Review Article

More Doctors Programme and the strengthening of Primary Health Care in Brazil: Reflections from the monitoring and evaluation of the More Doctors Cooperation Project

Joaquín Molina

OPAS/OMS no Brasil

Renato Tasca

OPAS/OMS no Brasil

Julio Suárez

OPAS/OMS no Brasil

Elisandréa Sguario Kemper

OPAS/OMS no Brasil

ABSTRACT

Universal Health Coverage has been a challenge for the majority of the world's health systems. Efforts to strengthen systems through universal coverage with the aim of improving living conditions and access to health services are optimized when this is based on quality Primary Health Care (PHC). A national policy has been being developed in Brazil since 2013 aimed at strengthening human resources for PHC. This policy is called the More Doctors Programme and is considered to be an important investment for PHC development in Brazil's Unified Health System. The purpose of this article is to present the main results of the More Doctors Programme monitoring

and evaluation actions undertaken by Pan American Health Organization. The More Doctors Programme has the potential to strengthen PHC in Brazil. It contributes to service improvement, puts PHC at the heart of the discussion on public policies, increases the interest of the scientific community in evaluating high-investment public policies, in addition to providing satisfactory responses to the population's health needs and thus contributing to service user satisfaction.

Keywords: Universal coverage; Primary health care; More doctors

Introduction

Universal Health Coverage has been a challenge for the majority of the world's health systems [1]. Efforts to strengthen systems through universal coverage with the aim of improving living conditions and access to health services are optimized when this is based on quality Primary Health Care (PHC) [2]. This means timely access to goods and services by all people, without distinction and in accordance with their health needs.

A national policy has been being developed in Brazil since 2013 aimed at strengthening human resources for PHC. This policy is called the More Doctors Programme (*Programa Mais Médicos*, in Portuguese) and is considered to be an important investment for PHC development in Brazil's Unified Health System (*Sistema Único de Saúde – SUS*, in Portuguese) [3].

Emergency provision of doctors for PHC is one of the elements of the More Doctors Programme. The Pan American Health Organization / World Health Organization (PAHO/WHO) works technically developing the More Doctors Cooperation Project, a partnership between PAHO/WHO, the Brazilian Government and the Cuban Government to enable thousands of Cuban doctors to come and work in

PHC in the Brazilian Unified Health System. Developing the More Doctors Cooperation Project is complex, given that it involves mechanisms of articulation between national, state and municipal governments, as well as mobilizing a large volume of both human and financial resources to achieve its ambitious goal of scaling up access to Primary Health Care and its quality in Brazil [4].

Among the cooperation actions provided for in the More Doctors Cooperation Project, PAHO/WHO prioritizes monitoring and evaluating the Programme, developing strategies that range from monitoring the working conditions of Programme doctors to conducting evaluation studies and research on the outcomes of the work of these doctors in PHC services. Several studies have been carried out using different approaches and methods, based on a monitoring and evaluation Framework. Their results have been positive and corroborate the scientific evidence produced by diverse academic institutions showing that the More Doctors Programme is an effective policy for strengthening PHC.

In addition to the studies and research undertaken directly by PAHO/WHO, it has also provided support to external research, forming partnerships with researchers and academic institutions

with the aim of increasing the production of scientific evidence covering all potential areas of the Programme's results, including the value added by the Programme to strengthening PHC and the Brazilian Health System.

The purpose of this article is to present the main results of the More Doctors Programme monitoring and evaluation actions undertaken by PAHO/WHO. These results can be seen to contributing to the themes set forth in the international mandates agreed between the Member Countries, namely PHC and access to universal health coverage as a target for the development of health systems, thereby making effective people's right to health [5].

Primary Health Care and Universal Coverage as pillars of Monitoring and Evaluation

The singularity of the provision of doctor's element of the More Doctors Programme arises, among other characteristics, from its quantitative dimensions – more than eighteen thousand medical professionals have been incorporated into Brazil's national health system – and also from its territorial extent, as it has reached all the regions of the country. This involves a huge diversity of socio-economic conditions as well as producing changes in diverse contexts. This diversity of experiences makes the More Doctors Programme a rich source of reflection regarding the progress and the challenges of this public policy and its potential to transform practices within PHC and consolidate its domains [6].

The More Doctors Cooperation Project has been considered by the United Nations (UN) to be one of the relevant good practices towards implementing the Sustainable Development Goals (SDG), especially SDG #3 to ensure healthy lives and promote well-being for all at all ages. The UN document also states that the More Doctors Cooperation Project can be replicated and is of potential benefit to any country that decides to adopt it. The document also highlights that while Brazil has made a substantial economic investment in order to implement the project; its long-term benefits tend to outweigh the cost of the investment. Sharing knowledge is one of the most important contributions in terms of PAHO participation and added value to the More Doctors Programme which, along with the Member States, have shown great interest in learning more about the Programme and its South-South cooperation initiative [7].

The monitoring and evaluation undertaken by the More Doctors Cooperation Project involves processes that are intrinsic to the execution of the More Doctors Programme, focusing on emergency provision of doctors but also dialoguing with other elements of the Programme. The evaluation results are of interest to all service managers and stakeholders involved in all the processes of the More Doctors Programme, and of course to Brazilian society which is after all the Programme's main beneficiary.

Given that PAHO/WHO is an international health cooperation body, the lessons learned through the evaluations of the More Doctors Programme are shared as a contribution to other countries in the Americas working to scale up and strengthen PHC and ensure universal health access and coverage.

Although the context in which the More Doctors Programme is implemented is determined by Brazil's economic, political and social reality, it also involves a diversity of experiences arising in the country's different realities which dialogue with policies and actions on the regional, local and international level [6].

Understanding the ensemble and the diversity of experiences produced in Brazil, as well as systematizing, evaluating and sharing knowledge, is an important step towards achieving PHC expansion and consolidation in Brazil within the context of universal coverage.

The first years of the More Doctors Programme brought considerable interest on the part of the academic and scientific community in evaluating it, in view of its dimension, magnitude and high levels of service user and service management satisfaction. Currently, following the first years of implementation, the focus of research on the More Doctors Programme is tending to change, given that the implementation evaluations, based on structure and process indicators, are being complemented by studies intended to evaluate results and seeking to measure the impact of this important policy for strengthening the health system and, above all, the health of the population.

In view of this, PAHO/WHO is restructuring the Cooperation Project's monitoring and evaluation actions, focusing on results and the achievement of its objectives. Based on the premise that the More Doctors Programme potentializes PHC and that it can contribute to the Brazilian health system making progress towards universal coverage, the pillars supporting the evaluations have been PHC as the structuring axis of the health system and universal coverage as a target to be achieved in order for the country to advance with ensuring the Right to Health.

Reflections based on the More Doctors Cooperation Project monitoring and Evaluation Results

Meta-analysis of scientific production on the more doctors programme

The meta-analysis study was conducted with the purpose of systematizing scientific production about the More Doctors Programme since it was institutionalized in 2013 up until November 2016. It seeks to characterize existing production about the Programme, summarizing and analyzing the main results of the studies carried out, as well as to identify their relevance for the national policy so as to provide input for improving the Programme in Brazil.

The results show that there has been great interest on the part of the academic and scientific community in evaluating the Programme (223 publications as at October 2016). The majority of the articles published (57%) dealt with the element relating to the emergency provision of doctors. Positive effects were identified in 62% of the articles and only three (6%) found equivalent positive and negative effects. Negative results were not predominant in any of the articles analyzed. A change in the position taken by authors could be seen as the Programme was implemented. Most of the particularly unfavourable articles

were written in 2013, whereas those that were very favourable were written in 2015 [8].

One of the aspects most studied in the published articles was equity, analyzed above all by investigating the distribution of medical professionals in Brazilian municipalities before and after the emergency provision thereof as encouraged by the Programme, with emphasis on the extent to which distribution was in fact coherent with the needs and priorities identified. Another approach towards equity was the measurement of improved access or reduced inequalities in accessing PHC services.

With regard to the results, the studies point to diverse positive aspects of the Programme, such as the increased doctor/inhabitant relationship in neglected locations, including rural areas, areas below the poverty line, those distant from large urban centres and those with indigenous populations; reduction in the number of municipalities with a shortage of doctors working in PHC and reduction in the scarcity of doctors in the country's North and Northeast regions; convergence of investments between different programmes aimed at PHC, as this strengthens the possibilities of effectively modifying the quality of care provided at this level of the system [8].

The dimension of scientific production about the Programme, involving researchers from the most diverse Brazilian research institutes, was an indication of the importance of this policy within the national context. The results of the studies point to important contributions made by the Programme, whether in relation to the development of new practices, or with regard to service user satisfaction and the improvement of some health indicators.

The consequence of these effects, as perceived by social stakeholders, has been the growing approval of the Programme, as demonstrated in the analyses of the opinion papers, from the perspective of both service managers and service users.

Knowledge transfer and innovations in PHC services

Qualitative studies have been conducted to identify the extent to which the Programme favours exchange of knowledge and the production of innovations at the local level. By means of case studies of selected Brazilian municipalities where the Programme is in place and interviews with Programme doctors and PHC teams, innovative practices have been identified in health clinic management, service organization, clinical practices, collective actions and in the community [9-12].

The case studies and the results of the interviews reinforce the evidence that doctors with the appropriate profile and training to work in PHC produce the best results, given that they comply with PHC norms and guidelines established in Brazil and are also more disposed to make the population welcome and understand their health needs, in view of them being foreign professionals with extensive experience and training in family and community medicine [13]. This also enables the exchange of knowledge, since the doctors share different prior experiences and knowledge learned in other contexts, thus facilitating team work and increasing the potential of the results of actions and

services. With regard to innovations in services, these have been characterized as a positive response to a problem, which previously either did not happen or happened in a distinct manner without having impact on the population's health. In this way it has been possible to detect and systematize accounts of diverse actions, ranging from use of traditional medicine practices to everyday procedures involving greater service user adherence or satisfaction and the respective impact on health indicators.

With this in mind, it is appropriate to highlight the strengthening of PHC actions in settings where the Programme has been implanted, as well as its potential to consolidate innovative forms of producing health and care, reinforcing care models aimed at comprehensive PHC. Findings include increased promotion and prevention practices and a new form of producing health care. These contributions reinforce PHC principles and guidelines in Brazil [8].

Evaluation of the work process and performance of Cuban doctors in the programme

A cross-sectional epidemiological study was conducted with the general population (n=832) and in indigenous territories (n=85). The aim was to monitor and evaluate the working conditions and the performance of the Programme's Cuban doctors in PHC services. The assumption was made that a universe of more than eleven thousand doctors specialized in PHC, with more than ten years work experience and international experience prior to the Programme would introduce important changes to services, contributing in particular to changes in the care model and seeking to implement comprehensive and quality PHC.

With regard to working conditions, the study showed that the majority of the Programme doctors interviewed had nurses, nursing technicians and community health workers in their teams. This favours interdisciplinary work by the teams that have doctors provided by the Programme. The study also indicated problems relating to infrastructure and lack of supplies and medication, revealing that some professionals work in conditions that are not favourable to the good performance of PHC actions and services.

In relation to the work process, an increase in the number of medical consultations, household visits and collective activities undertaken by these professionals was found. A reverse trend was also found between the number of appointments made in advance (these are increasing) and the number of spontaneous appointments (these are decreasing). This suggests improved service organization. There has also been a significant increase of pregnant women attending appointments in the first trimester of pregnancy, thus indicating improved service quality.

Standing out among the sample of doctors working in indigenous territories is the fact that the majority of them are part of multi-professional indigenous health teams and on average are responsible for 300 families. This increases the possibility of developing health planning, including identifying health priorities and needs, classifying risks and increasing effectiveness.

Increased health promotion and prevention actions were found by the study, as well as increased use of traditional medicine practices. This indicates greater sociocultural integration and exchange of knowledge with local populations.

Evaluation of the quality of PHC services employing Cuban doctors through the programme

A cross-sectional study was conducted with 9600 Cuban doctors from the More Doctors Programme in Brazil in April and May 2016. The aim was to evaluate PHC service quality, defined by Starfield [13] as the presence and extent of the cardinal primary health domains (access, longitudinality, coordination and comprehensiveness) and their subdomains (family-centeredness and community orientation), using the Brazilian version of the Primary Care Assessment Tool (PCATool). Taking the 8235 replies it was possible to rate the cardinal domains and their subdomains and to obtain the Essential Primary Health Score and the Overall Primary Health Score [14].

The Essential Score was 7.6 whilst the overall Score was 7.9. Both scores were above the cut-off point (6.6) indicating that the services evaluated had a high degree of PHC orientation. Considering analysis by domain and domain dimension, seven domains were found to have a high PHC score whilst one (access) was below the cut-off point (score=5.0). The highest scoring domains were comprehensiveness – service delivery (score=9.3), family-centeredness (score=8.8) and community orientation (score=8.6) (Table 1).

The results of this study were compared with the result of other studies that have used the PCATool in Brazil. Taking the primary health scores of PHC services with Cuban doctors and comparing them to Brazil's best PHC services such as, for instance, the Family Clinics in Rio de Janeiro [15] and the Family Health Centres in Curitiba [16] and Porto Alegre [17], similar or even better results can be seen for services with Cuban doctors provided through the Programme, indicating higher service quality in relation to the domains of access, longitudinality, comprehensiveness, care coordination, family-centeredness and community orientation.

The results of this study also provide important contributions to the debate on Primary Care in Brazil, putting the More Doctors Programme within the context of public policies for strengthening PHC-based health systems. The study shows, from the perspective of more than eight thousand doctors that is possible to have services with strong PHC orientation and quality even in less privileged settings. Despite the good performance of the services evaluated in this study, access continues to be a challenge to be overcome in PHC within the Brazilian Unified Health System. This indicates the need for changes and innovations triggered by health service management and put into practice in health services, which in turn should have their organizational structures restructured based on tools and technologies that provide greater accessibility.

Final Considerations

The focus of the monitoring and evaluation of the More Doctors Cooperation Project undertaken by PAHO/WHO is on measuring the impact of the More Doctors Programme in terms of achieving the overriding objective of strengthening the health system based on comprehensive and effective PHC.

Through diverse studies using different methodological approaches it can be seen that the More Doctors Programme has the potential to strengthen PHC in Brazil. It contributes to service improvement, puts PHC at the heart of the discussion on public policies, increases the interest of the scientific community in evaluating high-investment public policies, in addition to providing satisfactory responses to the population's health needs and thus contributing to service user satisfaction [18].

From the perspective of universal coverage as a target for health systems to ensure the right to health, the need exists to continue to demonstrate that PHC is the best path towards achieving universal access, providing comprehensive and coordinated care, organizing health systems based on health needs, since it is close to people, is part of communities and is better prepared to decode and reach agreement on health needs in a more effective manner.

The Brazilian More Doctors Programme is a good example of a policy for strengthening PHC, not only for the Region of the Americas, with PAHO/WHO support, but also in other countries with universal health systems. Investing in health training and health professional distribution, taking into consideration criteria based on equity and universal access, are priorities that should be set as targets for developing PHC in all countries.

 Table 1: Primary health domain scores for the experience of Cuban doctors within the more doctors programme, Brazil.

Score (0-10) N=8235											
		A	В -	Coordination		Comprehensiveness		G	Н	Essential	Overall
				C	D	E	F	G	п	PHC	PHC
N	Valid	8220	8234	8235	8215	8233	8186	8234	8224	8235	8235
	Missing	15	1	0	20	2	49	1	11	0	0
Average		5.0	8.0	7.7	7.6	8.0	9.3	8.8	8.6	7.6	7.9
Median		4.8	8.2	8.1	7.9	8.2	9.6	9.3	8.9	7.7	8.0
SD		1.7	1.2	1.3	1.5	1.2	0.8	1.4	1.4	0.9	0.9
Min		0	2.6	0.5	0.8	2.0	3.9	0	0	3.6	3.5
Max		10	10	10	10	10	10	10	10	10	10

REFERENCES

- 1. Stigler FL, Macinko J, Pettigrew LM, Kumar R, van Well C. No universal health coverage without primary health care. Lancet 2016; 1811.
- Pan American Health Organization/World Health Organization. A renovação da Atenção Primária em Saúde nas Américas. Organização Pan-Americana da Saúde/ Organização Mundial da Saúde, Washington DC 2007.
- 3. Brazil. Lei nº 12.871 de 22 de outubro de 2013. Institui o Programa Mais Médicos, altera as Leis n. 8.745, de 9 de dezembro de 1993, e n. 6.932, de 7 de julho de 1981, e dá outras providências. Diário Oficial da União 2013.
- Molina J, Suárez J, Cannon LRC, Oliveira G, Fortunato MA. O Programa Mais Médicos e as Redes de Atenção à Saúde no Brasil Mais Médicos. Divulg. Saúde Debate 2014; 52:190-201.
- 5. Pan American Health Organization/World Health Organization. Estratégia para o acesso universal à saúde e a cobertura universal de saúde. 53° Conselho Diretor; 66ª Sessão do comitê regional da Organização Mundial da Saúde (OMS) para as Américas. Resolução CD53/5, Rev 2. 2014.
- Pan American Health Organization/World Health Organization. Metassíntese dos Estudos de Cso do Programa Mais Médicos 2017.
- 7. United Nations. Good practices in south-south and triangular cooperation for sustainable development 2016.
- 8. Pan American Health Organization/World Health Organization. Mapeamento e análise da produção acadêmica sobre o Programa Mais Médicos *2013 a 2016*. In: Medina Medina et al. 2017 (in the press).
- Pan American Health Organization/ World Health Organization. Implementação do Programa "Mais Médicos" em Curitiba. Experiências inovadoras e lições aprendidas. Brasília 2015.
- 10. Pan American Health Organization/World Health Organization.

- Estudo de caso do Programa Mais Médicos no Rio Grande do Norte: caminhos percorridos, produções e criações de conhecimento no Semiárido Potiguar. Brasília 2016.
- Pan American Health Organization/World Health Organization. Programa Mais Médicos no município do Rio de Janeiro. Mais acesso, equidade e resolutividade na APS, Brasília 2016.
- 12. Pan American Health Organization/ World Health Organization. Atenção à saúde em municípios de pequeno porte do Maranhão. Efeitos do Programa Mais Médicos, Brasília 2016.
- 13. Starfield B. Atenção primária: Equilíbrio entre necessidades de saúde, serviços e tecnologia. Brasília: Organização das Nações Unidas para a Educação, a Ciência e a Cultura/ Ministério da Saúde 2002.
- 14. Kemper ES. PROGRAMA MAIS MÉDICOS: Contribuições para o fortalecimento da Atenção Primária à saúde. [Tese de doutorado]. Programa de Pós-Graduação em Ciências da Saúde da Universidade de Brasília, 2016.
- 15. Harzheim E, Lima KM, Hauser L. Reforma da atenção primária a saúde na cidade do Rio de Janeiro: Avaliação dos primeiros três anos de clínica da família. Pesquisa avaliativa sobre aspectos de implantação, estrutura, processo e resultados das clínicas da família na cidade do Rio Janeiro. Porto Alegre: OPAS 2013.
- 16. Chomatas E, Vigo A, Marty I, Hauser L, Harzheim E. Avaliação da presença e extensão dos atributos da atenção primária em Curitiba. Rev Bras Med Fam Comunidade. 2013; 8: 294-303.
- 17. Castro RCL, Knauth DV, Harzheim E, Duncan BB. Avaliação da qualidade da atenção primária pelos profissionais de saúde: Comparação entre diferentes tipos de serviços. Cad Saúde Pública 2012; 28: 1772-1784.
- Kemper ES. Mendonça AVM, Sousa MF. Programa Mais Médicos: Panorama da produção científica. Ciênc Saúde Coletiva 2016; 21: 2785-2796.

ADDRESS FOR CORRESPONDENCE:

Elisandréa Sguario Kemper, Organização PanAmericana, da Saúde (OPAS/OMS), Setor de Embaixadas, Norte, lote 19, Brasília DF, Brasil, Tel: 70800-400; E-mail: elisaskemper@gmail.com

Submitted: April 09, 2016; Accepted: April 22, 2017; Published: April 29, 2017