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PERSPECTIVE

# Chagas Disease and Primary Health Care in Brazil

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Chagas disease is an important public health problem in various countries in Latin America [1] both due to the high number of people affected and the failure of endemic countries to adopt preventive and control measures, such that, today, it is one of the most neglected tropical diseases in the world, affecting about 6 to 7 million people [1].

The Sistema Único de Saúde (SUS) – the national health service in Brazil – is structured in health care networks, which are organizations that serve a specific population associated with a particular territory, taking responsibility for their clinical outcomes, as well as financial and health aspects of this population [2]. The SUS was conceived under the commitments assumed in the International Conference about Primary Health Care (PHC) hosted by the World Health Organization in 1978 in Alma-Ata [3], which considered health as a fundamental human right and the most important social goal to be achieved in the world, and having PHC at the centre of health care networks.

The principal functions/attributes of PHC are solvability, communication and accountability. The first function is understood as the capacity of PHC to meet and solve more than 85% of the public health problems of its population. In relation to communication, it is understood that the PHC occupies the centre of communication of health networks, ordering the flow and counter flow of people, products and information between the different components of the networks. Finally, accountability implies knowledge and intimate relationship – in the sanitary micro territories – of the enrolled population, and the exercise of economic and sanitary responsibility [4].

In Brazil, PHC is the main gateway to SUS. According to the Brazilian Ministry of Health (2021) [5], PHC is guided by the principles of universality, accessibility, continuity of care, comprehensiveness of care, accountability, humanity and equality. In addition, the actions developed within the scope of PHC are orientated towards individual, family and collective health, and involve health promotion, disease prevention and protection, diagnosis, treatment, rehabilitation, harm reduction, paliative care and public health surveillance [6].

According to the clinical protocol and therapeutic guidelines for Chagas disease [7], the follow-up of non-serious clinical conditions of Chagas disease, and etiological treatment with benznidazole, when indicated for acute or non-severe chronic cases of Chagas disease, should be carried out within PHC. However, in a recently published study carried out in some of the municipalities of the state of Minas Gerais, Brazil, the low number of patients affected by Chagas disease in the municipal basic health units (Unidades Básicas de Saúde, UBSS) was pointed out during focus groups by the coordinators of the “Estratégias de Saúde da Família” (ESF, Strategies of Family Health) of the PHC [8]. In another study, also conducted in the same municipalities and by the same research group, but this time involving

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interviews of nursing teams, most participants claimed to have never provided care to patients affected by the disease [9]. These findings are interesting, and, at the same time, intriguing, as Minas Gerais was once one of the states with the highest prevalence of Chagas disease in Brazil [10]. In addition, the central-west region, where the studied municipalities are located, is one of the most endemic for Chagas disease in Minas Gerais [11]. Therefore, a great number of people with chronic disease were expected to be using the PHC services in these municipalities. Yet, according to the authors [8,9], one of the possible explanations for the low number of records of people affected with the infection in endemic areas could be related to the absence of a more redundant approach by health professionals during interviews and screening of patients, contrary to the recommendations for clinical follow-up of these patients in PHC [7].

From these pioneering studies on the relationship between Chagas disease and PHC, it was evident that there was a failure in the identification of those affected with Chagas disease, be it acute, chronic symptomatic, or in the indeterminate phase, when the users entered the health care system, that is, PHC, the service which supplies the majority of care for neglected diseases, and that, therefore, should be the first detection site for those affected. This failure is found throughout the health care system, from the moment when the health professional should focus attention on the individual, and stresses the importance of a better approach and interpersonal relationship, as the patient, when looking for the health facility, is found to be most fragile and often has difficulties in reporting their complaints/symptoms clearly [8,9]. Furthermore, this failure to identify diseased individuals may also be related to the lack of knowledge of health professionals about the epidemiology of the disease, which makes more detailed interviews difficult, and involves not only the “diseased individual”, but also encompasses the environment which that individual inhabits (i.e., whether they live in an endemic area). In fact, in the work of Rodrigues, et al. (2020ab) [8,9] there are also reports of a lack of training of health professionals in PHC in relation to Chagas disease, with the repercussion that the symptoms and signs of the disease are not recognized, or and that there is ignorance of eco-epidemiological aspects related to the vectors of it, such that these professionals are not prepared to detect it.

Another serious gap that became evident from the studies of Rodrigues, et al. (2020ab) [8,9] was the disarticulation between PHC and the public health surveillance sector with regard to the resolution of actions and services aimed at Chagas disease in the municipalities of Minas Gerais studied. During the studies, it was learned that the municipalities in question had independently developed and implemented health surveillance, and centralized disease prevention and control, without proper collaboration with the health units, making it impossible to provide comprehensive care, the

central principle of the legislation guiding the integration between PHC and public health surveillance. The integration between these two health sectors is essential, therefore, for effective prevention and control interventions against endemic diseases, among them Chagas disease, and is intensified through the joint work of these two sectors, enabling the control of vectors and directing attention to those affected by the disease, and even facilitating the diagnosis and early treatment of new cases.

Once again supported by the findings mentioned in the work of Rodrigues, et al. (2020ab) [8,9], another important gap detected in the services of PHC targeted to Chagas disease was the absence of interventions promoting health and education related to disease. The promotion of health is a contemporary global public proposal in public health disseminated by the World Health Organization since 1984 [12]. This author also affirms that the promotion of health constitutes a new paradigm, in contrast to models in which individualism, specialization, technologization and curative interventions predominate in healthcare practices. In this context, PHC is a privileged and strategic position to promote health and disease prevention, either in micro-areas (the area of responsibility of community health agents) or in territorial catchment area (the area of responsibility of primary health care units). In view of the above, and in addition to the municipalities studied, it is proposed to adopt a joint plan for the actions of PHC and of public health surveillance based on the needs of the territory, with a view to ensuring comprehensive care through interventions to promote, protect and prevent disease, and improving and providing positive changes in the care and in the health and disease processes of the population, particularly of neglected endemic diseases such as Chagas disease.

It is important to emphasize that the Brazilian Ministry of Health also highlights the existence of uncertainties regarding the management of Chagas disease, particularly in PHC [7]. Therefore, it is suggested that the management of Chagas disease needs to be better understood by managers and health professionals in Brazilian PHC, as well as understanding its dynamics in other regions of the country besides the municipalities of Minas Gerais already studied. Finally, it is critical to strengthen the integration between the PHC and public health surveillance, throughout the entire Brazilian territory, this being one of the potentially great challenges for the consolidation of the SUS.

## References

1. World Health Organization. Chagas disease. 2021. <https://tinyurl.com/yuy55d9b>
2. Shortell SM, Gillies RR, Anderson DA, Erickson KM, Mitchell JB. Remaking health care in America. *Hosp Health Netw*. 1996 Mar 20;70(6):43-44. PMID: 8593505.
3. World Health Organization. Primary health care. Report of the International Conference on Primary Health Care, Alma-Ata, Geneva. WHO. 1978. <https://tinyurl.com/5cpjv5x5>.
4. Mendes EV. As redes de atenção à saúde. 2nd ed. Belo Horizonte: Escola de Saúde Pública de Minas Gerais. 2009:554. <https://tinyurl.com/42n5etw8>
5. Brazilian Ministry of Health. Secretaria de Atenção à Saúde (SAPS). O que é Atenção Primária? 2021. <https://tinyurl.com/4u7a7s7x>

6. Brazilian Ministry of Health. Aprova a política nacional de atenção básica, estabelecendo a revisão de diretrizes para a organização da atenção básica, no âmbito do sistema único de saúde (SUS). Diário Oficial da União. 2017. <https://tinyurl.com/29dhwz78>
7. Brazilian Ministry of Health. Protocolo Clínicas e diretrizes terapêuticas da Chagas disease no âmbito do Sistema Único de Saúde - SUS. Diário Oficial da União. 2018:41. <https://tinyurl.com/ypbx2xx2>
8. Rodrigues FCS, Souza ICA, Araújo AP, Souza JMB, Diotaiuti LG, Ferreira RA. Agentes comunitários de saúde: percepção sobre os serviços de saúde relacionados à Chagas disease. Cad Saúde Colet. 2020;28(1):130-139. <https://tinyurl.com/dpfbutfp>
9. Rodrigues FCS, Souza ICA, Vieira APA, Borba JM, Diotaiuti LG, Ferreira RA b. Equipe de enfermagem: percepção sobre a Chagas disease. São Paulo: Rev Recien. 2020;10(32):367-372. <https://tinyurl.com/ufs5293r>
10. Villela MM, Souza JMBD, Melo VDP, Dias JCP. Vigilância epidemiológica da Chagas disease em programa descentralizado: avaliação de conhecimentos e práticas de agentes municipais em região endêmica de Minas Gerais, Brasil. Cad Saude Publica. 2007;23(10):2428-38. <https://tinyurl.com/63bfskvh>
11. Camargo ME, Silva GR, Castilho EA, Silveira AC. Inquérito sorológico da prevalência de infecção chagásica no Brasil, 1975/1980. Rev Inst Med Trop São Paulo. 1984;26(4):192-220. <https://tinyurl.com/4z9d76az>
12. Rabello LS. Promocao da Saúde: a construcao de um conceito em perspectiva do SUS. Editora FIOCRUZ. Rio de Janeiro. 2010:228.

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