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Brazil's, India's and China's South-South Cooperation in Health

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Abstract

Emerging economies play an increasingly important role in the international development cooperation field (IDC). Countries like Brazil, India and China have expanded their South-South cooperation (SSC) initiatives claiming a particular type of expertise, in which similar development experiences authorise the promotion of common policy solutions to other developing countries, particularly in Africa. In the health sector, 'Southern experts' who have previously participated in the design and implementation of health policies and practices in their home countries, are now leading implementation of SSC projects abroad. This working paper examines which type of health expertise is mobilized in Brazil's, India's and China's SSC with Africa. The first section discusses the claims of distinctiveness of the so-called 'Southern expert' on the basis of not being an international development expert from the North; and applies these claims to domestic health experts. The second part provides a snapshot of (1) the national health experiences and medical education of Brazil, India and China; and (2) their respective SSC health initiatives in Africa. Through a qualitative document analysis of existent literature and policy documents, the paper preliminarily underpins the health frameworks Brazil, India and China, respectively, promote at the domestic and international fronts.

Keywords: international development cooperation; South-South cooperation; Southern expertise; health experts; Brazil; India; China

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1 Introduction

The field of international development cooperation (IDC) is in a state of flux. It has experienced a tremendous input of new funding channels, modalities and models from a wide gamut of actors, which allegedly operate by different rules than those established within the Organization for Economic Cooperation and Development (OECD) and its Development Assistance Committee (DAC). The literature has interpreted the nature of the transformation either negatively pointing to aid ineffectiveness and its existential crisis (Faust and Messner 2007; Renzio et al. 2005; Davies 2011) or positively commenting on the necessary 'creative destruction' of the old aid regime (Kharas and Rogerson 2012). In both accounts, Southern providers legitimise their presence in the field by challenging traditional donor practices. Thus, after 60 years of DAC representing development assistance's hegemonic node, these actors unsettle long-standing axes of power, precisely because they upset the normative hierarchy between donor and recipient (Mawdsley 2015). IDC became a "battlefield" (Bracho 2015; Esteves and Assunção 2014) in which the former composition of actors, positions and practices within the field are being questioned, mostly in relation to the central tenant of Official Development Assistance (ODA) and the donor and recipient positions. The field's boundaries are unstable and power struggles over legitimacy and authority to redefine these boundaries are the order of the day.

Against this background this paper argues that the Southern expertise legitimizes itself as an authoritative voice for development policy-making and policy transfer. Under the heading of South-South cooperation (SSC) countries such as Brazil, India and China portray themselves as promoting 'alternative' development partnerships based on horizontal relationships (see footnote 1 below). Those horizontal partnerships stand in opposition to the vertical donor-recipient relations, which from a Southern perspective reinforce the asymmetries between the developed and developing world. SSC differential status is sustained with the premise that these actors share common development problems that they have either successfully overcome or are still facing. In both cases, Southern providers legitimate their actions in the

IDC field because their domestic experiences can inform public policy models and ideas. Ultimately, these policies are pertinent in a developing country's context and show the potential to be transferred, imitated and/or serve as source of inspiration to other countries in the South.

This working paper addresses how health practitioners or specialised institutions in emerging countries, namely Brazil, India and China, assist in the development of skills and capacity in other developing countries through technical cooperation initiatives. The structure of the paper unfolds in three parts. First, it provides an overview of the perspectives on Southern providers' entrance into the IDC field presenting the main assumptions under which the Southern expert constructs itself. Secondly, this paper reviews how emerging countries' engagement in the health arena is assessed, particularly on how South-South exchange in health is seen to contribute in health development. It roughly maps and summarises the history of Brazil's, India's and China's health systems and policies, and their SSC initiatives in Africa, in order to identify which kind of expertise is mobilized in this context. Third, the paper highlights some implications of the initial findings placing emphasis on the health experts and their frameworks for health issues and solutions for the developing world.

2 Southern Providers in the International Development Cooperation Field: a Distinct Type of Expertise?

SSC has emerged as a field of study in which Southern providers' protagonist role altered the organization and methods of development cooperation in general, and of the DAC donors in particular. Most analysis focuses on Southern providers' disrupting nature on traditional aid relations and governance structures (e.g. Arshad 2011; RoA Report 2010; Davies 2008)[1].

[1] For an overall literature review on emerging economies and international development see: Younis et al. (2013) 'Rising Powers in International Development: An Annotated Bibliography'; Mawdsley (2012) 'From Recipients to Donors: Emerging Powers and the Changing Development Landscape' and (2011) 'The changing geographies of

Form this macro-level perspective SSC is challenging the current aid architecture structured around the donor-recipient dyad. Southern providers represent a "hybrid" category of actors, offering development cooperation but in many cases still relying on international aid themselves. According to Bracho (2015), the Southern provider is an actor sui generis, which disrupts the logic of the development cooperation agenda, traditionally based on a clear division between developed and developing, the former entailing donor and the latter entailing recipient countries. Subscribing to this argument, Davies (2011, 2) acknowledges that with recent transformations the IDC's previous categorizations, the notion of developed and developing countries have lost their interchangeable character and applicability.

Simultaneously and equally important, criticism has been espoused with regards to discrepancies in SSC horizontal partnership discourse and actual practices on the ground, or even, in as much these practices are de facto substantially different from Northern donors (e.g. Quadir 2013; Kragelund 2011; Paulo and Reisen 2010; UNDP 2010; Six 2009; Manning 2006). The allegedly differentiated nature of SSC is questioned in this context and highlighted the need for extensive fieldwork in order to acquire an accurate picture of the agents and practices at the implementing end of cooperation projects. From this micro perspective it is important to fill the "knowledge gap" with regards to tangible evidence on the importance and the characteristics of SSC providers (De Bruyn 2013b; Besharati 2013) and their distinctive features in relation to Northern donors, as well as, amongst themselves.

In sum, SSC literature has focused on the common theme of explaining why Southern providers are "different" from traditional DAC donors and in which ways they might prove more effective in development cooperation (or not). The conclusions and arguments show a rather ambiguous picture. On the one hand, the engagement of Southern providers has been

foreign aid and development cooperation'; Chaturvedi, Fues and Sidiropoulos (2012) 'Development Cooperation and Emerging Powers: New Partners or Old Patterns'; Walz and Ramachandran (2011) 'Brave New World: A Literature Review of Emerging Donors and the Changing Nature of Foreign Assistance'; King (ed.) 'A Brave New World of "Emerging", "Non-DAC" Donors and Their Differences from "Traditional" Donors' (2010); Rowlands (2008) 'Emerging Donors in International Development Assistance: A Synthesis Report'.

described as something positive where SSC providers' role is to solve past failures in aid as Eyben and Savage (2012) have critically pointed out. On the other hand, much has been said on the problem of linking commercial and investment interests with SSC, particularly in the African context. The new era of intense BRICS-Africa relations has become a pun for the "new scramble for Africa" in a critical view, referring to the "neo-colonial" or "neo-imperialist" practices driving those actors. The choice of partner countries in development cooperation is questioned for its demand-driven character – one of the SSC principles for action – because it reflects Southern provider's own strategies in the search for natural resources, as well as, in establishing new markets and internationalising their national companies. In this context, the motivations driving SSC are interrogated and the rhetoric of Southern solidarity and practices of horizontal partnership is problematised.

SSC in the area of health has been less explored and the interest in this sector is relatively recent (De Bruyn 2013a, 8). Two studies focussed on the link between domestic health and international presence in the health arena, also considering SSC in health (GHSi 2012; and Bliss et al. 2010); and De Bruyn (2013) conducted research on the BICS (excluding Russia) and South-South cooperation in health, while taking Mozambique as case study. In fact, health has not been acknowledged as strategic sector because non-DAC donors invest largely in 'hard' sectors such as infrastructure. Emphasis laid on describing general cooperation policies [of the BRICS as group or of the individual countries] and mostly focusing on individual cases. However, social sector policies are important because they legitimize sectorial professionals, or civil servants, from the South as an authoritative voice in the international development field. This means that the Southern expertise is built on the premise that the domestic experience in taking part in the development of their countries' respective (health) sectors can be shared with other developing countries. The premise unfolds as such: in the first instance, the domestic policy experiments provide an inspiration, either positive or negative in terms of offering examples and a roadmap to be followed (or not) by other developing countries. And, secondly, these policy models have the potential to be "transferred" to a partner country through SSC initiatives.

The opposition between donor and SSC provider is, in part, built upon the perception that within initiatives between two (or more) developing countries – the horizontal development partnerships – there is no development expert, but a Southern expertise. The specialists from the South do not participate in a unified epistemic community, such as the international donor community (Mawdsley 2012). They built their expertise on the premise of following different practices precisely because of their distinct trajectory when compared to the one of Northern development experts. Furthermore, their experience is accentuated in the position of receiving aid. As a result, the Southern expertise constructs itself upon two critical elements for SSC: (1) the opposition with the Northern expertise; and (2) sharing the conditions of a developing country, which enables the establishment of horizontal relations between specialists and solutions from the South for the South.

The domestic experiences Southern providers have had in the development of their policies enact a particular kind of expertise. This expertise encompasses the domestic policy strategies and tools in the condition of a "developing country", and the promotion of particular concepts and notions [of health and development] at the international arena. In relation to those elements that the Southern expertise is seen as capable of tackling a developing country's specific – albeit "similar"– [health and development] problem. The most visible difference between North-South and South-South policy transfer is that the agents implementing SSC projects and programmes are not part of a bilateral development agency such as are Northern development experts, but they actively participated in designing and implementing policies in their respective countries. It means that the Southern expertise is built on the idea of a 'practical' knowledge or experiential knowledge acquired through experience[2]. In this context, that the expertise from the South is based on an "own" body of knowledge, which seems to make "SSC more attractive than traditional development cooperation" (Bilal 2012, 23).

[2] The concept of "experiential knowledge" in the context of SSC has been discussed by Alex Shankland (IDS) at the Development Studies Association 2016 Annual Conference, 12-14 September 2016, in Oxford.

Although experiential knowledge is seen to be knowledge of particulars, in the context of SSC and South-South "transfer", partnerships are established on the basis of shared experience and knowledge: a space and a "common" position in the condition of a developing country. This space allows for the elaboration of common policy solutions. In other words, providers and beneficiaries of SSC are experiencing similar dilemmas: presumably, both share the same space and time in relation to their exploitation by the North. This is a highly political discourse, which exalts the possibility of establishing horizontal partnerships, only viable from the South for the South, from one developing country to another.

Ultimately, South-South "transfers" supposedly create commonalities in terms of how problems and solutions for health and development are framed, shared and then solved by joint collective action. However, as Quadir (2013, 324) alerts, Southern partners are not necessarily unified by a common development vision. In many cases these actors pursue a development agenda based on their distinct conceptions upon development, placing emphasis on different questions and themes, which do not necessarily evolve around a core of common ideological premises. In order to critically assess the role of Southern providers and the premises of their distinctive type of knowledge and expertise, this working paper chooses three emerging countries, namely Brazil, India and China, all of which have health cooperation projects in African countries, and have been acknowledged in the international sphere for their domestic policy experiments in the sector while overcoming major development challenges.

Before exploring the selected countries in greater detail, some general considerations upon emerging countries' engagement in the health arena are noteworthy. Countries such as the BRICS are assessed with regards to three aspects: (i) the improvements of their own health policies, (ii) their engagement in global health technical and governance issues, and (iii) the provision of health cooperation to other developing countries – with the first and the last considered more relevant to this working paper. Poverty reduction investments have marked health improvements in the BRICS countries and progress towards achieving the

Millennium Development Goals. Major health issues such as universal health coverage and low-cost medicines and vaccines provision are central in their domestic agendas. Collectively, in groupings such as the BRICS or IBSA, the health topic draws increasing attention, for example, through the BRICS Health Ministers Meeting, which takes place on the side-lines of each World Health Assembly since 2011, or within the India-Brazil-South Africa (IBSA) Dialogue Forum, which addresses pharmaceutical patents, public health and government subsidies since its creation in 2003(Lechini 2007). Linking the IDC and the health field, then, SSC is seen as valuable resource to strengthen health systems in developing countries, as well as towards the achievement of the Sustainable Development Goals and the 2030 Development Agenda. SSC has been presented as "more" appropriate action to address health issues in other developing countries by means of providing more "adequate" solutions through operating in "similar" contexts, such as the condition of a "recipient" country and with a lower level of domestic resources and technology disposable than in Northern industrialised countries.

Domestically, health sectors have not evolved in a uniform or even pace. Considering that most emerging countries continue to face major health problems, particularly with respects to huge bottlenecks in public health investment, non-communicable diseases and addressing health inequity and inequality. Nevertheless, South-South collaborations in health are seen as new means to address health development through the enactment of the Southern health expert and emerging economies' domestic development experiences. A 2010 study by the CSIS Global Health Policy Centre signalled that the health engagement of emerging economies is intrinsically linked to the domestic health agendas those countries have pursued. SSC projects and programmes in the health sector can be expected to reflect national strategies for international engagement in the global health arena.

Following this line of argumentation, Brazil, India and China are expected to differ in their health cooperation approaches. Within each of the three selected countries for the underlying study, the individual historic experiences of the health expertise consolidated a

set of ideas and practices which inform Brazil's, India's and China's frameworks for health. The national health systems of those countries have been built and evolved in relation to these frameworks for health. Leander and Aalberts (2013) have pointed to the co-constitutive process through which the expertise and the object of expertise have generated each other simultaneously. Furthermore, the different concepts of health around which Brazilian, Indian and Chinese health experts gather provide the rationale for their international presence in the health field. It also enables us to inquire if health policies are "transferable" into other contexts through SSC. However, it yet remains underexplored which experts and their respective frameworks of health are participating in SSC projects and programmes.

By analysing the health expertise involved in Brazil's, India's and China's SSC in Africa, it is possible to examine which kind of policies or policy models are encouraged ("transferred") and which strategies for health promotion are stimulated. It may also shed light on the differences between SSC and NSC when comparing the frameworks for health and the health cooperation approaches that inform Northern and Southern experts, a possible object for future research. It is important to note that the research does not intend to make an evaluative judgment about the health frameworks per se by, for example, implying that public interventions are more valuable for a functional health system than private provision of public services. The debate about efficiency, equity and equality in health and healthcare are embedded in a long-standing discussion in the health arena, which is not the object of this paper.

Albeit the focus lies on technical cooperation in health and the selected countries' deal with similar issue areas such as HIV/AIDS, malaria etc., their cooperation approaches might considerably differ. Compared to India and China, Brazil is seen as the one to whom the health topic matters the most in foreign policy. Brazil's cooperation focuses on strengthening public health institutions, having a role in training foreign health experts in Brazilian institutions and as well as abroad. However, it has been recognized that India's (private)

pharmaceutical companies have had a pivotal role in lowering drug prices, expanding the job market and promoting economic development, also in African countries. China provides medical supplies free of charge and runs training programmes for diseases highly relevant in the African context, having their medical teams as a well-known trademark for cooperation projects. It is difficult to judge the individual initiatives between either ones that support health policy and systems or ones that place emphasis on product and service innovation, for example, because for health interventions it is still "not yet known which initiatives are most cost-effective, which are synergistic, and which may cross-react to produce unwanted side effects" (Gardner et al. 2007, 1057).

All initiatives might have a stake for health development in the global health arena and for developing countries' health systems, in particular. In this light, the paper addresses the health frameworks of Brazil's, India's and China's health experts and the knowledge exchange provided by those experts to African countries. This knowledge is expected to affect the adoption of health products and services on the continent. As the report by the WHO Commission on IP, Innovation, and Public Health (CIPIH) states:

> "South-South networks have often been neglected in the past but may become especially useful now that world-class expertise exists in some developing countries [establish a] network to analyze and promote enabling policy environments to develop products and services and deliver them to poor people" (Gardner et al. 2007, 1058) [emphasis added].

The next section provides a descriptive account of the main health indicators, policy developments and frameworks for health of Brazil, India and China, as well as, the SSC initiatives in the sector in Africa. Again, the focus lies on the health experts that participated in the design of health policies in their respective home countries and are currently active in SSC. These projects and programmes encompass institutional support, scientific training,

joint research programmes, and technology transfer. In its analysis, the section draws on academic publications from the health and development fields as well as policy documents.

3 Brazil's, India's and China's Health Expertise in SSC

Because SSC in health is less explored or recently emphasised in the field of international development cooperation it comes as no surprise that sector specific data is more difficult to obtain. In the literature, it is said to be nearly impossible to determine exactly the amount of cooperation per sector. Only aggregate or specific channels of financing are disclosed for information. Most accounts affirm the need to push for systematization of information in order to assess the impact of SSC provision in health (Fan et al. 2014; Acharya 2014; De Bruyn 2013b). However, this section, although descriptive, is not intended to provide generalisable appraisal of the health SSC projects and programmes of Brazil, India and China in Africa. It discusses which health actors participate in the elaboration of domestic policies and SSC initiatives. It indicates how those actors treat the health object and the ways health is promoted according to these actors' strategies, in other words, their frameworks of health. Arguably, the health expertise is located within the (national) health sector, but also in a specific understanding of 'health' where particular narratives and discourses about healthcare and health systems are endorsed by the health experts. For the subsequent analysis, it is important to highlight which expertise is mobilized and which kind of health framework is promoted.

The CSIS's study attributed three different slogans to the countries in question. Brazil is portrayed as "Health in All" which relates to the fact that the country's international presence is linked to its 1988 Federal Constitution and the incorporation of health as a human right (Art 196-198). In addition, the country promotes a complex definition of health encompassing a broad set of social determinants (Buss and Filho 2007), claiming to reproduce those understandings within SSC projects and programmes. "Innovation at Home" appears to be India's theme due to its usage of international connections in health to improve

domestic conditions and the private sector's active role in creating a medical tourism industry. And finally China's "Bare (but Powerfully Soft) Footprint" as a representation for the country's changing engagement in global health matters, bolstering its power by combating non-traditional security threats abroad. Nevertheless, it does reinforce China's core interest of promoting national economic growth and stability (Freeman and Boyton 2010, 15).

Among the BRICS countries, India figures as one of the least progressive in the Human Development Index (HDI)[3], which includes a long and healthy life as one of the three basic dimensions of human development. In terms of healthcare spending, the Indian case shows one of the lowest rates in the world, investing only 1.4% of its Gross Domestic Product (GDP) in 2014[4]. However, relations between spending and performance in health are not linear, pointing to the sector's complexity. China, for example, spends six times less than Brazil. However, the Chinese population shows greater life expectancy and lower maternal mortality rates than the Brazilian population (Esteves et al. 2011, 4). All three countries have pluralistic health systems composed of public and private health care providers. Nonetheless, they also show distinct organizational structures leading to different challenges in the promotion of an integrated health system. Whereas Brazil supports the largest public health care system of the world (*Sistema Único de Saúde*, SUS, in Portuguese) assisting 190 million people (Bliss 2010, 2), India is said to be highly dependent on private sector-led schemes, which are in need of government regulation. In contrast, China underwent several health reforms while moving towards a market-based system following the policy reformulations of Deng Xiaoping. Currently, China faces a 'double burden' of diseases (Brown et al. 2010, 7), a characteristically trait in the disease profile of many countries which are transitioning from a low-income to a middle or high-income country, and which, concomitantly, show unequal developments within the country, i.e. between rapid

[3] According to the Human Development Report the country climbed 5 notches up to the 130th position among 188 countries in 2014(UNDP 2015). However, it still is the lowest among the BRICS nations.
[4] Although it has improved, spending only 1.1% in 1995. Source: http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS.

urbanization processes and marginalization of rural areas. All these developments reflect on populations' health concerns.

The three countries participate in pharmaceutical production and in the generic medicines market. In 2012, India's pharmaceutical market ranked 13th in terms of value ($15 billion) and the sector is driven by the international demand for Indian medicines (Burns 2014, 443; 446). The country is renowned for its low-priced locally produced generics and by 2008 it produced more than 20% of the world's generics[5]. For China, the severe acute respiratory syndrome (SARS) outbreak in 2003 meant a re-examination of the health infrastructure and turned healthcare into a government priority. In the national context, the 'barefoot doctors' – the health workers trained to provide health services particularly to remote rural areas and became an integrated national programme in 1968 – are gradually being phased out. The 2009 Health Reform Plan aims to promote higher qualified medical personnel (Xu et al. 2010, 1502). This will influence China's medical education in the future outlook. Also HIV/AIDS became of greater significance, establishing various programmes and evaluating medical treatment options, meaning that China is willing to invest in anti-retroviral (ARV) production. Brazilian manufacturers dominate Brazil's generic market standing in real competition with the international pharmacy sector[6]. India and Brazil have invested in developing affordable pharmaceutical products and have had a major impact on medicine prices and availability, particularly for those vaccines and drugs, which directly affect developing countries (Chaturvedi and Thorsteinsdóttir 2012; De Bruyn 2013). It is in this context that the development of low-cost technology provided by those countries is firstly directed towards tackling domestic health challenges, but in the mid-term these solutions can be useful for other (developing) countries (GHSI 2012).

[5] Source: http://www.pwc.com/gx/en/pharma-life-sciences/pdf/global-pharma-looks-to-india-final.pdf, 9.
[6] Source: Research and Markets: An Essential Report on the Market for Pharmaceuticals in Brazil, Russia, India & China 2009. Available at: http://www.businesswire.com/news/home/20090908005790/en/Research-Markets-Essential-Report-Market-Pharmaceuticals-Brazil.

In terms of the health workforce all three countries face shortages and inequality in the distribution of trained health professionals in their national territories. The differences in distribution according to areas of high and low economic development are striking in the Brazilian case. The programme "More Doctors" (*Mais Médicos*, in Portuguese) is the most recent effort by Brazil's government to allocate more professionals to remote and poor territories. It is in the third year now and has been positively evaluated by the Pan-American Health Organization in 2015. However, since 2016 the Brazilian government debates the reduction of the programme's budget and personnel, as well as, affirming that it is only provisional or of temporary nature. China has even smaller contingents, but compensates by the services of less qualified personnel, known as 'barefoot doctors' (Buss et al 2014, 399). India offers a combination of registered, formal health-care providers and informal medical practitioners. These informal practitioners are major contact points for the population, because the expanding private sector competes with public health facilities for human resources. Despite the increasing shortages, the country has emerged in the global health-workforce market (Hazarika 2013, 107).

The Table I below present a snapshot of the national health systems of Brazil, India and China in relation to the national contexts in which their health systems developed, and the health policies and reforms on which it is build on. For the sake of comparison, the major objective is to identify the health frameworks and the body of knowledge those countries' health experts are presented to have according to the literature and official policy documents.

Table I: Snapshot - National Health Systems *

	Brazil	India	China
National context	Sanitary movement and 1988 Constitution	Economic development/health economics	Three different phases – free care; market-oriented; 2009 health initiative
Body of knowledge Health framework	• Social determinants in health • Primary universal assistance and democratic participation	• Biomedical model of health and disease • Secondary and tertiary care models	• Barefoot/village doctors • Traditional Chinese Medicine (TCM) • Consultative forums for 2009 reforms
Status of health reform(s)	• Brazilian Healthcare Reform Project • As of 1988 Unified Health System (SUS) & Complementary Medical Care (SSAM) • Family Health Strategy	• 12th National Plan (2012-2017) • UHC National Rural Health Mission (2005) • Pradhan Mantri Swasthya Suraksha Yojna	• 2009 Health Reform Plan • Implementation Plan for the Recent Priorities of the Health Care System Reform (2009-2011) • National Essential Medicines System (2009)
Medical education/HR in health	• Ongoing Health Education (*Política Nacional de Educação Permanente em Saúde*) • *Mais Médicos*	• National Commission for Human Resources for Health Bill 2011 • National Eligibility con Entrance Test	• Three-tiered system of health providers in rural areas • Integrated Management of Township Health Centers (2002) • New Rural Cooperative Medical Scheme (2003)

[*own elaboration, **work-in-progress**]

Although many reform and policy efforts can be observed, significant challenges remain for Brazil's, India's and China's health systems, particularly the shortages in workforce. But how it is then that these countries can promote their expertise in health? The Southern expertise in SSC initiatives is intrinsically linked to the idea of less-financial investment, rather being intensive in technical cooperation, knowledge and experience sharing, and mutual learning. However, it seems that there are significant differences in terms of the kind of knowledge exchange offered and the kind of cooperation approaches promoted by the three countries. Interestingly, they have engaged in cooperation projects for quite a while now. China sent its first medical teams to Africa in the 1960s. Although not necessarily focused on health, the Indian Technical and Economic Cooperation Initiative (ITEC) dates back to 1964 establishing training programmes in 154 foreign nations (Price 2004, 10). Since 1965, Brazil headed a government program for students from Asia, Africa, Latin America and the Caribbean inviting the selected students to Brazilian institutions (*Programa de Estudante de Convênio de Graduação*, PEC-G, and later also for graduate students, PEC-PG).

The accounts that place emphasis on the experts or agents at the implementing end of SSC highlight advantages and disadvantages in the deployment of "Southern experts" in development cooperation. Arguments go that there is an inherent lack in coordination and structuring the domestic cooperation system, i.e. lack of a centralized cooperation agency. The knowledge exchange provided by SSC actors might not be specialized yet, judging it to be in its "heroic" phase (Cesarino 2012, 526). What the author means by that, particularly talking about Brazilian SSC, is that Southern providers learn how to engage with local actors without being immersed in the international development apparatus and its specialized scripts and vocabulary (Cesarino 2013). In this view, the expertise mobilized within SSC assumes a positive connotation. Others warn for the "lack of expertise with African politics, culture and community issues" (He 2014, 31). This is then to say, that SSC agents lack a formal education and professionalization in international development. Again, the matter is the usage of technical experts, who work domestically and participate in cooperation projects abroad, however, never been part as specialists in international development

cooperation. SSC's expertise lies exactly in the fact of not having specialized "international/global development knowledge" but an experiential, practical knowledge, which builds on similarities in experience within the developing world and in its relation with the North.

This working paper does not discuss whether SSC is more effective than NSC [in health] or the experts' motivations involved in SSC – i.e. if Indian pharmaceutical manufacturers will address local needs without external incentives (see Gardner et al. 2007, 1054). It is an initial effort to map what Brazil, India and China have pursued in their Southern health partnerships and which kind of expertise is mobilized in this context. The following sub-sections provide a glimpse of the three countries' health experts, and the body of knowledge or framework for health promotion they potentially disseminate within SSC.

3.1 Brazil

Brazil's commitment to universality and equality is said to be at the foundation of its national health system. With the 1988 National Constitution, health became simultaneously a citizen's right and a state's duty. Furthermore the Unified Health System foresaw the participation of state and local health councils and consumer representation. Although the 1980s and 1990s stand in the light of introducing market-oriented sectorial reforms in many developing countries, a set of health policies where introduced by the Brazilian government such as the Family Health Programme tackling rural and poor population, which covered nearly 50% of Brazilians by 2009 (Ruger and Ng 2010, 6). These developments went hand-in-hand with the constitution of the Brazilian health expert community.

The Brazilian health expert was shaped by the dynamics of the sanitary movement during the military regime (1964-1985). Some concepts, such as the social determinants in health (Buss and Filho 2007) and a vision of public health, which combines primary universal assistance and democratic participation and social control mechanisms, became key for the

health experts and informed their framework for health. The medical schools with preventive medicines departments and institutions such as the *Centro Brasileiro de Estudos de Saúde* (Cebes) and the *Associação Brasileira de Saúde Coletiva* (ABRASCO) were actively involved in shaping the debate about public health reform. The health experts integrated within these institutions framed knowledge upon alternative policies, which could ultimately influence national development in general and health policies in particular. In fact, the dominant narrative of these public health agents in Brazil associates the democratization process and the right to health with international operations of Brazilian state actors in the health field (Esteves and Assunção 2017).

Today, Brazil´s international presence in the health field is organized around three interconnected concepts: health diplomacy, health-industrial complex and structuring cooperation. Health diplomacy refers to the recognition of cross-border health problems and establishes linkages between health agendas and foreign policy directives. It is discussed in the context of transition from "international" to "global" health (see for example: Kickbusch et al. 2013; Katz et al. 2011; Lee and Smith 2011; Kickbusch et al. 2007). In the Brazilian case the adoption of "health diplomacy" pushed for higher coordination between the Ministries of Health and of External Relations (MRE) (Buss and Ferreira 2010). Both ministries signed a *memorandum of understanding* in 2005 and designed an institutional plan for the period of 2008-2011 entitled "More Health: Right for All" ("*Mais Saúde: Direito de Todos*", in Portuguese) (Roa and Silva 2015, 9). It is thus safe to say, that Brazilian health experts are highly aligned with the country's foreign policy community.

> "Whether in regional forums such as the Union of South American Countries' (UNASUR) Health Council or at the World Health Assembly, Brazil's professional foreign policy specialists frequently sit side by side with senior Health Ministry officials to jointly craft the country's approach to key global health policy concerns" (Bliss 2010,4).

This might particularly be true, in the case of the Fundação Oswaldo Cruz (Fiocruz), Brazil's major research institution for public health linked to the Ministry of Health. Fiocruz carries out the lion's share of health projects and programmes, since the Brazilian Cooperation Agency (*Agência Brasileira de Cooperação*, ABC, in Portuguese) [7] is not equipped with a staff of trained health professionals to deliver the intended cooperation. In 2009, Fiocruz established its Center for International Relations in Health (CRIS) to support the institution's international activities responding to growing demands for international exchange. The health-industrial complex is presented as a national development strategy and the condition for a functioning health system: it promotes the idea of national self-reliance and technological independence at the same time, as public health investments should be stimulated. The aim is to set up a feedback loop between the economy and public health (Gadelha 2006). Health is referenced as a citizen right, and a development and innovation strategy for the society. The articulation of both dimensions highlights Brazil´s strong narrative on health as priority for national development.

The corollary of Brazilian cooperation maintains equity, solidarity and access to health above economic gains (Russo and Shankland 2013, 267). Under its structuring cooperation approach, Brazil asserts to entail a double innovation. First, by breaking with passive knowledge and technology transfer. And secondly, by allegedly contributing to structural change in partner countries focused on strengthening fundamental health institutions in the beneficiary country (Ventura 2013). Thus, Brazilian health experts actively defend that their practices stand in contrast with traditional approaches "guided by vertical programs, linked to specific diseases, which, apparently, would have little impact on the health systems and

[7] The Brazilian Cooperation Agency (ABC) was established 24 years ago with the objective to coordinate the international aid received by Brazil. It is affiliated to the Ministry of External Relations (MRE) and in charge of all technical cooperation involving Brazil and other countries or international organisms. Although it has the mandate to negotiate, coordinate, implement and monitor the projects and programmes that stem from agreements, other Brazilian federal and state agencies and ministries are implementing South-South technical cooperation. ABC provides guidance regarding the opportunities of those projects and publicising the information on project development and achieved results.
Official website in English: http://www.abc.gov.br/training/default_en.aspx.

on outcomes for populations" (Almeida et al. 2010, 28) [free translation]. Characteristically, the experts' structuring cooperation narrative claims that Brazil promotes institutions and networks focused on knowledge production and training in health. Against this backdrop, training and health policy networks were established, such as the Network of National Health Institutes, the Network of National Schools in Public Health and the Network of Technical Health Schools, in both the African and the South American regions (Fraundorfer 2015, 71).

With the establishment of its first ever Regional Office in Maputo in 2008, signalised that the Fiocruz rapidly expanded its institutional reach internationally, especially in Africa. One of the major projects is the establishment of an anti-retroviral (ARV) factory in Mozambique aiming to encourage a local drug production, a national regulatory authority and tackle dependence on pharmaceutical donations by promoting generic manufacturing (Fiocruz 2012). However, implementation has been going on for more than a decade now and the initiative is highly criticised in terms of lack of political support, different understandings of the factory's purpose, as well as, hidden private sector interests (see Esteves and Assunção 2017; Russo et al. 2014; Roa and Silva 2015; Milani and Lopes 2014). Nevertheless, Fiocruz is seen to transmit the Brazilian experience in setting up health institutes, laboratories, and schools of public health.

In the Brazilian context, approximate figures on health cooperation are more scrutinized when compared to India and China. According to ABC, approximately 16% of its budget is allocated to health projects[8]. At the same time compared to all Brazilian agencies carrying out international development assistance, the country's Ministry of Health has had the largest budget with ca. US$ 27 million allocated in 2007 (Bliss 2010,5). 150 international health cooperation initiatives were developed between 2003 and 2007, focussing on a vast array of thematic areas, such as malaria, HIV/AIDS, universal health care, nutrition, the

[8] These numbers only refer to the period ranging from 2005 to 2009, period assessed by the last official report on Brazil's International Development Cooperation (COBRAD 2010).

establishment of human milk banks, environmental surveillance for health, epidemiological surveillance, hospital administration, and technology transfer (ABC 2007; Vaz and Inoue 2007). Within the African context, Brazil's SSC initiatives in health have followed the Strategic Public Health Cooperation Plan (PECS 2009-2010) established among the Community of Portuguese Speaking Countries in 2008. The plan, amongst others, includes the training of Portuguese-speaking health professionals at Brazilian facilities, as well as fomenting local public health research by strengthening National Health Institutes or even inaugurating master courses in Health Science, such as in the case of Mozambique.

The exchange of experiences and the language of dialogue and partnership are presented as a break with the projects solely motivated by donor-country interests (Bliss 2010, 4). As stated at the beginning of this section, Brazil's domestic experience is framed in its international outlook, in which the government's decision to ensure universal access to ARV medication, for example, is related to its successful negotiation with regards to barriers to pharmaceutical availability. This means, that in order to promote certain domestic health policies and choices, the health experts and "diplomats" recognize the need for a strong foothold at international arena, and where domestic and international health policies can be linked with cooperation activities (Esteves and Assunção 2017). The fact that Brazil is considered a forerunner in ARV treatment and prevention and has been leading the ARV factory project – which might, on the long-run, have tangible impacts on the service/medicine provision in the African landscape – sustains this paper's argument on international outreach based on domestic experiences, and will be explored further in future research.

3.2 India

India is criticized for serious flaws in its public health infrastructure. Since its independence, the country lacks reforms aiming at primary assistance and assisting the poor. Due to regressive social policies driven by the structural adjustment agenda in the 1990s, the

resources available for the sector have been reduced. According to John et al. (2011, 264), historically the sociocultural and poverty-associated determinants of diseases blurred, and emphasis was placed on a biomedical model of health and disease, in which science and technology came first; a slogan which Jawaharlal Nehru promoted. Thus, Indian professionals neglected public and primary healthcare because of an overemphasis on biomedical interventions. Health economics dominated the framework putting economic development as desirable and accepting the integration of the private sector into the universal health system (Sengupta and Prassad 2011). "Even Kerala, India's success story, is not immune (…) many Keralite health professionals leave the public sector, especially in rural primary care clinics, because they are drawn to more lucrative private sector work" (Ruger and Ng 2007, 271).

India made efforts for the development of national policies, but most programmes continue to be structured around technological responses and focused on specific targets. Indian hospital services and health insurance became an investment opportunity for corporate and multinational enterprises (Patel et al. 2011, 421-423). This is why India's health strategies are predominantly focused on secondary and tertiary models of care, which are more profitable, than primary prevention[9]. Furthermore, the private sector is highly uncontrolled with no legally binding commitments in place. The country presents itself as an anomaly: one the one hand it shows the lowest performance and spending figures in public health in terms of disease burden and infrastructure shortages compared to Brazil and China. On the other hand, the active private sector is leading research, vaccines and medicines production in the world (Dukkipati 2010, 24). India's role in breakthrough innovations such as the *Aravind Eye Care*, the world's largest provider of cataract surgery, and *Narayana Hrudayalaya*, a leading

[9] Primary, secondary and tertiary models of care are all important for a functioning health system. Primary care means the first point of consultation for all patients within a healthcare system and often associated with the services provided at the local community level. Internationally, it is recognized as a government responsibility and citizens' right since the Alma Ata Declaration (1979). Secondary and tertiary care, are all specialized services, which make use of personnel and facilities for advanced medical investigation and treatment, and usually are not the first contact for patients.

provider of cardiac care, might prove how business innovation can alter cost, quality and delivery standards fishing for low-cost products and services:

> The secret of success in such "bottom-of-the-pyramid" models is a commitment to excellence combined with a hyperspecialized division of low- and high-skilled labor that is unheard-of in costly hospitals of the industrialized world (Gardner et al. 2007, 1056).

India's international engagement in health follows three paths – health diplomacy, an emerging role as an aid donor and private sector stimulated innovation – but the latter Indian health experts consider the most "effective" form. Health diplomacy in the Indian context is a strategy to support the country first, stimulating donors' contributions to experimental areas of health spending. India's experience in soliciting international aid funding is largely successful because the government allegedly makes donors adapt to the Indian context rather than the other way round (Dukkipati 2010, 26). In 2003 in an official announcement, Jaswant Singh, the Finance Minister until 2004, reduced the number of donors from which India would receive aid. Concomitantly, the India Development Initiative was launched signalizing the country's intention to assume a role as "donor" or SSC provider. This role is reinforced in support of countries of the Global South with which India wants to share its own experience of rapid economic development (Jobelius 2007, 2). This projection of the Indian development experience, in turn, goes hand-in-hand with the private sector activities in the medical field promoting medical tourism and international capacity building.

India's development assistance traditionally went to South Asia and immediate neighbour countries providing infrastructure, health, and education. The India-Africa Forum Summit is a milestone for India's engagement in Africa. In the last 2015 Summit's declaration health is framed as "critical in the development of human capital, which drives socio economic growth". The declaration reaffirms the commitment to enhance collaboration and share experience in research and training, and strengthen public-private sector collaboration in

areas of pharmaceutical and procurement between India and Africa[10]. Indian health cooperation "[is mainly] devoted to technical training of civil servants and managers working in state-owned enterprises and government-run institutions such as hospitals, railways, and universities" (Agrawal 2007, 7). India also invested in of South-South Health Collaborations networks composed of research institutions and universities in Africa as well as public-private partnerships, such as the African Malaria Vaccine Testing Network (AMANET), the South-South Initiative in Tropical Disease (TDR), the African Network for Drugs and Drug Information (ANDI), between others (Chaturvedi 2015). Thus both, the private and the public sector are engaged in health cooperation. But the private sector is India's footprint, particularly because Indian pharmaceutical companies provide between 60 to 70% of vaccines and medicines distributed by UN agencies (Harmer 2014, 395). Some private providers have invested heavily in treatment aiming at poor and vulnerable populations such as the *Aravind Eye Care*, which is already offering cataract treatment in African countries (Ruger and Ng 2007, 264).

Most recently, the Pan-African e-Network is the new flagship of India's innovative capacity. A 2015 UNDP evaluation registered approximately 700 online medical consultations, over 5,643 medical education sessions in different medical disciplines for health-care institutions in participating countries. The network is a private-driven initiative, headed by *Telecommunications Consultants India Ltd* (TCIL), providing a digital information service. Focused on tele-education and telemedicine via satellite, the fundamental idea behind the project is the provision of services operational in potentially precarious conditions and tailoring solutions regardless of the remoteness of places (Duclos 2014, 158). Thus, it is directly targeting medical and health specialists, while acknowledging that "telemedicine is an excellent CME [continuing medical education] medium educating the non-specialist (…) The knowledge that a specialist is always virtually available does wonders for a rural

[10] Third India-Africa Forum Summit, 'Partnership in Progress: Towards a dynamic and Transformative Development Agenda', India-Africa Framework for Strategic Cooperation, New Delhi, 26-29 October 2015, 11. Available at: http://www.mea.gov.in/Uploads/PublicationDocs/25981_framework.pdf.

physician's morale" (Ganapath and Ravindar 2009, 584). This project is based on the Indian experience of the Apollo Hospital group (a private provider), which has introduced telemedicine in the country.

Building on this innovative business capacity, India's ability to devise innovate solutions applicable to other developing countries is portrayed as significant contribution to global healthcare. However, in terms of research and development (R&D), the research infrastructure remains in the public sector with almost two-thirds of all health research:

> In areas such as social development, reproductive health, education, and taxation, the only experts available in India are those employed in the public sector. Most of the technology deployed abroad is strictly a by-product of indigenous research conducted to solve India's own problems (…) In fact, most public-sector organizations in India are neither dedicated to aid implementation nor possess any specific expertise about the economic and social conditions of recipient countries. Indeed, many of the organizations through which Indian aid is administered are bureaucratic 'fits' rather than strategic choices or competitively selected entities (Agrawal 2007, 10) [emphasis added].

Although India's direct or conventional global health engagement and development expertise might be limited, the private health experts want to turn India into a global healthcare hub, in which expertise entails the provision of low-cost technology, human resource development and education. Contradictions arise with regards to India's capability to provide affordable healthcare to all – or even "first-class treatment at Third World prices" (Modi 2010, 128), at the same time India's health expertise is guided by the private sector, because the public sector is said to be missing "expertise" as quoted above. However, the usage of health experts embedded within commercial incentive structures, mainly oriented towards secondary and tertiary models of healthcare, might have implications for the adoption of certain products and services in Africa and the improvement of health (in)equity and (in)equality in the partner countries.

3.3 China

China's health care system has experienced at least three different phases. From the 1950s until the end of the 1970s the government offered free health care providing 'near-universal' coverage through medical and insurance schemes. With the economic reforms in 1978 these plans were replaced by a city-based social health insurance scheme excluding many sectors of the population. The implementation of free-market reforms had allegedly two effects on the health sector: health spending became a low-priority budget item for the government, at the same time medication and high-tech services increased in prices. The transition then meant an increase in service costs while lowering service provision itself (see: Daemmrich 2013). By 2009, the government introduced a health initiative as response to these structural problems and the relation between healthcare service costs and provision. The Chinese government committed to universal health coverage and promised an investment of $ 125 billion over a three-year period (Ruger and Ng 2007, 271). These three phases in the healthcare system affected the ways medical education has developed in the country:

> Often because of the past reform efforts, medical education in China has a rich yet turbulent history (…) China adopted the Soviet model of autonomous medical universities (…) The Cultural Revolution in 1966-76 disrupted higher education, but also led to barefoot doctors brining health services to rural populations (Xu et al. 2010, 1502).

Health is one of the historical focus areas of China's foreign aid. The dispatch of medical teams dates back to the 1950s and is portrayed as the most effective form of Chinese medical cooperation in Africa, with the first team deployed to Algeria in 1962 (Li 2010, 7). Nevertheless, as with its foreign policy, China's approach to global health changed during the last 50 years: from a revolutionary vision aligned with liberation movements as envisaged in the Asian-African Bandung Conference (1955), to a new "going-out" or "going global" strategy at the end of the 1990s. Increasingly, assistance is framed under a mutual benefits

discourse, one of the eight principles of Zhou Enlai's principles for Foreign Aid (2010). The disposal of Chinese health products and services became part of this cooperation strategy:

> Reform of China's medical aid started in 1999, when China's Ministry of Health announced to short list high-quality supplies of domestic medicine and equipment for future aid work. Free services such as medical teams would gradually be changed into jointly run hospitals, pharmaceutical factories (He 2014, 29).

This explains why by 2003 the Ministry of Health "regarded the medical teams as part of China's 'going out' strategy and called for more business cooperation for pharmaceutical sectors" (He 2014, 10). The medical teams are not longer free of charge, and China started to invest in projects related to infrastructure. Although, the mutual benefit narrative maintains that medical aid has to be initiated or demanded by the beneficiary government, aspects such as "efficiency" and "practical results" became more relevant for China's development cooperation programme (He 2014) than politically motivated aid in the "Bandung spirit". This strategic shift is also explained by the changes in the organizational structure of Chinese aid policies and programmes: in the 1980s, the Department of Foreign Aid was established within a new and larger Ministry responsible for economic relations and trade, which later became known as the Ministry of Commerce (MOFCOM). While the State Council designs the aid policies and programmes, the Ministry of Health has run the medical teams (Li 2010). However, since MOFCOM is massively involved in foreign aid, general critique is made on China's "no-strings attached" cooperation or the so-called "Angola model" which is a parallelizable to tied aid (Brautigam 2010). In other words, Chinese cooperation agents are seen to do "loosely" related projects, mainly directed towards infrastructure, and in many cases, Chinese companies and services are hired as a condition of the cooperation agreement. Furthermore, Freeman and Boyton (2010) argue that the principle of non-interference into domestic affairs – which is arguably a major characteristic and/or principle respected by all SSC providers – could undermine possible structural changes within partner countries, only pursuing punctual and/or crises-driven activities on the ground.

China invests in building an image as contributor to global welfare. But all activities abroad need to be linked to the promotion of domestic stability and economic growth. This is a particularly powerful discourse when considering that the economic boom has not matched health improvements. There is political pressure to tackle domestic health problems first, before extending health care assistance to third countries (Freeman and Boyton 2010, 16). The forecast is that the Chinese government will be looking inward pursuing the national health care reform pledged in 2009[11]. Nevertheless, the domestic challenges China faces are often portrayed as inspiring for other developing countries to improve health care with limited resources. Again the idea of limitation in resources suggests equalizing historical conditions under which development "took place" and is particularly useful when considering that most of China's global health outreach is directed towards Africa.

> "China has built an image of its health cooperation with Africa as a South–South initiative, which is based upon a special understanding that comes from their shared history of slow economic development" (Freeman and Boyton 2010, 18) [emphasis added].

One important innovation in China-Africa relations is the Forum on China-Africa Cooperation Summit (FOCAC) initiated in 2000. In its 4th edition nine years later, the overall grant assistance was doubled and health cooperation objectives were incorporated into the Summit's declaration to support local production of health products and share expertise[12]. According to the 2013 Report of China-Africa Economic and Trade Cooperation, from 2010 to 2012, China helped build 27 hospitals, sent 43 medical teams to 42 African countries and

[11] Note that analysis on China's health reforms since 2009 show a mixed picture of successes and failures. There are significant improvements, but due to increasing pressures on the healthcare system – such as the suspension of the one-child policy and the spread of non-communicable diseases, as well as, lack of support from regulators and state-run firms and fragmentation in the sector – reform is seen to be moving slowly. Also, in this context the influence of the national pharmaceutical providers is questioned. See for example: World Bank Study Report (2016) 'Deepening Health Reform In China'; Zhao (2016) 'China Healthcare', J.P. Morgan Report CSPC Pharmaceutical, Asia Pacific Equity Research (2016); South China Morning Post (2016) 'China's health care reforms set to benefit top domestic pharmas' and (2015) 'China's health care reform moving slowly amid obstacles'; Kahler (2011) 'China's Healthcare Reform: How Far Has It Come?'.

[12] Source: http://na.chineseembassy.org/eng/xwdt/t625458.htm.

regions, treating over 5.57 million patients[13]. China's approach to Africa is associated to the *Beijing Consensus*, allegedly comprehending a "different" approach to development in which China assumes the exemplary role of "lifting people out of poverty and similarly as to other developing countries having suffered under the structural adjustment programmes" [14]. Before the Beijing Consensus, the Fourth International Roundtable on China-Africa Health Cooperation was held to explore innovative health collaborative partnerships and address pressing health challenges facing Africa. The idea was to elaborate on:

> "How African countries can best work with Chinese scientist and pharmaceutical manufacturers to increase access to high-quality, low-cost health interventions and also explored how China can help support Africa's local production of health products and how African can share expertise with China on AIDS prevention and treatment to help improve China's efforts at home" [emphasis added].[15]

This statement reiterates the mutual benefits discourse, by means of attempting a two-way knowledge exchange, in which Chinese health experts are engaged but also the beneficiary of SSC can contribute to improve China's health conditions. Overall, the Chinese health cooperation practices of today show similarities with India. For example, the *Brightness Action* relies on the exportation of cheap quality Chinese medical products. This initiative aims to treat cataract patients through the provision of mobile hospitals, eye and training centres for diagnosis and treatment technologies (CAETC 2013) and reminds of India's training activities and provision of services such as the *Aravind Eye Care System,* amongst

[13] Evidencing the knowledge gap on health cooperation data, amounts differ: According to He (2014, 26) "[d]uring the past 50 years, China has sent more than 17,000 medical workers to 48 countries in Africa, treating nearly 200 million people on the continent. By 2012, China had built more than 30 hospitals and 30 anti-malaria centres in Africa" [emphasis added]. Depending on the source these figures diverge immensely. Overall China's aid data is highly problematic. For a discussion see Brautigam *versus* AidData.

[14] Source: http://www.thebrokeronline.eu/Articles/How-will-the-Beijing-Consensus-benefit-Africa.

[15] Source: http://www.vanguardngr.com/2013/05/africa-china-rub-minds-on-aids-malaria-others/.

others. However, as He (2014, 28) signalizes, Chinese medical companies still consider the involvement in this type of government donation projects unprofitable.

Nonetheless, China's initiatives on the African continent are increasing, and the country is expanding into the global pharmaceutical market. The total import export value of health products between China and Africa increased 6 times within 8 years, from US$190 million in 2001 to US$1.14 billion in 2009 (Freeman and Boyton 2010, 19). These initiatives stand in light of China's competition with India, who still remains the leading exporter for the African market. Both countries have increased their investments in anti-malaria and antibiotics market in Africa. Furthermore, "old" health practices such as the deployment of medical teams are being reformulated. Firstly, China now only covers training and salaries of the doctors send abroad, whereas the beneficiary country provides medical facility, pharmacies, devices and doctors' housing. Secondly, these medical teams acquired multiple functions because they directly facilitate the expansion of markets for Chinese companies and products (He 2014, 28).

Thus, China's global political, economic and health engagement relates to the domestic conditions and objectives of sustaining the economy and national security – initiated by framing SARS as major driver for global health engagement – and it reaffirms a mutual benefits narrative within international cooperation. This means the establishment of an allegedly win-win situation in which China shares its expertise and provides infrastructure and services, at the same time these initiatives facilitate the expansion of Chinese interests, such as of state-owned companies, abroad, particularly in the African market. Table II provides an overview of Brazil's, India's and China's South-South technical cooperation in the health sector in Africa, scrutinizing the actors involved, the governments' official narratives, and foreign policy and SSC principles. With this emphasis, future research aims to delineate which Brazilian, Indian and Chinese experts participate in SSC in health and which health frameworks inform their initiatives at the domestic and international fronts.

Table II: Snapshot – Brazil's India's and China's South-South cooperation in health*

	Brazil	India	China
International presence Guiding concepts	• Health diplomacy • Health-industrial complex • Structuring cooperation • "Health in All"	• Health diplomacy • SSC provider/ donor role • Private sector stimulated innovation; "Innovation at home" • "First-class treatment at Third World prices"	• "Going out/Going global" • Mutual benefits • Non-interference • "Bare (but Powerfully Soft) Footprint" • Health as international security concern
Actors	• Brazilian Cooperation Agency • Ministry of Health • Fiocruz	• Ministry of External Affairs • Indian manufacturers and hospitals i.e. *Aravind Eye Care System*, *Apollo Hospital Group*; *Telecommunica-tions Consultants India Ltd*	• State Council • Ministry of Commerce • Ministry of Health • National Health and Family Planning Commission (NHFPC since 2013) • Chinese provinces
Thematic focus	• Malaria • HIV/AIDS • Universal health care Nutrition • Maternal and child health • Environmental and epidemiological surveillance • Hospital administration • Technology transfer	• HIV/AIDS • Tele-education and telemedicine • Eye care • Medical tourism	• Malaria • HIV/AIDS prevention and control • Tuberculosis • Influenza • Traditional Chinese Medicine (TCM)

Technical cooperation in Africa	• Training and education • Public health research and strengthening National Health Institutes • Promotion of institutions and networks (RINSP; RESP; RETS) • Dental care • Cancer prevention and control • Child and maternal/reproductive health and milk banks ARV factory and medicines regulatory capacity	• Technical training of civil servants and managers working in state-owned enterprises and government-run institutions (hospitals, universities) • South-South collaborative networks • Pan-African e-network • Cataract treatment	• Building infrastructure (e.g. hospitals) • Dispatch of medical teams treating patients • Training of local medical professionals • Medical equipment • Joint programmes on infectious diseases • Military medical units • Reproductive health • Brightness Action
Framework for Africa	CPLP's Strategic Public Health Cooperation Plan	India-Africa Forum Summit	Beijing Consensus FOCAC Macau Forum

[*author's elaboration, **work-in-progress**]

4 Preliminary Analysis

This working paper deals with two interrelated developments in the 21st century: the emergence of the so-called SSC providers and their expertise within the international development cooperation field. Concurrently, the Southern expertise establishes itself as an authoritative voice for development policy-making and policy transfer, as the first section presented. The Southern expertise is based on the assumption of sharing domestic experiences with other developing countries through SSC. Taking the case of the health sector, the second part addressed how Brazil, India and China assist in the development of skills and capacity in African partner countries. Two important questions follow from the

observations above: (1) if the so-called "Southern expertise" is constructed upon the opposition to the Northern development expert and the specialized international development knowledge, what kind of knowledge is promoted within Southern partnerships? And (2) which relation exists between the adoption of health services and products in Africa and the kind of health expertise promoted in the context of Brazil's, India's, and China's SSC?

The argument goes that experts organize themselves around certain conceptions about health and health promotion – the health framework. Accordingly, Brazil, India and China sustain particular notions and guidelines for their international health engagement. Whereas "health diplomacy", "industrial-health complex" and "structuring cooperation" appear to have the same weight for the Brazilian health expert, the Indian health expert considers "private sector stimulated innovation" more effective an tries to merge it with its emerging donor role and health diplomacy. China, on the other hand, stands in stark contrast to both Brazil and India, due to its 2003 security-driven agenda in health and 2009 inward-looking domestic health reforms although the deployment of medical teams continues to be a significant aid modality. In regards to similarities, these countries share the idea of developing a health system with limited resources, where high-end technology and "formal, specialized" knowledge associated with health development in Northern industrialised countries is lacking. This suggests equalizing historical conditions under which development "took place" with relation to other developing countries – the partner countries in SSC.

Hence, South-South collaborations in health are framed on the basis of respective capacities and strength derived from particular national contexts. These respective capacities and strengths enable these countries' health experts to elaborate policy solutions for third partner countries, "leading to new health care products and services aiming to fulfil their own needs" (Chaturvedi, 2015:12). However, it is difficult to argue for an either/or position in terms of in as much as SSC primarily strengthen other developing countries health systems and institutions, such as claimed by the Brazilian expertise, or link health projects with

private sector interests. It does depend on the visions upon health that these experts carry. Not to forget that the health arena is a disputed field with contestations between opposing forces within pluralistic health systems in which public and private incentives and frameworks are intertwined, as well as, in relation to health (dis)agreements at different levels (from global to sub-national). The domestic battles in the establishment of health reforms have to be addressed in detail. Ultimately, they will point to the health frameworks entailing an understanding of health and development problems and solutions these experts promote.

Within the international development cooperation field, SSC has come under attack seen to be lacking knowledge and well-structured cooperation approaches based on *ad-hoc* decisions (WHO, 2014:48). The debate is centred on the kind of expertise Southern provider claim to have when compared to Northern development experts, at the same time that their non-specialisation in international development makes them vulnerable in presenting "sufficient knowledge and training in the localization of African countries" (He, 2014:31). The question of the means of comparison between the Northern and the Southern expertise remains open in this working paper. However, the main argument is that although the improvements in healthcare on the domestic level have not matched the pace of their economic development, SSC providers have established themselves as authoritative voices in health and development policy-making and policy transfer. This authority emanates from Southern providers, domestic policy experiments in health (experiential knowledge) and claims of a shared space – of confronting historical development ills, as shown in the narratives of Brazil's, India's and China's SSC in health. This discourse generates a similar policy space for the elaboration of (health) solutions in the developing world. How this knowledge is mobilized to promote "common" conceptions of health – a particular health framework – and how this changes the current landscape of health products and services in developing countries will be the object of future research.

Bibliography

Acharya, Shambhu et al. (2014) 'BRICS and global health', *Bulletin of the World Health Organization,* 92*,* 386-386A.

Agrawal, Subhash (2007) 'Emerging donors in international development assistance: the India case', one of five reports on the role played by emerging economies in funding international development. Partnership Business Development Division, IDRC/CRDI.

Almeida, Celia et al. (2010) 'Brazil's conception of South-South 'structural cooperation' in health', *R. Eletr. de Com. Inov* Saude Rio de Janeiro, 4:1, 23-32.

Bilal, San (2012) 'The rise of South-South relations: development partnerships reconsidered', European Centre for Development Policy Management, 1-29.

Bliss, Katherine E. (2010) 'Health in all policies: Brazil's approach to global health within foreign policy and development cooperation initiatives' in Katherine E. Bliss et al. (eds) *Key players in global health. How Brazil, Russia, India, China, and South Africa are influencing the game*, CSIS Global Health Policy Center, 1-14.

Boyer, Dominique (2008) 'Thinking the anthropology of experts', *Anthropology in Action*, 15:2, 38-46.

Bracho, Gerardo (2015) 'In search of a narrative for southern providers. The challenge of the emerging economies to the development cooperation agenda', DIE Discussion Paper 1, 1-52.

Brautigam, Deborah (2010) *The dragon's gift: the real story of China in Africa* (Oxford and New York: Oxford University Press).

Brown, Theodore M. et al. (2006) 'The transition from "international" to "global" public health and the World Health Organization', *História, Ciências, Saúde – Manguinhos*, 13:3, 623-647.

Burns, Lawton R. (2014) *India's healthcare industry. Innovation in delivery, financing, and manufacturing* (Delhi: Cambridge University Press).

Buss, Paulo M. et al. (2014) 'Health and development in BRICS countries', *Saúde Soc. São Paulo*, 23:2, 390-403.

Buss, Paulo M. and José R. Ferreira (2010) 'Critical essay on international cooperation in health', RECIIS, *Revista Eletrônica de Com. Inf. Inov. Saúde*, 4:1, 86-97.

Buss, Pualo M. and A.P. Filho (2007) 'A Saúde e seus Determinantes Sociais', *Physis: Rev. Saúde Coletiva*, 17:1, 77-93.

Cesarino, Leticia (2013) *South-South cooperation across the Atlantic: emerging interfaces in international development and technology transfer in agriculture* (PhD Dissertation, University of California, Berkeley).

Cesarino, Leticia (2012) 'Anthropology of development and the challenge of South-South cooperation', *Vibrant, Virtual Braz. Anthr*, 9:1, 509-537.

Chaturvedi, Sachin (2015) 'Exploring Indian engagement in agriculture and health: a case of Angola and Mozambique', *BPC Papers*, 3:3, 1-39.

Chaturvedi, Sachin and Hella Thorsteinsdóttir (2012) 'BRICS and South-South cooperation in medicine: emerging trends in research and entrepreneurial collaborations', *RIS Discussion Paper* 177, 1-33.

Clarke, David et al. (2015) *Making policy move. Towards a politics of translations and assemblage* (Bristol and Chicago: Policy Press).

Daemmerich, Arthur (2013) 'The political economy of healthcare reform in China: negotiating public and private', *Singerplus*, 2:448, 1-13.

Davies, Penny (2011) 'Towards a new development cooperation dynamic', Draft Background Paper, *North–South Institute*, 1-18.

De Bruyn, Tom (2013a) 'Adding new spices to development cooperation. Brazil, India, China and South Africa in health, agriculture and food security', KU Leuven Paper 9, first working paper series 'Challenging the status quo? The impact of the emerging economies on the global governance of development cooperation', 1-50.

De Bruyn, Tom (2013b) 'Challenging development cooperation? A literature review of the approaches of the emerging powers'. KU Leuven Paper 10, second working paper series 'Challenging the status quo? The impact of the emerging economies on the global governance of development cooperation', 1-38.

Duclos, Vincent (2014) 'Of doctors and wires ICTs, healthcare, and India's telemedicine venture into Africa', *Journal of Critical Southern Studies*, 1:1, 1-34.

Duclos, Vincent (2015) 'Global eHealth. Designing spaces of care in the era of global connectivity', *Medicine Anthropology Theory*, 2:1, 154-164.

Dukkipati, Uttara (2010) 'India's approach to global health: innovation at home´ in Bliss et al. (eds) *Key Players in Global Health. How Brazil, Russia, India, China, and South Africa Are Influencing the Game*, CSIS Global Health Policy Center, 24-33.

Esteves, Paulo and Manaíra Assunção (forthcoming) 'The partnership puzzle: Brazilian health development practices in Mozambique', in Bergamaschi, Isaline, Moore, Phoebe and Arelene B. Tickner (eds) *South-South cooperation beyond the myth*. *Rising Donors, New Aid Practices?* (UK: Palgrave Macmillan).

Esteves, Paulo; Assunção, Manaira. (2014) 'South-South cooperation and the international development battlefield: between the OECD and the UN', *Third World Quarterly*, 35:10, 1775-1790.

Eyben, Rosalind and Laura Savage, Laura (2012) 'Emerging and Submerging Powers: Imagined Geographies in the New Development Partnership at the Busan Fourth High Level Forum', *Journal of Development Studies*, 49: 4, 457-469.

Fan, Victoria Y. et al. (2014) 'Tracking the flow of health aid from BRICS countries', *Bulletin of World Health Organization*, 4:92, 457-458.

Fraundorfer, Markus (2015) *Brazil's Emerging Role in Global Governance: Health, Food Security and Bioenergy* (New York: Palgrave Macmillan).

Freeman, Charles W. III; Xiaoqing L. Boyton (2010) 'A Bare (but Powerfully Soft) Footprint: China's Global Health Diplomacy, in Bliss et al. (2010) *Key players in global health. How Brazil, Russia, India, China, and South Africa are influencing the game*, CSIS Global Health Policy Center, 15-23.

Fundação Oswaldo Cruz. Centro de Relações Internacionais em Saúde (CRIS). Relatório de Atividades 2012. <http://portal.fiocruz.br/sites/default/files/documentos/Relatorio%20CRIS%202012%20b.pdf>, accessed 18 June 2016.

Gadelha, Carlos A. G. (2006) 'Development, health-industrial complex and industrial policy'*, Rev Saúde Pública.*, 40, 1-13.

Ganapathy, Krishnan and Ravindra, Aditi (2009) 'Telemedicine in India: The Apollo Story', *Telemedicine and e-Health*, 15:6, 576-585.

Gardner, Charles A. et al. (2007) 'Technological and social innovation: a unifying new paradigm for global health', *Health Affairs*, 26:4, 1052-1061.

GHSi (2012) 'How the BRICS are reshaping global health and development', Global Health Strategies Initiatives.

Harmer, Andrew (2014) 'The BRICS countries: a new force in global health?' *Bulletin of World Health Organization*, 92, 394-395.

Harmer, Andrew et al. (2013) 'BRICS without a straw? A systematic literature review of newly emerging economies' influence in global health', *Globalization and Health*, 9:15, 1-11.

Hazarika, Indrajit (2013) 'Health workforce in India: assessment of availability, production, and distribution', WHO *South-East Asia Journal of Public Health*, 2:2, 106-112.

He, Wenping (2014) 'Chinese cooperation in Mozambique and Angola: a focus on agriculture and health', *BPC Papers*, 2:3, 1-36.

Jobelius, Matthias (2007) ,New powers for global change? Challenges for internal development cooperation', *FES Briefing Paper* 5, 1-12.

Katz, Rebecca et al. (2011) 'Defining health diplomacy: changing demands in the era of globalization', *Milbank Quarterly*, 89:3, 503-523.

Kickbusch, Ilona et al. (2013) *Global Health Diplomacy: Concepts, Issues, Actors, Instruments, and Cases* (New York: Springer Publishing).

Kickbusch, Ilona et al. (2007) 'Global health diplomacy: the need for new perspectives, strategic approaches and skills in global health', *Bulletin World Health Organization*, 85:3, 230-232.

Kothari, Uma (2005) 'Authority and expertise: the professionalisation of international development and the ordering of dissent', *Antipode*, 3, 425-446.

Leander, Anna; Aalberts, Tanja (2013) 'Introduction: the co-constitution of legal expertise and international security', *Leiden Journal of International Law,* 26:4, 783-792.

Lechini, Gladys (n.d.) 'Middle powers: IBSA and the new South-South cooperation'. Nacla Reporting on the Americas, <https://nacla.org/article/middle-powers-ibsa-and-new-south-south-cooperation>, accessed 10 September 2016.

Lee, Kelley and Smith, Richard (2011) 'Global health diplomacy: a conceptual review', *Global Health Governance*, 5:1, 1-12.

Lewis, David and Mosse, David (2006) *Development brokers and translators: the ethnography of aid and agencies* (Bloomfield: Kumarian Pressa, Inc.).

Li, Anshan (2010) 'Chinese medical cooperation in Africa. With special emphasis on the medical teams and anti-malaria campaign'. Discussion Paper 52, Nordiska Afrikainstitutet (Uppsala), 1-27.

Maldonado, Nicole (2014) 'The World Bank's evolving concept of good governance and its impacts on human rights', Doctoral workshop on development and international organization, Stockholm, Sweden.

Mawdsley, Emma (2015) 'Development geography 1: cooperation, competition and convergence between 'North' and 'South', *Progress in Human Geography*, 1-10.

Mawdsley, Emma (2012) *From Recipients to Donors: Emerging Powers and the Changing Development Landscape* (London: Zed Books).

Milani, Carlos R.S and Lopes, Roberta N. (2014) 'Cooperação Sul-Sul e *Policy Transfer* em Saúde Pública: análise das relações entre Brasil e Moçambique entre 2003 e 2012', *Carta Internacional*, 9:1, 59-78.

Modi, Renu (2010) 'The role of India's private sector in the health and agricultural sectors of Africa' in Fantu Cheru and Cyril Obi (eds) *The rise of China & India in Africa* (London: Zed Books).

Patel et al. (2011) 'Research and markets: an essential report on the market for pharmaceuticals in Brazil, Russia, India & China 2009' <http://www.businesswire.com/news/home/20090908005790/en/Research-Markets-Essential-Report-Market-Pharmaceuticals-Brazil>, accessed 28 August 2016.

Price, Gareth (2004) 'India's aid dynamics: from recipient to donor?', Asia Programme Working Paper, Chatham House, 1-14.

Quadir, Fahimul (2013) 'Rising donors and the new narrative of 'South–South' cooperation: what prospects for changing the landscape of development assistance programmes?' *Third World Quarterly*, 34:2, 321-338.

Roa, Alejandra C. and Silva, Felipe R. B. (2015) 'Fiocruz as an actor in Brazilian foreign relations in the context of the Community of Portuguese-Speaking Countries: an untold story', *Images*, 22:1, 1-16.

Ruger, Jennifer P. and Ng, Nora Y. (2010) 'Emerging and transitioning countries' role in global health', *St Louis U J Health Law Policy*, 3: 2, 253-289.

Russo, Guiliano et al. (2014) 'On the margins of aid orthodoxy: the Brazil-Mozambique collaboration to produce essential medicines in Africa', *Globalization and Health*, 10:70, 1-8.

Russo, Guiliano and Shankland, Alex (2013) 'Brazil's engagement in health co-operation: what can it contribute to the global health debate?' *Health Policy and Planning*, 1-5.

Sengupta, Amit and Prasad, Vandana (2011) 'Developing a truly universal Indian health system: the problem of replacing "health for all" with "universal access to health care", *Social Medicine Editorial*, 6:2, 69-72.

Ventura, Deisy (2013) 'Public health and Brazilian foreign policy', *Sur- International Journal of Human Rights*, 10:19, 95-114.

World Health Organization (2014) *South-South and triangular cooperation in health. Current status and trends*. Summary of findings from an analysis undertaken on behalf of IHP+.

Xu, Dong et al. (2010) 'Reformation of medical education in China', *The Lancet*, 375:9725, 1502-1504.