ALAP 2020

IX Congreso de la Asociación Latinoamericana de Poblacion

9 a 11 diciembre

EL ROL DE LOS ESTUDIOS DE POBLACIÓN TRAS LA PANDEMIA DE COVID-19 Y EL DESAFÍO DE LA IGUALDAD EN AMÉRICA LATINA Y EL CARIBE

Andrew Amos Channon, Department of Social Statistics and Demography, University of Southampton, UK. A.R.Channon@soton.ac.uk

Rosangela Fernandes Lucena Batista, Department of Public Health, Universidade Federal de Maranhão, rosangela.flb@ufma.br

Aridiane Ribeiro, Universidade Federal de Goiás - Regional Jataí, aridiane@ufg.br

Pia Riggirozzi, Department of Politics and International Relations, University of Southampton, UK, P.Riggirozzi@soton.ac.uk

Marta Rovery, Universidade Federal de Goiás, martary@gmail.com

Erika Fonseca Thomaz, Department of Public Health, Universidade Federal de Maranhão, ebthomaz@gmail.com

Using existing data to develop health facility scorecards in order to strengthen the rights of women and children in Goias and Maranhao, Brazil

Background and Research Problem

Significant progress has been made in Brazil to reduce maternal, newborn, and child mortality. However, efforts across states, particularly in Maranhão and Goiás, have been uneven (Lassi, Kumar et al. 2016). Maranhão has the highest maternal mortality within Brazil, while Goiás has the highest number of maternal deaths in the Central-West region (Szwarcwald, Escalante et al. 2014), with poor, rural, and Afro-descendent women and children bearing a disproportionate burden due to poverty, neglect, gender violence and lack of information (Victora, Aquino et al. 2011). Across Brazil only 15% of mothers receive adequate prenatal care, which varies by demographic background, region and urban/rural residence (Tomasi, Fernandes et al. 2017).

Previous research has demonstrated the benefits of community engagement and social accountability as means of enhancing quality of care, the appropriateness of health service delivery for users, and patient satisfaction and utilisation (World Bank 2004). In sub-Saharan Africa and South Asia interventions addressing attitudes to health seeking and community-based accountability frameworks have reduced maternal and neonatal mortality (Björkman and Svensson 2010, Prost, Colbourn et al. 2013). Many of these programmes include community-based scorecards, where the health facility is scored on a number of dimensions that are known to be related to improving health, and these scorecards are distributed throughout the community. This ensures facilities are accountable to the community, while empowering that community to demand improvements to services (Ho, Labrecque et al. 2015, World Health Organization 2015). Yet little is known whether and how these programmes can strengthen the health system to improve MNCH, especially in poor and rural areas in Latin America. In Brazil there is a dearth of community-based interventions to improve health and awareness of the rights to health.

The rights of women and children within Brazil are codified in a number of different international and legal frameworks. However, knowledge of the rights of women and children during the first crucial 1000 days of life (from conception to the second birthday) by mothers is patchy, and there is little information about how rights can be realised at a local level and especially in the local primary health centre (UBS) where much care is given. The explicit linkage between the rights of women and children and social accountability provides the possibility of improving care, strengthening rights and developing community engagement with the UBS.

In order to improve health and strengthen rights in the first 1000 days of life, the project EU QUERO (Engaging Users for Quality Enhancement and Rights) commenced in 2018; a collaboration between the Universities of Jataí/Goiás and Maranhão as well as the University of Southampton (UK). One aim of the project was to co-produce new knowledge and literature on the effectiveness of community empowerment and accountability interventions on quality of health services in Brazil. Further, the feasibility of an intervention was to be tested, to evaluate access and quality of MNCH during the critical first 1000 days of life through scorecards and training of key stakeholders in the community and the local health system.

Objectives

The first objective of this paper is to develop scorecards for each UBS within Goiás and Maranhão states, explicitly linked to an analysis of the rights of women and children. These rights will have been stated in national or international frameworks. An analysis of the feasibility of doing this using existing facility data will be undertaken, in order to reduce the burden on the health facilities in providing relevant information. The second objective is to analyse the scorecard outcomes within

the two states, understanding about linkages between different scorecard domains and exploring geographic and social factors that may be linked to the results.

Materials and Methods

Initially, a comprehensive list of the individual recommendations and rights of women and children during the first 1000 days of life were compiled, using governmental and international documents as references. These recommendations and rights were grouped, firstly within each of four phases within the 1000 days: prenatal, delivery, postnatal and child. Further groupings were undertaken based on the dimensions of the rights, such as access to the UBS, referral to other parts of the health system, transportation etc. Finally, these were grouped under broad headings within each of the phases under study. Hence there is a clear structure and grouping for the recommendations, linked directly to where these recommendations were made.

In order to understand if individual UBS are providing the care that was collated, the data that was collected as part of the 3rd round of the Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica (PMAQ-AB), from 2017, was used. PMAQ-AB is a national survey undertaken in most UBS which collates information about the activities, infrastructure and care provided. PMAQ is one of the world's largest initiatives to improve primary care performance, initiated in 2010, is intended to accelerate access to primary care through the Family Health Strategy while providing resources and pay-for-performance incentives to enhance health care infrastructure and the quality of care provided. The data from the PMAQ are beginning to be used to understand the structural and operational constraints faced by frontline health workers (Macinko, Harris et al. 2017, Macinko, Harris et al. 2017). Managers and health professionals are interviewed as part of the survey. Crucially there are also interviews with users of the UBS who answer questions about their experiences and knowledge of the services provided.

The questions asked in PMAQ-AB were each analysed to see if they illuminated any of the aspects of rights that had been identified and grouped as noted above. Those questions that were related to any of the dimensions noted were used. Some dimensions did not have any questions that were available for them and hence these dimensions were not analysed. There were no questions related to the delivery of the child in PMAQ (as deliveries did not happen at the UBS), and hence this phase of the 1000 days was omitted for this paper. UBS where no users who had given birth in the previous 2 years were also omitted, as there was not full information from a maternal user perspective available.

For the three remaining phases (prenatal, postnatal and child care) the questions within PMAQ-AB were analysed within each of the dimensions of care. Using equal weights a score out of 100 was given for each dimension, with 100 indicating that the UBS had met the requirements for services amongst all users and questions in the survey as related to the women's rights, and 0 indicating that none of the service recommendations had been met. UBS were then divided, based on their scores, into four groups, with the top group having a score of 100, the next group a score of 75-99, then 50-74 and finally those UBS who scored less than 50. UBS are rated on each group of questions, as well as each dimension of care and overall.

Results

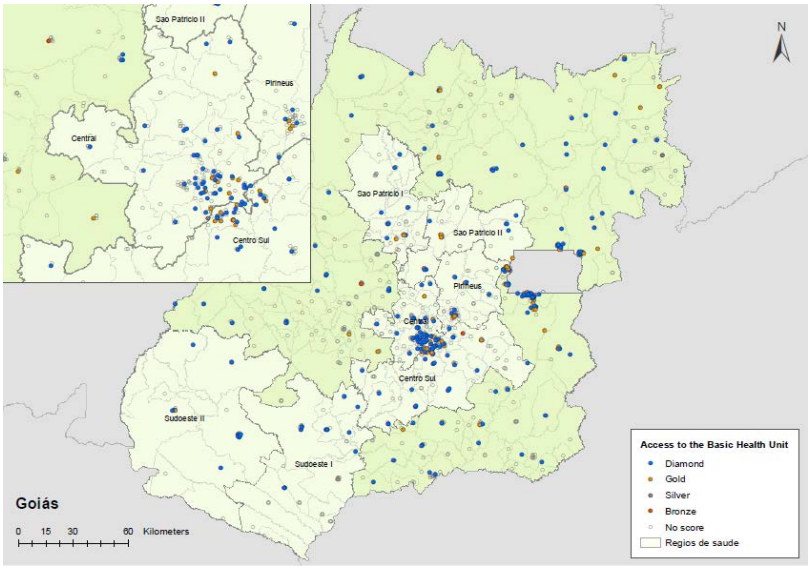
The table below gives the Dimensions and Groupings linked to rights during the prenatal period which were able to be studied using the PMAQ-AB survey. A similar table was constructed for each of the three included phases within the first 1000 days. Each of these dimensions had an associated scorecard constructed for it, with further scorecards for each of the groupings as well as overall for the UBS.

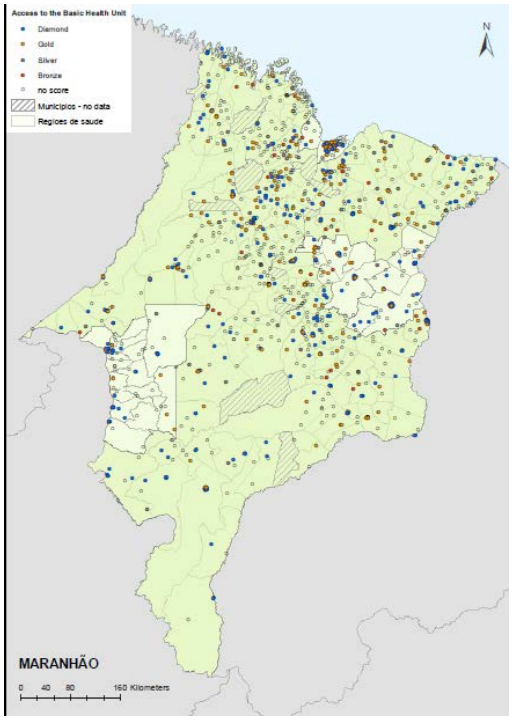
Group	Dimension
1. Access to PHC and linkage with other points of the network	Access to PHC
	Integration of the health system
	Risk classification and referral
	Transport of the users
	Linkage of the women with the maternity
2. Respect and Empowerment of the user	Social control (or social participation)
	Dialog with the users
	Relationship between health professionals and users and respect
	Health education
3. Prenatal care	Home visit
	PHC consultation
	Assistance to medical complications
	Supplementation
	Immunisation
	Medical exams
	Records

In total, across all phases, groupings and dimensions, each UBS had over 50 scores generated (19 different dimensions and groupings for the prenatal phase, 16 for the postnatal period and 18 for the child phase). Questions related to rights were available from all sections of the PMAQ-AB survey, although in some cases the questions asked were not detailed nor captured the full range of rights that were included within that domain.

The maps on the following page are examples of the maps demonstrating the scores within one dimension (access to the UBS) for the two states. Separate maps showing each dimension and grouping were created, which displayed the geographical variation in scores across the states too. Each UBS therefore has a range of scores based on each dimension of rights which provides information to the community about the quality of care at their local health centre.

The range of scores for each health facility were grouped and an analysis of the correlation between scores on each dimension was undertaken. This indicated that although most scores were positively correlated, with specific facilities scoring highly on most dimensions, there were clear dimensions that were not correlated within facilities. The dimensions that were not correlated differ by UBS, indicating that specific interventions and improvements to service could be implemented within UBS to improve services. Further exploration of the links between scores on each dimension is currently under analysis.





Conclusions

The use of scorecards to empower communities in the decision-making within the local health facility is an area of focus by the WHO (World Health Organization 2015). This study demonstrates the possibilities of designing these scorecards using existing data, with an explicit link to the rights of the user, which in this case are mothers and children within the first 1000 days of life. The availability of PMAQ-AB facilitates the design of the scorecards and ensures that they are relatively cheap to produce. However there are some issues with the data that need to be accounted for in future rounds if there is to be confidence in the results of the scorecards at both health facilities and throughout the community.

The survey interviewed users of the facility. This study only used UBS where a woman who was pregnant or had given birth in the previous two years had answered the questions. The selection of users into the survey was based on who was available within the UBS during the survey visit (which has its own issues). Women were more likely to be there during specific clinic times, and hence some UBS were excluded. Further, some of the scorecards results were based on only one response which may not be representative of the experiences of other women who use that UBS. Another issue is that not all UBS took part in the survey, although the numbers who did not was minimal.

However, even with the above, the explicit linkage of rights to scorecards gives a strong basis for these results to empower communities. The scorecards can provide information both about the local UBS as well as the rights of women and children, starting a dialogue between the community and health professionals, especially community health workers, who are members of both constituencies.

The analysis of the results of the scores did indicate that in some UBS simple learning off nearby health facilities may improve care to women and children, with sharing of processes and information between UBS with different strengths encouraged. Yet this study has demonstrated the possibility of using existing information to strengthen rights and health care for women and children, and that these results can be used within the full EU QUERO project intervention.

References

Björkman, M. and J. Svensson (2010). "When is Community-Based Monitoring Effective? Evidence from a Randomized Experiment in Primary Health in Uganda." Journal of the European Economic Association **8**(2-3): 571-581.

Ho, L. S., G. Labrecque, I. Batonon, V. Salsi and R. Ratnayake (2015). "Effects of a community scorecard on improving the local health system in Eastern Democratic Republic of Congo: qualitative evidence using the most significant change technique." Conflict and Health **9**(1): 27.

Lassi, Z. S., R. Kumar and Z. A. Bhutta (2016). "Community-based care to improve maternal, newborn, and child health." Reproductive, Maternal, Newborn, and Child Health: 263.

Macinko, J., M. J. Harris and M. G. Rocha (2017). "Brazil's National Program for Improving Primary Care Access and Quality (PMAQ): fulfilling the potential of the world's largest payment for performance system in primary care." The Journal of ambulatory care management **40**(2 Suppl): S4.

Macinko, J., M. J. Harris and M. G. Rocha (2017). "Introduction to the Special Edition on the Brazilian National Program to Improve Primary Care Access and Quality (PMAQ)." The Journal of Ambulatory Care Management **40**(2 Suppl): S1.

Prost, A., T. Colbourn, N. Seward, K. Azad, A. Coomarasamy, A. Copas, T. A. Houweling, E. Fottrell, A. Kuddus and S. Lewycka (2013). "Women's groups practising participatory learning and action to improve maternal and newborn health in low-resource settings: a systematic review and meta-analysis." The Lancet **381**(9879): 1736-1746.

Szwarcwald, C. L., J. J. C. Escalante, R. Neto, D. de Lyra, P. R. B. d. Souza Junior and C. G. Victora (2014). "Estimation of maternal mortality rates in Brazil, 2008-2011." Cadernos de Saúde Pública **30**: S71-S83.

Tomasi, E., P. A. A. Fernandes, T. Fischer, F. C. V. Siqueira, D. S. d. Silveira, E. Thumé, S. M. S. Duro, M. d. O. Saes, B. P. Nunes and A. G. Fassa (2017). "Quality of prenatal services in primary healthcare in Brazil: indicators and social inequalities." Cadernos de Saúde Pública **33**(3).

Victora, C. G., E. M. Aquino, M. do Carmo Leal, C. A. Monteiro, F. C. Barros and C. L. Szwarcwald (2011). "Maternal and child health in Brazil: progress and challenges." The Lancet **377**(9780): 1863-1876.

World Bank (2004). World Development Report 2004: Making Services Work for Poor People. Washington DC, World Bank,.

World Health Organization (2015). WHO recommendations on health promotion interventions for maternal and newborn health 2015, World Health Organization.