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Business as usual? The role of BRICS co-operation in addressing health system priorities in East and Southern Africa

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Abstract

There has been increased interest in whether "South-South" co-operation by Brazil, Russia, India, China and South Africa (BRICS) advances more equitable initiatives for global health. This article examines the extent to which resolutions, commitments, agreements and strategies from BRICS and Brazil, India and China (BIC) address regionally articulated policy concerns for health systems in East and Southern Africa (ESA) within areas of resource mobilization, research and development and local production of medicines, and training and retention of health workers. The study reviewed published literature and implemented a content analysis on these areas in official BRICS and ESA regional policy documents between 2007 and 2014. The study found encouraging signals of shared policy values and mutuality of interest, especially on medicines access, although with less evidence of operational commitments and potential divergence of interest on how to achieve shared goals. The findings indicate that African interests on health systems are being integrated into south-south BRICS and BIC platforms. It also signals, however, that ESA countries need to proactively ensure that these partnerships are true to normative aims of mutual benefit, operationalize investments and programs to translate policy commitments into practice and strengthen accountability around their implementation.

Introduction

There has been increased interest by political analysts, policy makers, researchers and development practitioners in the role of "South-South" development initiatives pursued by Brazil, Russia, India, China and South Africa (BRICS) (The Financial Times 2014; Becker 2013; Stuenkel 2014, 2015; Bond and Garcia 2015; Naude et al., 2015; TSSO 2015; UNOSSC 2015). There has also been debate about whether or not these policies represent a paradigm shift in global health partnerships between emerging and developing economies (Gold 2012; O'Neill 2013; Harmer 2013; Harmer and Buse 2014). There are discussions about the BRICS influence on World Health Organization policies (Gautier et al., 2014), the ability of BRICS to create greater access to medicines (Yu 2008), and the appeal of "no strings attached" health aid associated with BRICS co-operation (Cabral et al., 2014). BRICS co-operation has been observed to "have great potential to move … towards reducing the current gaps in health outcomes and introducing greater fairness" (Chan 2011). BRICS initiatives are often seen as an alternative to Western driven "business as usual" in terms of development policy (The Guardian 2014; Bond and Garcia 2015). They have been assumed to represent a form of South-South co-operation with potential for strengthening health systems and addressing the social determinants of health, in contrast to disease specific programs found in many aid arrangements (Loewenson et al., 2014).

Brazil, India and China (BICs) are drawing increased attention for their new forms of international development co-operation and "South-South" partnerships for health with low- and -middle income countries. Their need for mineral, energy, land and other African resources has generated increased trade and development agreements that could open opportunities for more equitable forms of development co-operation than found in the development policies of the Group of Eight (G8), World Bank and International Monetary Fund (IMF)-led Washington consensus (Hickel 2012; O'Neill 2013; Naude et al., 2015). Chinese diplomacy is self-articulated as being based on principles of equality and mutual benefit. India's foreign policy goals include intentions to improve the international economic and political order. Brazil's developmental foreign policy aims to pursue "structural co-operation in health" in a rights-based approach that addresses health determinants. In all three cases, the BIC countries explicitly project a foreign policy image that is cooperative and equitable (Loewenson et al., 2014; Chaturvedi 2005; Gagnon 2012).

Within a research program of the Regional Network for Equity in Health in East and Southern Africa (EQUINET) on the role of global health diplomacy (GHD) on health systems in Africa, this study investigates co-operation forums between BICs individually and BRICS as a group, and the regional organizations in East and Southern Africa (ESA) that are involved in health. These organizations include the East African Community (EAC), East, Central and Southern African Health Community (ECSA-HC), Southern African Development Community (SADC) and the African Union (AU). In doing so, the authors investigated the extent to which BRICS and BICs resolutions, commitments, agreements and strategies represent forms of co-operation that address regionally articulated policy concerns for health systems in ESA countries. The investigation is focused

on three areas that were prioritized in a 2010 consultation at the ECSA Health Community Directors Conference and Regional Health Ministers policy forum, consisting of 27 people from 10 countries that defined areas of focus for the EQUINET research program on GHD, 1) *Resource mobilization for comprehensive systems* to accelerate achievement of development goals on child and maternal health; 2) *Technology and skills transfer* for research and development and local production of medicines, and; 3) training and retention of African *health workers* (Loewenson et al., 2011). The study explored the priorities articulated in ESA regional policy forums on these areas; and the normative and practical commitments presented for health development in these three areas within policy statements, agreements and commitments of BRICS and BICs and their level of synergy with ESA regional priorities. Finally, the authors interpret the relationship between ESA priorities and BRICS/BICs commitments in these three areas for how far they represent mutually beneficial forms of "South-South" co-operation for health.

Methods

This research, implemented within the EQUINET regional program, is based on a desk review conducted between June and September 2014 of existing English language books, journal articles, book chapters, news and internet articles pertaining to BRICS and their role in health co-operation in ESA. A content analysis was carried out on official policy documents published by BRICS/ESA regional bodies and other multilateral diplomatic BIC documents regarding health in Africa published between 2007 and 2014; this time period was chosen because BRICS forum meeting preparations began in 2008.

Literature Review

Relevant literature was located through an extensive online search using terms related to BRICS, Brazil, India, China and health development and co-operation in countries in Africa and more specifically in Africa and with regional organizations: SADC, ECSA-HC, EAC and with AU. Searches were conducted in Google, Google Scholar, Google Books, and the PubMed/Medline databases for publications post-2005, to approximately coincide with the 2007-2014 period under review. A total of 790 documents were found using the search terms in all databases. Titles were reviewed by two authors for relevance, leaving a total of 56 papers, and the abstracts were further reviewed by three authors to provide 38 sources; these full papers were reviewed by three authors and included in the literature review. A snowballing technique from all authors identified other applicable or widely cited literature referenced in the articles identified in the initial selection. The saturation point was reached when the same sources appeared in multiple bibliographies, and when additional articles found did not have relevance to the key aims of this project. Manual content analysis of the included documents was used to extract evidence on co-operation between ESA and BICs/BRICs countries and regional organizations within the key themes for the work identified in the introduction; the findings from the initial content analysis were reviewed by all authors.

Policy Review and Content Analysis
The content analysis of the BICs and ESA policy documents was organized in two phases: first, a manual and Nvivo content analysis of health policy priorities within the three focus areas in ESA regional policy documents; and second, a manual and Nvivo content analysis of BRICS/BICs related policy documents to input to a comparative analysis of how far the aforementioned ESA priorities are reflected in official BRICS/BIC policies and agreements relating to Africa.

The content analysis was implemented first manually, capturing stated background conditions, policy areas and recommendations and regional strategies and areas for international co-operation associated with the three focus areas: i) *Resource mobilization for comprehensive systems* on maternal and child health; ii) *Technology and skills transfer* for research and development and local production of medicines, and; iii) *training and retention of health workers*.

The manually captured data was then analyzed using the Nvivo 10 software package to search for and document key terms related to the three health areas of concern. The "document coverage", shown in the tables in the findings, refers to the share of total text in the document dedicated to the respective area in terms of the key words and related text. Various measures were used to strengthen data quality. Repeated readings and word queries were used to refine the categories and eliminate irrelevant themes. Single words or phrases were interpreted in the context of the sentence and paragraph where they were found. Attention was given to word groups with similar meanings, such as: access to medicine, access to safe medicines; and right to health, a rights approach to health.

The first phase of content analysis covered 39 regional agreements, policy statements and resolutions of ministerial meetings generated by the EAC, ECSA-HC, SADC and the AU between the years 2006 and 2014 (included in the references). These documents were obtained online from the websites of the organizations and directly from key informants. Only official public domain documents were used in order to allow for validity and consistency in the comparative analysis.

While ESA documents from 2006 to 2014 were used to identify the regional health priorities within the three focus areas, the content analysis of the BICs documents was limited to the period 2008-2014 as this directly corresponds to the period of concurrent BRICS Summits and BIC related foreign policy initiatives relevant to health and African development. These included forums such as the BRICS summit, UNASUR-AU forum and China-Africa forum.[1]

[1] The BRICS Summit is an annual diplomatic meeting of heads of state and government of the BRICS, that includes Brazil, Russia, India, China and South Africa, with seven summits held to date. The Union of South American Nations (Unasur)- AU forum have met in 2006, 2009, 2013 and 2014 to strengthen international co-operation between the two regions. The Forum on China Africa co-operation (http://www.focac.org/eng/) has held 6 Ministerial conferences since its formation in 2000 involving ministers from China and African countries on international co-operation and partnership between China and African countries.

The findings from the content analysis of the ESA and BICs/BRICS documents were compared to identify the extent of conformity between the policy priorities and strategies of ESA and those of BIC/BRICs. Within Nvivo, "text search" queries were conducted to search for common themes in all sources within the three focus areas, including synonyms, specializations, and stemmed variations. The Nvivo software was used to manage interrelated terms such as 'access to medicine' and "affordable medicine" and to code occurrences of concepts/ terms that were associated with each other, such as "technology transfer", "research development" and "manufacturing". The stated health priorities in the ESA documents and in the BICs/BRICS documents included were separately ranked and their weighting across the different regional bodies compared. The common health priorities of ESA related bodies were compared against top health commitments and strategies of the BRICS-related bodies. The next section presents these findings in order to explore how far, within these areas, the articulated aims of health co-operation as presented by BRICS and BICs countries relate to the priorities for health system development as articulated in the ESA region.

The work faced various limitations. The study could only access policy documents and agreements that were in public domain and made available within the time frame of the work. The search and review included documents in English (the language used for formal documents of the regional policy bodies), but this excludes documents in Portuguese that may more directly report on Brazil's co-operation with Portuguese speaking countries in the region (Mozambique and Angola). Despite these limitations the analysis of the policy documents shows relatively robust and reliable trends and allows insightful comparative analysis on existing policy gaps.

Findings

Literature review

The small number of sources located during the literature review indicates a relative paucity of scholarship on BRICS health development co-operation in Africa, as noted by other authors (Chaturvedi and Thorsteinsdottir 2012; Harmer et al., 2013; Ruger and Ng 2010). The increasing number of documents over time however suggests a growing interest in the BRICS role within global health. The literature suggests that BRICS/BICs co-operation with ESA had several potential, and already actualized, benefits for the region. Loewenson et al., (2014: 12) note that, "[t]he growth of south-south alliances has provided new opportunities for African countries to widen domestic policy space and to increase leverage in global processes", a view echoed by Hwenda et al., (2011).

The literature suggests that whether in relation to global health, or more specifically in relation to co-operation with African countries, BRICS countries do not operate as a unified block. Their internal political composition, economic structures, international goals, and historical experiences lead to differences in their approaches. Thus, Harmer et al., (2013: 10) "found little evidence to support the assertion that the BRICS are influencing global health, although

individual BRICS countries are becoming more vocal and active in shaping, and indeed leading, global health movements". This is echoed by McKee et al., (2014) and others exploring the policies of BRICS countries individually rather than as a block, particularly in relation to Brazil (Cabral, et al., 2014; Lee et al., 2010; Russo et al., 2013; 2014; Russo and Shankland, 2014) and China (Center for Strategic International Studies, 2011; Liu et al., 2014).

Gautier et al., (2014) found some evidence of BRICS operating as a coordinated bloc to affect WHO reform, but suggests that this was more in rhetoric than in practice. BRICS policies are reported to display common features of horizontal co-operation, non-interference, aid without policy-related conditionality and fewer procedural conditions compared to traditional funders, and a more explicit and acknowledged link between development - and geostrategic and commercial interests (Cabral et al., 2014; Harmer et al., 2013; Russo et al., 2014). While commitments have been made by the BRICS as a block to promote global health, some observe that the formation is at too early a stage for evidence of visible changes (Tytel and Callahan 2012; Stuenkel 2012). Individual countries within BRICS are noted to have had stronger co-operation with and impact on health systems through bilateral agreements, rather than as BRICS as a whole (Cabral et al., 2014; Lee et al., 2010; Russo et al., 2013, 2014; Russo and Shankland 2014; Center for Strategic International Studies 2011; Liu et al., 2014). BICs countries, and Brazil in particular, have made commitments to capacity development, knowledge transfer, health worker training and support of local medicines production (Cabral et al., 2014; Ruger and Ng 2010; Russo et al., 2013; 2014). No papers were found in the literature that explored how far these policy commitments were delivered on, nor how far the normative policy statements of BRICS/BICs translate into specific agreements or strategies in relation to expressed ESA priorities and policy interests.

Several documents focused on more specific aspects of BRICS policy, especially on access to and production of medicines and vaccines (Kaddar et al., 2014; Chaturvedi and Thorsteinsdottir 2012; Yu 2008), including with African countries and particularly with Portuguese-speaking African countries (Russo et al., 2013; 2104). Two papers raised BRICS approaches to specific diseases, including neglected tropical diseases (Cashwell et al., 2014) and tuberculosis (Creswell et al., 2014).

African leaders have called for south–south co-operation to be strengthened, including collaboration with BRICS countries, to scale up investment in Africa's pharmaceutical sector, especially for generic essential medicines (AU 2013). It is argued that there are perceived lessons from BRICS countries' successful experience in leveraging the response to AIDS as an engine for innovation, for research and development and for local production in Africa (Sidibe et al., 2014). Despite this, and the same call in BRICS policy documents, there is limited documentation of the role of African actors within BRICS processes or within the changing architecture of global health governance, especially from an African perspective. Only three papers found offered a view from within the continent (Kitaw & Mariam, 2012; Loewenson et al., 2014; Hwenda et al., 2011). There is limited literature examining the forums and spaces within which such co-

operation takes place. There is note of greater influence on global policies when African countries have acted collectively, as observed in African engagement on intellectual property and access to medicines, on responses to HIV and AIDS and on health worker migration (Loewenson et al., 2014), and by the AU in its 2012 Roadmap for Shared Responsibility and Global Solidarity for AIDS, TB and Malaria in Africa to leverage diversified HIV financing and access to and local production of essential medicines (AU 2012). The impact of such collective action is noted to be stronger when ESA priorities align with BRICS priorities, such as in the negotiation of flexibilities provided within the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), such as for compulsory licensing and parallel importation[2] to address issues of medicines access and on intellectual property regimes (Harmer et al., 2013; Ruger & Ng, 2010; Yu, 2008).

Given the lack of published literature, the study explored formal ESA regional and BRICS and BIC policy documents to clarify the relationship between stated policy aims of ESA related bodies and how those aims are translated and mirrored in BRICS/BIC related forums. The next section presents the findings on this relationship, to assess how far articulated normative aims of health co-operation, as presented by BRICS and BICs countries, relate to the agendas and policies for health system development expressed by ESA policy-makers.

Policy document analysis

Common ESA policy priorities within the three focus areas

The detailed manual content analysis found that the chosen three areas of focus were raised with a high frequency in all three regional policy forums (SADC, EAC, ECSA-HC) confirming their policy relevance. Table 1 shows that this was also found in the complementary Nvivo analysis.

	EAC documents	**ECSA-HC documents**	**SADC documents**
	Average coverage (%)		
Maternal and Child Health	33.7	30.7	35.6
Medicines and Pharmaceuticals	34.0	27.7	38.3
Human Resources for Health	29.2	34.2	36.6

Table 1: Document coverage on specified issues

These issues were also commonly raised in the AU. Both from manual and Nvivo analysis AU and regional bodies gave similar relative space to the three areas and used similar language to define them. Resource mobilization for maternal and child health (MCH) was given less coverage than technology and skills

[2] Compulsory licensing refers to the right to grant a license, without permission from the license holder, on various grounds including public health; parallel importation refers to the right to import products patented in one country from another country where the price is lower. These and other flexibilities are provided in the TIPS agreement when it is necessary to protect public health

transfer for local medicines production and retention and training of health workers (See Table 2).

Area	AU documents		ESA documents	
	Average coverage (%)	Rank	Average coverage (%)	Rank
Maternal and Child Health	30.88	3	29.78	3
Medicines and Pharmaceuticals	35.25	1	31.67	2
Human Resources for Health	33.87	2	38.55	1

Table 2: AU and ESA (*) document coverage and ranking of health areas
(*) ESA coverage combines the three regional bodies

Resource mobilization for maternal and child health

MCH was raised across all ESA regional bodies as a health priority and target for additional resource mobilization at national and regional levels, particularly given the inclusion of MCH goals in the Millennium Development Goals (MDGs). ECSA-HC suggested "slow progress toward attaining the health-related MDGs and concern about the persistently high death rates of mothers, newborn babies and young children" (ECSA-HC 2007:3) as did EAC (EAC 2013b:30). SADC noted differences across member states on basic indicators, but observed that MCH outcomes were still "relatively poor" (SADC 2003a: 17). The AU reported that "Africa is still not on track to meet the health MDG targets" (AU 2007a:2).

The manual and Nvivo analysis identified three policy priorities in MCH: i. additional funding; ii. additional personnel and iii. a stronger focus on reproductive health, specifically in relation to prevention of vertical transmission and reproductive health education. All the regional documents cited the need for increased health budgets to fund MCH and to meet the Abuja commitment of 15% government budgets allocated to health (AU Heads of state 2000). In 2011, the EAC recommended collective allocation by member states (Kenya, Tanzania and Uganda) of US$2.5 million to meet the additional costs of MCH regional programs representing 4.3% of the overall EAC health development budget (EAC 2011a). In 2010 SADC identified the need to harmonize protocols for the management of MCH across member states, committing a further US$100,000 at the regional level to implement the SADC Sexual and Reproductive Health (SRH) strategy by 2015: this was within the overall budget of US$2.5 million for its Regional Health Business Plan (SADC 2010). In general, the Nvivo analysis raised common priorities for: i. increased budgets for MCH; ii. improved MCH training and qualification standards for health workers iii. alignment of reproductive health in professional education and schools; iv. reliable procurement of ARV and essential medicines for prevention of vertical transmission and v. promotion of a "rights-based approach" to child and maternal health.

All regional bodies emphasized the links between health and economic development and understood MCH as embedded in deeper social, economic and trade challenges, in the same was as they did for other health challenges (ECSA-HC 2014; ECA 2013a; SADC 2013c). For example the AU Health Strategy 2007-

2015 document states, "an inter-sectoral approach is essential for scaling up sustainable interventions" for MCH and other health programs (AU 2007a:5). China and India were often singled out by regional organizations in ESA as potential health partners, generally or in relation to technology co-operation, discussed further below.

Technology and skills transfer for research and development and medicines production

There was common emphasis across the policy documents of the three regional bodies and the AU on the need to increase local medicines production in Africa. They all noted this to be essential to improve access to medicines and for more reliable and adequate supply of affordable medicines, especially generic essential medicines (SADC 2003a; AU 2007b; EAC 2011b; ECSA-HC 2008a). All regional organizations raised the need for increased research and development of traditional medicines, recognizing that "raw materials" from plants and biodiversity in Africa were often exported with the medicines produced outside Africa and then reimported at substantial cost (SADC 2007; EAC 2011b; ECSA-HC 2014; AU 2007b). The AU, EAC, ECSA HC and SADC policy documents concurred on the barriers to local production, namely the lack of technology, capital and of technical expertise. SADC noted the still "inadequate levels of technology transfer into African countries" (SADC 2007:1) as did the AU, EAC and ECSA HC (EAC 2011b; ECSA-HC 2014; AU 2007b).

In the short term, in the absence of locally produced medicines, all regional bodies and the AU proposed regional bulk purchasing or pooled procurement supported by harmonized regulation and policy on medicines (ECSA-HC 2007; EAC 2013a, SADC 2010). The manual and Nvivo analysis identified three further ESA priorities to enhance domestic research and production of medicines: (i) increased training for skills development in the pharmaceutical sector; (ii) attraction of capital investment in local production through African investment or co-operative partnerships, and (iii) harmonizing laws and policies on quality control and facilitating WHO prequalification to support local medicines production.

The policy documents raised global level issues such as management of counterfeits and substandard medicines, exploiting TRIPS flexibilities and meeting WHO quality guidelines that lead to international co-operation. Co-operation with countries on technology transfer and capital investment was raised, specifically with China and India rather than with BRICS/BICs as a group (SADC 2007; EAC 2011b; ECSA HC 2014; AU 2007b). The emphasis given to these global level issues and the international co-operation needed for capital investments and skills transfers suggest that these areas would benefit from international co-operation, including with countries in BRICs. For example, the AU Pharmaceutical Manufacturing Plan for Africa raises the point that co-operation with India and China has "perceived benefits" for "local production" and in "facilitating technology transfers", thus helping to "enhance self-sufficiency in drug supply" and "ensuring access to essential medicines for countries in need" (AU 2007b:2; AU 2012).

Health worker training and retention

Across the EAC, ECSA, SADC and AU policy documents there was consensus on current drivers of the shortage of qualified health professionals relative to health needs, including "challenges in recruiting health professionals" (EAC 2013a) to work in rural areas (ECSA HC 2014), inadequate health training programs (AU 2007a), and the retention of trained health workers (SADC 2013c), within and across countries in the region. The shortfalls were identified as undermining achievement of the MDGs and other health goals, and limiting policies such as local production of and access to medicines. The ECSA HC noted "the need for leadership and policies on management of health workers" to address these challenges (ECSA 2014:3) as did the other regional bodies (EAC 2013a; SADC 2013c; AU 2007a).

Nurses, doctors, midwives and pharmacists were most commonly raised categories of health workers, and training and retention was more commonly linked to nurses than other categories. The Nvivo analysis identified three key ESA priorities to address shortages of critical skills in the health sector across the regional organizations, in order of frequency, as: i) the robust measures to retain existing health professionals; ii) wider and better quality training programs and; iii) leadership in strategies for health worker recruitment.

The regional documents called for coordination of strategies within and across countries to address these challenges. ECSA-HC called for inter-ministerial collaboration between health and "other ministries such as finance, education and public service" (ECSA-HC 2008a:6). SADC's 2013 human resources for health (HRH) strategy document recommended harmonizing accreditation and training programs and reinforced earlier policy for SADC countries to only recruit health professionals through government-to-government agreements (SADC 2013a, 2013b; SADC 2001). All regional bodies called for increased resources to address health worker shortfalls (ECSA HC 2014; EAC 2013a; SADC 2013c; AU 2007a). They all referred to the global *WHO Global Code of Practice on the International Recruitment of Health Personne*l (WHO 2010) but did not specify how member states should promote policy implementation, nor what implications it had for bilateral agreements with other countries, including BRICs.

BRICS and BICs related policies

Across the BRICS and BICs documents there is explicit statement of mutually beneficial cooperative policies for health. For example, the 2011 *BRICS Health Ministers' Meeting Declaration* stated that "public health is an essential element for social and economic development" and that "we are committed to support and undertake inclusive global public health co-operation projects, including through South-South and triangular co-operation … [and] to support other countries in their efforts to promote health for all" (BRICS 2011a:1-2). Terms promoting mutual co-operation are found in the BRICS documentation, such as: "common prosperity" (BRIC 2010:1), "reducing imbalances in global economic development" (BRIC 2010:2), "shared prosperity" (BRICS 2011b:1), "true partnership" (BRICS 2012:1), and "equitable and sustainable solutions for common health challenges" (BRICS 2013a:1). The *Forum on China-Africa*

Cooperation declares that it represents "a new type of strategic partnership between China and Africa featuring political equality and mutual trust, economic win-win co-operation and cultural exchanges" (FOCAC 2009a:1). The 2011 *Africa-India Summit* affirmed "that our partnership remains based on the fundamental principles of equality, mutual respect, mutual benefit and the historical understanding amongst our peoples" (Africa India Forum 2011b:1). These statements assert policy principles, but may be read as rhetorical in the absence of practical measures to realize them, as suggested by Gautier et al., (2014).

The Nvivo analysis suggests that while there are overlaps between the three ESA health priority areas and BRICS-related policy statements, there are also variations across BICs in the match between their international co-operation priorities and those of the ESA region. As shown in Table 3 below, the BRICS policies are more focused on pharmaceutical production and use of TRIPS flexibilities for medicine and vaccine procurement. The BRICS documents studied are more general, and the individual BICs country bilateral or multilateral policies and agreements offer more substance. In general the BRICS/BICs commitments tend to be vague and primarily focused on pharmaceutical policy, neglecting many other ESA health concerns. This is discussed further below.

Area	**BRICS/ BICs Bodies**	**ESA regional bodies**
Medicines and Pharmaceuticals	55.38	31.67
Maternal and child Health	23.38	29.78
Human Resources for Health	21.24	38.55

Table 3: Document coverage (%) in percent of health categories in combined BRICS and BIC documents relative to that of the combined ESA regional documents

The normative language used in the documents suggests the general acceptance of mutually beneficial cooperative policies for health. Within the policies public health is framed as essential for socio-economic development and the language of mutual co-operation is embedded throughout BRICS and BICs policy documentation, as noted above. This common statement of commitment in BRICS policies to South-South co-operation, equity, trilateralism, partnership and mutuality has been noted by other authors, but with limited further analysis of the implications or of implementation measures (Tytel and Callahan, 2012; Stuenkel 2012). As discussed below, our findings also provided less evidence of the substantive application of these normative intentions.

Resource mobilization for maternal and child health

The MDGs are referred to within BRICS and BIC documents in a general sense as goals to be achieved. The MCH goals are not given specific attention except in the more recent 2013 documents, where direct mention was made of reducing child and maternal mortality rates as a BRICS priority (BRICS 2013a; BRICS 2013c), including through "enhancing services and capacity building" (BRICS 2013c:1).

Some focus is thus being given to MCH, although without clarity on the implications for resource mobilization in achieving these goals. There is

reference to "enhanced financing support" (BRICS 2012:5), "exchange of best practice" (BRICS 2013c:1) and partnerships for development, but no details on how this will be operationalized nor how they may affect alliances on global negotiations in the UN summits on the post-2015 agenda.

As noted in the literature review, more concrete measures were more commonly found in country level agreements that articulated action plans than in outcome documents from ministerial summits. For example, in the *Declaration of Sharm El Sheikh Forum on China-Africa Cooperation's Action Plan* China committed itself to train 20,000 people in various sectors, including health, within Africa over three years with an additional US$1.5 million contribution to the AU's New Partnership for Africa's Development (NEPAD) for the training of nurses and maternity assistants and offered unspecified levels of debt relief for African countries (FOCAC 2009b:10). As noted in the methods, limited access to country to country agreements, especially those in Portuguese, means that it is not possible to make inferences on how far the co-operation between the BICs countries and African counterparts in this area is being operationalized.

Technology and skills transfer for local production of medicines
As shown in Table 3, pharmaceutical issues dominated the BRICS/ESA synergies in the policy documents. All post-2011 BRICS documents make common reference to "access to medicines" as a human right, to producing and accessing "affordable" and "generic medicines", including by using TRIPS flexibilities. All three BICs countries are medicine producers and as discussed later, themselves face patent protection challenges under TRIPS in exporting medicines. The policy documents position BICs as producers, sometimes in co-operation with African countries, to support "exportability of medical products produced in BRICS countries" (BRICS 2011a:2).

The documents analyzed express the need for "better collaboration to overcome barriers to access affordable medicines" in "a global health agenda for universal access to medicines" (BRICS 2011a:2), to "assure availability of affordable ARV drugs to developing countries" and that "trade agreements do not undermine TRIPS flexibilities" (BRICS 2013a:2). Recent policy documents stated a need for better "WHO Prequalification" procedures (BRICS 2011:2), and expressed commitment to collaborate on "technology transfer" and "capacity building" between BRICS states and developing countries (BRICS 2011a:2; BRICS 2013b:3), and to co-operate on infrastructure (BRICS 2013b).

There is thus significant overlap between ESA priorities and BRICS stated policy objectives. At the same time the language used in the BRICS documents suggest an orientation to "focus on the unique strength of BRICS countries" for "R&D and manufacturing" and to widen markets for medicines produced in BRICS countries. The *Second Africa-India Forum* in 2011 articulated a commitment to "fight against counterfeit medicines", to assure India's ability to provide safe and reliable access to medicines and to prosecute counterfeit producers (Africa-India Forum 2011b). India also proposed research co-operation in the area of traditional medicines (Africa-India Forum 2011a).

While there is synergy with ESA pharmaceutical priorities in relation to "access" and the possible offer of affordable medicines, there is less evidence of co-operation on support of the longer-term objective of local production in Africa. Further, there is no mention within BRICS documentation of assisting African initiatives for joint, pooled and bulk procurement/purchasing.

Health worker training and retention
While the BRICS-related documents explicitly mentioned the need for increased medical training and for more health professionals in Africa, there was only a generalized expression for "co-operation" toward "investment in human capital" (BRIC 2009: 5). The Nvivo analysis indicated that the documents gave more focus to training than retention measures and did not commonly specify types of professionals, although in individual cases they alluded to nurses, doctors and "maternity assistants". Notably there was no specific reference to training in pharmaceutical skills, despite its relevance to supporting medicines procurement and production. Individual BICs documents made more specific policy commitments in regional ESA forums on health workers. China committed to extending training and financial resources for the AU's NEPAD training of midwives in African countries, as well as for 3,000 medical personnel to control and treat malaria, to funding 100 postdoctoral fellowships (including in the health sector) and to increasing professional exchanges for better understanding of best practice in health (BRIC 2009). Commitments were also expressed by India in the *Second African-India Summit* in 2011 to develop training programs in HIV, TB and malaria, although without specifying the mechanisms for how this would be done (Africa-India Forum 2011b).

Discussion

The analysis of the EAC, ECSA-HC, SADC and AU policy documents confirmed the priority given by the 2010 ECSA-HC Ministerial meeting on health diplomacy to the three areas of focus for the EQUINET research, with similarly articulated health policy priorities found across regional bodies:

i. *Resource mobilization for MCH*: policy priorities include increased budgets for MCH; training and qualification standards for health workers, reproductive health in professional education and schools; reliable procurement of ARVs and essential medicines for prevention of vertical transmission and promotion of a "rights-based approach" to MCH.
ii. *Technology and skills transfer for medicine production*: policy priorities include/focus on skills development in the pharmaceutical sector; capital investment in local production and harmonized laws and policies on quality control and WHO Prequalification, with bulk procurement in the short term to support medicines access.
iii. *Health workers:* policy priorities include measures to retain existing health professionals; wider and better quality training programs and strategies for attracting health workers to areas of shortages.

These priorities were consistently raised across regional bodies during the period between 2008 and 2014, suggesting both their relevance and that they have not been responded to sufficiently. The three priorities have global dimensions, in relation to global goals (e.g. the MDGs), global agreements (e.g.

TRIPS and the WHO Global Code of Practice on the International Recruitment of Health Workers) and wider cross-border issues (e.g. trade in medicines). For all these reasons these priorities have pertinence for international co-operation.

In general, while there is normative recognition and encouragement from BRICS, and some evidence of specific plans and initiatives in both the literature review and policy analysis from all three BICs countries, it also appears that at this stage these policies may still be more normative than operationalized in practice (Gautier et al., 2014).

There is evidence that African priorities are included in BRICS documents, and increasingly so. The increasing attention to MCH issues, for example, may be due to rising attention to the impending deadline to meeting the MDGs, but also due to the consistent policy articulation of these concerns by African countries. It would be expected, given the broad policy positions stated in the literature review, that the co-operation between BICs/BRICS and African countries on issues such as child nutrition would apply a social determinants paradigm. Applying this would engage multidisciplinary approaches to address the agriculture, health, trade and other aspects of poor nutrition. The application of this paradigm could be investigated in follow up research.

The literature and early policy documents (pre-2011) suggest that specific African health issues rose in profile in the BRICS documents after the inclusion of South Africa in 2011 to form BRICS. Having an African state involved as a core member in BRICS policy may have motivated increased attention to African issues. It does, however, raise a concern for South Africa to balance its national interests in engagement in the BRICS with its commitments in the ESA region and its global diplomatic aspirations. The raised attention to African concerns may also have been motivated by increased economic and trade relations between the BICs and a range of African countries. This too would need separate investigation.

At the same time the evidence suggests that while the normative statements do open space to advance African policy interests, this cannot be assumed. The overlap between ESA and BRICS policies was stronger in the area of pharmaceuticals. However, the BRICS/BICs statements were focused more on access for BICs producers to African markets than for enabling local African producers. In a context in which BICs countries (specifically India and China) account for over 20% of pharmaceutical imports into Africa (IMS Health 2013) and in which the pharmaceutical industry in BICs countries is rapidly reorienting itself towards stronger patent protection (Aginam 2010), there is debate over whether or not South-South initiatives will lead to improved local manufacturing capacity in Africa. While there is a potential for BICs/BRICS to be a cohesive challenge to the influence of North Atlantic community, including in institutions such as the WHO, the interests of BICs/BRICS members appears to diverge in this area.

This divergence confirms an argument that African countries should not assume and should actively and collectively negotiate for their interests in areas such as

technology or skills transfer in their relations with BICs countries (SEATINI and CEHURD 2014; Holt et al., 2012; Owoeye 2014). The *African Union's Roadmap on Shared Responsibility and Global Solidarity* has been argued to provide a platform for negotiating this international co-operation. Equally important, it is argued to be a platform for building the regional collaborative arrangements that are necessary to strengthen the influence, capacities and trade within the Africa region that will advance local medicines production and technology transfer (Waning et al., 2010).

The findings highlight that there has been increasing collective voice, joint declarations and commitments over a range of policy issues, but that these are not yet translating into the same intensity of implementation or of accountability on agreed goals. The findings suggests that policy commitments made in BRICS forums that are relevant to the ESA region are more likely to be operationalized through specific bilateral agreements with specific BICs countries. While there was some limited evidence of this from our analysis, it would need to be tested further through exploring the specific country-to-country agreements between BICs and ESA countries and their implementation. Russo et al., (2014), noting Brazil's efforts to provide funding and expertise for the development of a pharmaceuticals factory in Mozambique, also discuss the problems encountered in getting the factory up and running, "[exposing] Brazil's lack of familiarity with the complexities of development project implementation in a context that is very different from its own" (Russo et al., 2014:76).

The findings indicate that there are regional dimensions to co-operation in health in all three focus areas. Capital investment, bulk procurement, harmonized laws, capacity building, research and development and infrastructure are areas identified in ESA documents where substantive regional and south-south commitments and plans may be expected to be found. While collective platforms such as the AU, SADC and EAC policies and roadmaps signal the intention of regional co-operation, the findings suggest limited co-operation on operational plans to build African regional capacities in science, technology and innovation (including R&D), on the management of intellectual property rights, on pooled procurement and on technology transfer. The agreement to establish the BRICS development bank (to rival the World Bank) came into force in the 7th BRICS Summit in 2015 and once funded the institution may provide more "practice" in these areas, than those presently found in the policies examined. This could be further investigated in follow up research.

Conclusions

Within policy statements, both ESA and BICs countries make links between their own national goals and their international co-operation in health. The study found encouraging signals of mutuality of interest. This appeared to be strongest on medicines access, although with potential divergence of interest on how to achieve this. The policy overlap was more evident where BICs economic interests aligned with ESA health priorities. It can, however, be argued that a deeper articulation of the nature of the mutuality of understanding, interests and benefit would be important to realize the stated intentions of south-south co-operation.

The literature reviewed highlighted that BICs and ESA countries have shared interest in promoting a more equitable global political economy, which addresses health determinants. BRICS countries have strong economic potential to shape, rather than adapt to, the global economy and the global health governance landscape, particularly following the financial crisis (Harmer et al., 2013). BICs and ESA countries have shared platforms and have held joint positions in global negotiations that reflect this interest, including on research and development of health technology, on neglected diseases, on TRIPS and other health determinants, and on responses to AIDS. This study finds the same policy values articulated in the south-south co-operation between BICs/BRICS and African countries. However, there is less evidence of operational commitments and goals, which would signal BRICS-ESA relations as being genuine alternatives to “business as usual”.

This calls for forms of co-operation that go beyond the current appetite for African agricultural and mineral commodities, where African countries have competitive advantage, to co-operations that support investments in human, technological and productive capacities in the continent. Further, in the interaction between ESA and BRICS, countries from each group may need to take clearer responsibility for operationalizing investments and programs that translate specific policy principles and commitments into practice and that strengthen accountability around their implementation. Follow up research could explore this further, by examining more recent bilateral agreements (across health-related sectors) between BRICS and ESA countries to assess the degree to which areas identified as having mutual benefit and that are relevant for health and health systems are being formally and mutually codified in practical terms, with measures for monitoring and reviewing compliance.

One test, for example, will be how far the BRICS Development Bank reflects the commitments in its functioning as an investment bank, development facility and forum for knowledge exchange. With the high interest in pharmaceuticals and technology transfer, the allocation of the area of access to medicines, vaccines and diagnostics to South Africa, China and India at the 2013 BRICS Ministerial meeting in Cape Town provides another important opportunity for more focused delivery and accountability and follow up review (BRICS 2013).

As presented in this article, there is evidence of integration of African interests in these south-south platforms. Yet it also suggests, as Yu points out (2000:389), that the challenge remains for African countries to ensure that partnerships between BRICS and the ESA region are true to the normative aims of mutual benefit.

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Disclaimer of interest
The authors declare that they have no competing interests.

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