continue to influence government decisions, and tax subsidies for private health care contribute to an expanding private sector. The government must respond to these challenges through firmer commitments to building a larger and more effective public health sector. (5.9)



## 2.3 RUSSIA/RUSSIAN FEDERATION

Russia has a total population of 143.5 million, with a surface area of 17,075,400 square kilometers, and a population density of nine inhabitants per square kilometer with 75% of the total population living in urban areas. It is a presidential federal republic with 83 regions. Although the Soviet Constitution was the first in the world to guarantee the right to UHC, social status, working conditions and geographical residence for all its health systems deteriorated after the collapse of the Soviet Union, despite showing improvements in recent years. The public health sector is dominant. Services covered by public funds include inpatient, outpatient care, urgent care and supplies for special groups of the population and regional budgets cover the unemployed population. Starting in 1993, employers began to contribute to mandatory health insurance for their employees at a rate of 5.1% (2011). The shortage of funding after the collapse of the Soviet Union was partially offset by increased private spending. Public facilities were allowed to charge for free complementary health services. Private consumption amounted to 40% of total expenditure in 2011, with 88% of private health consumption. Recent government policies are centered on improving and equalizing access to quality care. A national health project (2006-2013) and several regional programs focused on equalizing access, consolidating administration and increasing contributions. This reform is removing the removal of barriers for private health care providers.

Russia's challenges in achieving universal health coverage are to decrease high mortality, with the government aiming to increase life expectancy to 75 years by 2025. For this Russia needs to modernize its health system, offer effective care, but also reinvigorate its efforts in health promotion, and more homogeneous access in the various geographical regions. These efforts will require increases in resources, which do not seem to be being visualized in the fraction of GDP used for health in recent years. In addition, combining guarantees of the provision of free health care with the reality of private financing would be an additional challenge. (5.9)

## 2.4 INDIA

India has a total population of 1,236.7 billion, with surface area 3,287,263 in square kilometers, a population density of 416 inhabitants per square kilometer, with 32% of the total population living in urban area. It is a federal republic with 28 states and seven territorial unions. Public financing of health is only 1.04% of GDP and the user's own out-of-pocket spending is very high. In 2010, 60 million inhabitants live below the poverty line. India's mixed health system has seen a progressive decline in public health services with a dominant growth of unregulated private health plans. The National Rural Health Mission (NHRM) has been improving maternal and child health, but does not provide primary and secondary health care. Various government initiatives have made efforts to improve primary care, and even those of high complexity, still far short of the needs of the population. In 2010, a planning



mission from India set a target of an increase in public health funding to 2.5% of GDP by 2017, as well as recommending investments for health workers, creation of effective public health sector and health management frameworks, as well as access to essential medicines, participation. This development plan proposes a near doubling in public funding and adds to the NHRM an urban component. The main challenges in achieving an effective UHC are associated with not only technical but also political issues. The public sector is overly centralized, rigid, and poorly managed, and because the private sector serves the needs of much of the population, it is more regulated and is made up of both formal and informal providers. In addition, shortages of qualified personnel, paramedics, medical supplies and equipment seriously hamper India's efforts to enable universal health care. (5.9)

## 2.5 CHINA

China has a total population of 1,350.7 billion, with 9,669,512 surface area in square kilometers, with a population density of 145 inhabitants per square kilometer with 52% of the total population living in urban areas. They are a republic with 23 provinces, five autonomous regions, and four municipalities. The country is experiencing a huge economic, social, environmental and emergency and disease transformation. The population is demanding an increase in health services and a reduction in personal spending on their health care. The epidemic of respiratory distress syndrome (SARS) in 2003 served as a catalyst for this process of governmental health care. Three systems NRCMS (New Rural Cooperative Medicine Scheme), URBHI (Basic Health Insurance for Urban Residents) and MFA (Health Care Financial System - for Poorer Citizens), complement each other and have expanded the scope of health service benefits. However, these efforts need to be standardized and a better health care reimbursement plan added. Its biggest challenges to access to UHC, in addition to the enormous political transition at the regional and national level, include the aging of the population and the increasing prevalence of chronic diseases in these populations. Prevention actions are still very inefficient and access to health services varies from region to region. Actions to control health costs are urgently needed, so as not to jeopardize a universal access program. (5.9)

## 2.6 SOUTH AFRICA

South Africa has a total population of 52.3 million, with 1,221,037 surface area in square kilometres, with a population density of 43 inhabitants per square kilometre with 62% of the total population living in urban areas. It is a quasifederal republic with nine provinces.

Because of legal apartheid, considerable disparity in health indices between races remains. For example, life expectancy at birth in 2004 was 49 years, while that of whites was 64 years, and there were inequalities between geographic areas. Despite the constitutional obligation to access health rights, the system remains deeply divided with the wealthiest population with private health coverage



and the rest more dependent on inadequate resources from public sector services. The health system falls far short of what is needed for equity in care including many barriers, especially for the poor population. In addition to the few social and economic benefits available to this population, it is also a victim of the explosion of diseases such as AIDS, in addition to the shortage of health professionals among sectors of geographical areas. There is no mandatory upfront payment, little funding or tax-based, which accounts for just over 40% of total funding and large disparities in spending. The government is committed to a pathway process to UHC over a 15-year period, with three five-year phases. According to the plan, an initial phase will create efficient conditions for the equitable provision of high-quality public services by going towards improving infrastructure deficiencies, enabling essential medicines, with a particular focus on primary care, including the presence of health agents and nurses for this population, as well as the construction of hospitals and nuclei of district authorities. At a later stage, the commitment will be to establish the National Health Insurance Fund with joint action of public and private providers. The challenges are numerous, from the resistance of private providers to ongoing government plans, to the difficulty of obtaining human resources with adequate training. (5.9)

In summary, the challenge of the BRICS component countries is to a greater or lesser degree for each of the following:

- 1- Increase in insufficient public spending; 2- Administer the public and private mixed health systems; 3- guarantee of equity; 4- the demands for more human resources; 5- Change Management Demographics and disease charges; 6-and address the social determinants of health. The strongly contested political nature of health reform is also evident in each country.
- 2- Each of the BRICS has some form of national commitment to ensuring health and is engaged in driving the necessary reforms. However, everyone has some way to go. While the formation of the BRICS was initially based on macroeconomic interests, these countries exhibit the potential to exert regional and global influence and become important leaders in the realm of social policies, using their internal learning in the construction of a universal health care system. (5,8) The attached table, based on data from the World Bank, summarises the most relevant data for the evaluation and progress of the indicators. (9)

### **3 FOREIGN HEALTH POLICY OF CHINA, BRAZIL AND INDIA, AND ITS IMPACT ON GLOBAL GOVERNANCE**

The relationship between health and foreign policy is complex. A large number of domestic ministers and agencies with potentially competing agendas compete to be heard in international



negotiations. Traditionally, foreign policy has approached health issues historically from two prominent patterns. "The first of these is through specific threats to health such as 'cross-border' cooperation to control the spread of communicable diseases that generate international problems. The second approach uses cooperation, offering health care to increase the influence of the state or ensure better relations with other states. (6.8)

Many authors have tried to introduce frameworks for analysis in this area, particularly when considering the themes of global health governance. Stuckler and McKee 6 created five metaphors as motivation for global actions in health: global health as foreign policy, as security, as charity, as investment and as public health. Lee identified four main discourses in global health governance: biomedicine, economics, human rights and security by arguing that neoliberalism is also important transcending the other four. 6,8 In a more recent analysis Kickbusch 8 outlined the central foreign policy objectives as the realization of security, the creation of economic wealth, support for the development of low-income countries, and the protection of human dignity. The author identifies three global agendas that link health to foreign policy. Is it security, covering the fear of global pandemics, bioterrorism, humanitarian conflicts and natural disasters, economic, covering the impact of health on development, the impact of outbreaks like SARS or Ebola? In the global markets and the global market in health goods and services. And social justice seeing health as a social and human right value, linked to "The United Nations Millennium Development Goals", access to medicines and primary health care and calls in high-income countries to invest in global health initiatives. Similarly, it has been examined whether these discussions of global health security are really about global health, or preferably about national security fears, particularly of industrialized countries. 10th

However, whatever classification is used, they all agree that there are different reasons for engaging in global health activities with health and foreign policy coexisting to different extents.

During the twentieth century, the United States played the catalytic role of global health actions through its foreign policy. Since its economic crisis, this role has weakened and the global system is looking for growing powers that have the means or the will to lead in global health matters. Could emerging powers like Brazil, China, India, Russia or South Africa, do it?2, 6.8

Many analysts want the BRICS to be more active on issues involving global health, although the level and form of this partnership is unclear. At what level will they align their foreign health policy? What alliances are they looking for? Will they set regional agendas different from current global health priorities?8

What has been seen so far are the movements towards increased cooperation in the field of social development, environmental protection in health, as well as the institutionalization of regular meetings of the ministers of health of emerging countries, with objectives addressing all emerging health threats at the global level. 7, 8.10



In September 2006, SR Ministers from seven countries (Brazil, France, Indonesia, Norway, Senegal, South Africa and Thailand) participated in a meeting that explored how international policy could contribute to the fight on important health issues and how the health dimension could benefit foreign policy. This meeting gave rise to the idea of the Global Health in Foreign Policy Initiative (FPGHI), resulting in 2007 in the Oslo Declaration that was classified as an icon of the importance of the study of health as a foreign policy issue, offering a stimulus for the creation of an emerging concept of "global health diplomacy".<sup>7</sup> This concept provides for a set of relationships, according to which health policy is used to achieve foreign policy objectives. This coalition, with regard specifically to the BRICS, is manifested by joint declarations such as the one made before the "63rd World Health Assembly 2010", and in formal structures, with meetings with heads of state and ministers of health (BRICS Health Ministers 2011; Xinhua 2011; BRICS information Centre 2013.<sup>4,8</sup> An example for the systematic understanding of the links between foreign policy motivations and BRICS engagement would be in the specific area of access to medicines and in actions towards achieving universal health coverage, in addition to including in the domestic agenda economic growth, trade, foreign investment, the fight against poverty and the creation of social protection. These last agenda items are considered of great importance, since for the BRICS there is no simple correlation between health and wealth. The rapid growth of their economies has led to major problems, such as rapid urbanization, high rates of urban poverty, air pollution, inclusion of new habits and lifestyles, in addition to higher life expectancy at birth and the consequent increase in the elderly population and decrease in the fertility rate. Political solutions and huge investments seem to be needed at both the national and global levels to overcome these challenges. By 2035, 35% of the world's population will live in China or India, which leads the World Health Organization to conclude that through domestic actions on issues such as universal health coverage, the BRICS will be able to effectively affect the global health agenda. These movements could offer a means to achieve better health conditions for all, improve international relations, and promote health as a human right and a global public good.<sup>4,8,10</sup>

However, from the evaluation of the health indicators of each country individually, we observe that for each of them it has a more or less long path, with numerous challenges to follow. From an individual point of view, the countries that make up the BRICS present specific difficulties in conducting this process.

The social and political environment, as in the case of women in China and India, the high prevalence of alcohol abuse among middle-aged men and women in the Russian Federation, and high prevalence of HIV infection in South Africa interfere with mortality rates. The Russian Federation has the highest average income, but is among the worst in health, and has evolved little in the last 20 years. India has the lowest average income, but has managed to supplant South Africa in terms of relative health performance inequality. Brazil has a similar average income to South Africa most exhibited





improvements in health performance among all age groups. This high prevalence in South Africa has been attributed to HIV epidemic infection, continued rural poverty, and inefficient deployments of high-impact interventions. While China has half the average income of Russia, it has surpassed Russia. Only the elderly remain in inequality during all these years in China. In terms of comparative performance, Brazil has the second performance in health after China, from its economic reforms and demographic transition in the mid-80s, perhaps due to the implementation of the integrated health system and family health programs. Although these initiatives do not fail to present their setbacks and shortcomings, they have contributed to substantial improvements in health performance and health equity in Brazil. In positive terms, Russia has embarked on important actions in its commitment to combat non-communicable diseases, and China has a short-term goal of increasing the value of its health investment to \$1.31 trillion, followed in this effort by South Africa, which also announced in 2014 a substantial increase in its health spending. India launched the world's largest food subsidy plan in 2013 worth \$22 billion a year. These investments clearly highlight the possibility of a positive impact on the post-2015 global health agenda, which enables the use of global health as a "Soft Power" in the pursuit of the objectives in the international policy of each BRICS component country. 6,8,10

In terms of geopolitical position, the BRICS align themselves with the countries of the developed world as partners and not as donors, adhering to the principle of non-interference, establishing regional and global networks through financial aid, but mainly in the exchange and cooperation in the form of technological resources and knowledge transfer. Although in economic terms, sustaining health prominently in foreign policy is becoming more difficult because the international economic context and domestic fiscal crises adversely affect governments, societies, international organizations and non-state actors. Adding to this, it is known that health has been neglected in foreign policy and diplomatic practice although global health is an urgent foreign policy issue of our time. Some authors suggest that diplomats need to acquire more specific knowledge in this area by increasing the level of trust needed between established and emerging powers for diffuse reciprocity to work sufficiently. 4.8

In summary, the academic analysis of the BRICS (more than the BRICS countries individually) shows that it has increased its influence in the last five years, but it remains very little understood. In a recent Hammer 2 review they did not find much evidence that BRICS influence global health, although they are more active and vocal, leading movements such as universal health coverage (UHC) or in the production of generics. However, the challenge would be to harness that momentum and convert political will into action. This momentum, overcoming the multiple obstacles, could become fundamental actions of the BRICS in global health diplomacy by defining priorities for an integrated post-2015 agenda privileging global governance on issues that revolve around the health sector, in particular trade, intellectual property, climate change and food and water security. 4,6,8,10



## REFERENCES

- 1- Stuenkel O. Apresentacao. Potencias emergentes e desafios globais. Cadernos Konrad Adenauer: Ano XIII/2; 7-11. ed Konrad Adenauer Stiftung. 2012.
- 2- Harmer A, Xiao Y, Missoni E, Tediosi F. 'BRICS without straw?' A systematic literature review of newly emerging economies' influence in global health. Globalization and Health: 9:15.2013.
- 3- Mujica OM, Vazquez E, Duarte EC, Escalante JJC, Molina J & Silva Junior JB. Socioeconomic inequalities and mortality trends in BRICS 1990-2010.
- 4- Fidler DP. Assessing the Foreign Policy and Global Health Initiative: The Meaning of the Oslo Process. Centre on Global Healthy Security. June 2011/GH BP 2011/01.
- 5- Marten R, McIntyre D, Travassos C, Shishkin S, Longde W, Reddy S, Vega J. An assessment of progress towards universal health coverage in Brazil, Russia, India, China, and South Africa (BRICS). April 30, 2014 [http://dx.doi.org/10.1016/S0140-6736\(14\)60075-1](http://dx.doi.org/10.1016/S0140-6736(14)60075-1).
- 6- Watt NF, Gomes JG, McKee M. Global health in foreign policy - and foreign policy in health? Evidence from the BRICS. Health Policy and Planning; 29:763-773, 2014.
- 7- Amorim C et al. Oslo Ministerial Declaration global health: a pressing foreign policy issue of our time. Lancet. 369:1373-78, 2007
- 8- Kickbusch I. BRICS' contributions to the global health agenda. Bull World Health Organ; 92:463-464, 2014.
- 9- World Development Indicators Database. Washington: The World Bank. 2014.
- 10- Rushton S. Global health Security: security from whom? Security from what?. Political Studies; 59:779-96, 2011.



## ANNEXES

Table I-Comparison and progress of the \* BRICS Socioeconomic and Health Indicators\*\*

1990 and 2010

	<b>Brazil</b>	<b>Russia</b>	<b>India</b>	<b>China</b>	<b>South Africa</b>
<b>Expectation of life at birth</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>
	66,7	67,6	58,7	69,5	61,8
	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>
	73,2	67,6	65,7	74,9	55,2
<b>Mortality maternal (100000 born alive)</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>
	120,0	74	600	120	250
	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>
	56	34			
			200	37	300
<b>Rate of mortality below of the 5 years (by 1000 born alive)</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>
	58,8	27,3	114,2	48,9	62,3
	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>
	16,8	12,5	63,4	15,9	52,6
<b>Prevalencia do HIV in adults between 15-49 years(%,year) (2011)</b>					
	0,3%	0,8-1,4%	0,3%	<0,1 %	17,3%
<b>Density of physicians (per 1000 individuals./year)</b>					
	1,76(2009)	4,3(2006)	0,65(2009)	1,46(2010)	0,76(2011)
<b>Probability of death between 30-70 years of chronic diseases (2008)</b>	20%	32%	27%	21%	27%
<b>Water and Sanitation Prevalence of open defecation</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>
	16,7	1,0	74,5	7,1	13,2
	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>
	4,0	1,0	50,8	0,8	7,0
<b>Population Rural (% total population)</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>	<b>1990</b>
	26,1	26,6	74,5	73,6	48
	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>	<b>2010</b>
	15,7	26,6	69,1	50,8	38,5
<b>Health Expenditures (% of total GDP) 2010</b>	<b>9,0</b>	<b>5,1</b>	<b>4,1</b>	<b>5,1</b>	<b>8,9</b>