### A brief history of worker's health in Brazil's Unified Health System: progress and challenges

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> Abstract This article draws on current understandings of workers' health in Brazil that emerged concomitantly with advances in the field of public health. It describes the institutional trajectory of the field of workers' health within the Unified Health System (SUS), emphasizing the challenges faced in developing actions in the sphere of workers' health surveillance. It synthesizes the often tortuous path taken over the last 30 years between multiprofessional training processes, coordination between different levels of the SUS, interinstitutional support, especially from public universities, and interaction with participatory processes. It provides an overview of progress and challenges in the face of continuous changes in working conditions and work organization and the limited effectiveness of government policies designed to address occupational health risks. Finally, it suggest that progress has come out of the intertwining of social and academic movements, with the opening up of institutional spaces that transform the SUS, reviving the underlying principles of participation and health promotion in broad vision of state policy.

> **Key words** Worker's health, National worker's health policy, Workers' health surveillance

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#### Introduction

The field of workers' health in Brazil is the result of an accumulated heritage in the realm of public health, which has its roots in the social medicine movement in Latin America, and is strongly influenced by the experiences of the Italian workers' movement.

Scientific advances in the fields of preventative medicine, social medicine and public health during the 1960s and 1970s broadened the framework for analyzing the health-disease process, including work-related health problems. In the wake of the Brazilian health reform, this new way of understanding the work-health relationship and intervention in the world of work led to the introduction of occupational healthcare practices into public health. A new began to take shape, which, drawing on the social sciences - particularly Marxist thought - broadens the view of occupational medicine and occupational health. Several publications describe this process<sup>1,2</sup>, systematize certain practices<sup>3,4</sup> or outline the conceptual and methodological differences between workers' health and occupational medicine and occupational health<sup>5,6</sup>.

The concept of "labor process", revived in the 1970s drawing on the ideas of Marx, particularly those laid out in Chapter IV of his Book Capital, is central to the study of the determinants of health. The appropriation of this concept as instrument of analysis enables the reformulation of hegemonic conceptions that are formulated from a unicausal or multicausal perspective and thus simplify the relationship between cause and effect and disregard the social and historical dimensions of labor and the health-disease pair. Accordingly, the individual and the environment is understood in terms of their exteriority, ignoring their historicity and the context surrounding the materialized relations of production in specific work settings that may or may not cause health problems.

Workers' health is a field that incorporates strategic, interdisciplinary, multiprofessional and interinstitutional knowledge and practices (technical, social, political, human) with the aim of analyzing and intervening in labor relations that cause disease and injuries<sup>8</sup>. Its main frame of reference is public health or, in other words, health promotion, prevention and surveillance.

An interdisciplinary approach to treatment entails two intertwining planes of analysis: one that addresses the social, economic, political and cultural context that defines the particular relationships that come into play in spaces of work and the social reproduction profile of different social groups; and another that deals with specific characteristics of the labor process that have potential health effects. Among the concepts and notions that can be extracted from these characteristics are those that classify risk - fundamentally associated with the quantitatively measurable physical properties of the objects and means of labor and the work environment – and those that define standards and requirements, which relate to more qualitative components derived from the organization of work.

Contemporary with the health reform movement, this new view of workers' health gained greater prominence after the 8th National Health Conference held in 1986. In December of the same year, the 1<sup>st</sup> Workers' Health Conference had aired the experiences gained from the implementation of the Workers' Health Services Network, which was still in progress. This network, which preceded the promulgation of Brazil's Unified Health System (*Sistema Único de Saúde* – SUS), incorporated principles and guidelines that would later be enshrined in the 1988 Constitution, such as universality, comprehensiveness and public participation.

Engaging in dialogue with workers – holders of knowledge derived from experience and key stakeholders when the aim is transformative action – is one of the methodological premises of the workers' health approach. At the end of the 1970s, this premise was incorporated into the "Italian Workers' Model" which sought to change and control working conditions in factories.

This article initially addresses the process that preceded the incorporation of workers' health into the SUS, outlining some of the factors that influenced this process, including the mobilization of trade unions in support of workers' health and the support of international organizations. It then goes on to analyze the institutionalization of workers' health in the SUS, underlining the main advances and the various challenges encountered along the way. We pay particular attention to understandings of health surveillance within workers' health using case studies. Finally, we provide a brief overview of public participation in this area.

### Background to workers' health in Brazil

The sharp growth in the number of industrial workers witnessed in Brazil in the 1970s was accompanied by a corresponding increase workers'

organizations geared towards the regulation of working time and obtaining better wages. This decade also saw the emergence of workers' health movements that strived to secure better working conditions. The Inter Union Department of Studies and Research on Health and Workplace played an essential role in formulating a proposal put forward by the ABCD Chemical and Petrochemical Workers' Union to the São Paulo State Department of Health in 1984. The proposal envisioned the creation of the ABC Chemical Worker's Health Program, a pioneering initiative involving the active participation of the union in the management of the program<sup>11</sup>. Subsequently, similar workers' health programs (WHPs) were created by other states, with varying levels of worker participation in activities, including health surveillance.

The WHPs were influenced by the position of the International Labour Organization and World Health Organization when, in 1983, the Pan American Health Organization introduced the *Programa de Salud de los Trabajadores* (workers' health program) and supported a seminar held in 1984 in Campinas. The seminar suggested that effectively tackling work-related health problems in their entirety – considering the range of economic, cultural and individual factors that influence this process – requires a shift in focus away from occupational health towards the health of workers'.

The first WHPs and Workers' Health Centers (Centros de Referência em Saúde do Trabalhador - CRST) that preceded the SUS focused on treatment, rather than the prevention of health problems and protection of worker safety. The ultimate goal of this strategy was the provision of an effective occupational health service by the public health system, where the central focus was diagnosis, monitoring and guidance. The guidance document produced at the end of the 8th National Health Conference marked a shift in approach by stating that decent working conditions and workers' knowledge and control of work processes and the work environment are prerequisites for attaining full access to health care. At the same time, the 1st National Workers' Health Conference put forward a proposal recommending that the SUS should encompass both action on workers' health and agencies, adopting a rights-based approach to health.

With respect to macro regulatory policy, workers' health is viewed as a universal right<sup>12</sup>, as defined by be the 1988 Constitution and Law N°: 8080/90, transcending the right to social securi-

ty and work where Government intervention is limited to regulation of health and security.

Brazil's Basic Health Law (*Lei Orgânica da Saúde*) provides that the SUS shall be responsible for action on workers' health in the sphere of healthcare, surveillance, information, research and union participation. The law also provides that the SUS shall participate at federal level in the definition of norms, criteria and standards related to the control of working conditions and the work environment and coordinate workers' health policy in a hierarchical manner, decentralizing actions to state and local government. The same law also regulates the creation of the Intersectoral Commission for Workers' Health (CIST, acronym in Portuguese) by the National Health Council.

# Workers' health in the SUS – progress and challenges

The institutionalization of workers' health within the SUS has not occurred in a linear, constant and regular fashion. After the promulgation of the 1988 Constitution, as progress was being made incorporating the area into the SUS, the challenges of consolidation that arose often proved to be barriers to effective implementation.

At the beginning of the 1990s, new WHPs were created in various states and municipalities across the country; however, not all were consolidated, some having a short lifespan. Initial progress towards the consolidation of the area depended on overcoming a combination of hurdles. Despite making major strides forward, some of these hurdles remain even today: the lack of a workers' health culture within the public health system; expenditure constraints; shortages of specialist and experienced staff; overlapping functions of government agencies; resistance in traditional areas of surveillance (epidemiological and sanitation) to the incorporation of the health-disease pair into practices; workers' attitudes and perceptions toward occupational health and safety; the lack of workers' healthbased methodologies and approaches; inconsistencies in and a wide range (and sometimes lack) of understanding of workers' health issues in regulatory instruments produced by the three spheres of government.

Gradual progress was made in the 1990s and new challenges began to arise. The 2nd Workers' Health Conference held in 1994 ratified the "municipalization" of action on health as set out by the Constitution. This proposal coincided with a break from the safety model in the previous year sanctioned by the 9th National Health Conference and the establishment of a new management model for the SUS, which was celebrated by those who defended health reform. From the workers' health point of view, this approach was a positive move, since services would be provided at local government level. However, decentralization was not entirely successful. Even today, the challenges of decentralization impose a barrier to the consolidation of worker' health within the SUS. Many of the proposals put forward by the 2nd Workers' Health Conference foreshadowed not only future advances, but also the challenges that were certain to arise. One of these proposals was the joint participation of trade unions and grassroots organizations... in the management of workers' health, representing an advance that was in tune with both the conceptual framework and the principal of participatory democracy underlying the Constitution and the therefore the SUS. Strictly speaking, this proposal was only put into effect in exceptional circumstances where, in a very small number of workers' health referral centers (Centros de Referência em Saúde do Trabalhador - CEREST), services were managed in coordination with health management councils with a certain degree of participation of unions and the public.

The first half of the 1990s also saw the creation of the CIST, attached to the National Health Council, in accordance with Articles 12 and 13 of the Basic Health Law. The national CIST was consolidated during the second half of the decade and proactively participated in the formulation of a workers' health policy.

One example of the decisive participation of the CIST during this period was the Regulatory Instrument Governing Workers' Health Surveillance in the SUS (Instrução Normativa da Vigilância em Saúde do Trabalhador - VISAT no SUS) which, although signed only three years after its formulation (1998), represented an important step forward for the area. However, the instrument did not encompass the everyday working practices of the CEREST, which remains a huge challenge even today, 19 years after its promulgation. Another example is the Operational Norms Governing Workers' Health (Norma Operacional de Saúde do Trabalhador - NOST/SUS), also produced in 1998, which provided important guidelines for service management, but was revoked prematurely.

The publication of the List of Work-related Diseases in 1999 was major step forward. In ac-

cordance with a provision in Article 6 of the Basic Health Law (Paragraph 3, Subparagraph VII), the old list, which by that time was obsolete and resulted in a lower position for Brazil in the international ranking of occurrences of work-related diseases and injuries compared to Western countries, was revised. The comprehensively revised and updated list was published in manual form in 2001, serving as a guide for medical experts and health professionals in general to this day. A fresh revision is required however, given that 17 years have passed since its publication and the instrument provides that the list shall be revised on a periodic basis. In this respect, the constant emergence of new technologies and restructuring of the production process give rise to new types of health problems and injuries that are not included on the list.

Various other proposals involving the participation of the CIST were put into effect in the 1990s, such as the completion of hospital admission authorization forms (*Autorizações de Internação Hospitalar*) for cases involving work-related accidents<sup>13</sup> and the SUS Workers' Occupational Health Policy (*Política de Saúde Ocupacional para o Trabalhador do SUS*), which forms part of the Principles and Guidelines for Work Management in the SUS (*NOB/RH-SUS - Princípios e Diretrizes para a Gestão do Trabalho no SUS*) published in 2005<sup>14</sup>.

At the beginning of the 2000s, the workers' health technical department of the Ministry of Health formulated a proposal for the creation of a workers' health network, leading to the creation of the National Comprehensive Workers' Health Network (*Rede Nacional de Atenção Integral à Saúde do Trabalhador – RENAST*) two year later.

The current network's structure is defined by Ministerial Order N° 2.728 (November 11 2009), which provides that the RENAST shall be composed of CERESTs and be part of the network of services provided by the SUS.

The gradual implementation of the RENAST, aided by the publication of three ministerial orders between 2002 and 2009, gave rise to a service with its own unique identity, representing an undeniable step forward in the area. Reviews of the first 20 years of workers' health in the SUS undertaken by Santana et al. and Ribeiro et al outline these achievements and future expectations for the area<sup>15,16</sup>.

One of the main challenges of the network, which has yet to be effectively overcome, is that each CEREST had a common budget regardless of their location and the demands imposed by the socioeconomic and productive context of the region. Prevaleceu o viés orçamentário de caráter mais pragmático, cujo percurso ao longo dos 15 anos, desde sua implantação, acabou por facilitar o surgimento de soluções de continuidade que, hoje, desafiam os profissionais dos Cerest a utilizarem os recursos rubricados de workers' health.

Further advances were witnessed in the area after the introduction of RENAST, especially with respect to staff training and development. Although the constant turnover of staff within the network leads to the loss of well qualified professionals, it maintains a constant inflow of new professionals in constant pursuit of training and development through postgraduate courses and basic training in the area of workers' health surveillance provided by the CERESTs across Brazil, demonstrating the vitality of the area. One of the challenges accompanying this undeniable advance is gauging the quality of certain types of training, particularly distance learning courses, in terms of a dissociation from participatory theories of interventions in the world of work. These courses should be assessed considering the effective implementation of the National Workers' Health Policy (Política Nacional de Saúde do Trabalhador e da Trabalhadora - PNSTT), questioning to what extent their content and approach are in keeping with the operational needs set out in the policy guidelines. Training programs should aim to produce concrete results and transform reality in a lasting and effective manner.

The continental proportions of the country, its cultural diversity, land use and the huge variability in health equipment pose challenges in a sphere that is already effectively regarded as an advance in the area of workers' health. Certain emblematic achievements accomplished by the CERESTs operating in close coordination with other institutions are worth mentioning.

In this respect, it is important to highlight the support provided by the Public Prosecutor's Office for Labor Affairs (*Ministério Público do Trabalho* - MPT) over recent years. The MPT has frequently promoted intersectoral communication and coordination, where CERESTs have been the central focus for the formulation of demands and the adoption of measures to address problems in different manufacturing and production industries. Moreover, a number of advances were made as a result of public hearings and terms of commitment to conduct adjustment (*Termo de Ajuste de Conduta* - TAC) signed by companies. Although the MPT plays a vital role, especially in

face of the current constraints and shortcomings of enforcement and surveillance agencies, the question of the risk of the "judicialization" of social conflicts must be raised.

In the same institutional vein, academic institutions, especially public universities including FIOCRUZ and FUNDACENTRO, have played a significant role in staff training. However, a more enduring, organic and institutionalized cooperation is required, which is not limited only to contributing to the training of professionals committed to improving working conditions and workers' health.

With respect to RENAST, notwithstanding a relatively high rate of staff turnover in the CESTs, which causes discontinuity of activities in certain cases, it is important to mention the strategic training-action programs implemented in several states in line with surveillance guidelines for categories of workers considered priority. In this respect, it is important to highlight training courses designed for workers' health surveillance "multipliers" supported by the Ministry of Health and FIOCRUZ, multiprofessional post-graduate courses, and various continuing training courses. These courses promote critical thinking in relation to technicist and reductionist views still prevalent in the area. Furthermore, the emergence of several proposals for encouraging research team building and development involving researchers from different academic backgrounds has shown the potential of this new approach to research/action.

The homologation of the PNSTT in 2012, which provided important guidance on service provision and research in the area, was a major step forward. The principles and guidelines set out in the document serve as a primary reference point in the area of workers' health, meaning that the policy contributes towards reducing the gap between academic knowledge production and the needs of evidence-based practice.

# Workers' Health Surveillance – achievements and challenges

Workers' health surveillance harbors the capacity to transform the reality of the world of work, providing an understanding of the realities of workers and the determinants of health, in order to tackle them. The impacts of the measures adopted to tackle these problems inform decision-making and help to enhance workers' health information systems. Moreover, as an interdisciplinary, multiprofessional, interinstitutional

and intersectoral practice, workers' health surveillance transcends the boundaries of the health sector without losing sight of its underlying principles, thus widening its operational sphere in line with the original concept of the system.

Workers' health surveillance has the task of bringing the analysis of the interaction between health and the labor process to the health service setting. The complex and often conflictive undertaking entails explaining, observing and intervening in situations of risk, labor relations, and forms of resistance and attrition to workers' health<sup>17,18</sup>.

According to the most recent survey of the RENAST (2015/2016) published in 2017, there are currently 210 CERESTs in operation. Some of these centers have accumulated vast experience acting in keeping with the underlying premises of workers' health surveillance. Furthermore, there has been a rise in the number of recorded cases of work-related problems, with one million recorded cases, and 98% of local health authorities have shown that the have the necessary capacity to effectively record cases.

Exemplary cases include the surveillance of exposure to benzene in gas stations, workers' health surveillance in the sugar cane sector, successful efforts to ban asbestos, and interinstitutional action and negotiations geared towards the surveillance and prevention of occupational accidents. Although focal, initiatives directed at specific issues such as slave and child labor, extremely precarious working conditions in the informal waste sector, charcoal productions and vulnerable territories, should also be regarded as achievements in this area, given that they helped to consolidate intervention methodologies by highlighting necessary improvements.

Special emphasis should be given to pneumoconiosis, work-related cancer, agrochemical poisoning, and mental health problems given that they reinforce the national lines of action of the implementation of surveillance in coordination between the CERESTs and primary care services, among other levels. With regard to mental surveillance, the cross-cutting nature of this area requires a shift from the narrow focus on classic workplace risks towards to work organization. These recurring themes signal possibilities for developing protocols and program-based workers' health surveillance training.

All these initiative uphold the premise intersectorality, interdisciplinarity and worker participation. Health surveillance for rural and forest workers and those working over, in or near water, one of the current focuses of health surveillance action, brings a special peculiarity to the consolidation of workers' health. The integration of environmental and workers' health surveillance activities, often in vulnerable areas subject to conflict, enables the enhancement of research-action practices, one of the hallmarks of workers' health surveillance. Research-action is a growing field of training, with support from academic groups engaged with and committed to grassroots movements involving an array of different groups, such as traditional peoples, riverine and coastal communities, fishermen, marisqueiras, women craftmakers, rural settlement workers, shaping a territorial, integrated and participative approach to surveillance.

The measure of the achievements accomplished in the sphere of workers' health is bounded by the size of the challenge. It is essential to solve, or at least attenuate, the problem of overlapping functions, be it within the health system in the area of sanitary surveillance, or outside, with labor inspection. The lack of sensitivity of public agents towards the mission of the SUS to protect and promote workers' health and prevent work-related illnesses and injuries is incomprehensible given its endorsement by the Constitution.

### Public Participation – achievements and challenges

While the creation of the CIST as an essential component to the effective implementation of CERESTs was a major step forward, alongside other spaces created to promote the participation of health service users, the meaningful participation of workers in these commissions remains a challenge. The low level of mobilization of workers' organizations means that spaces of public participation have limited effectiveness when it comes to prioritizing workers' health actions in state and municipal health plans. There is a tendency among workers to transfer responsibility to workers' organizations (unions, association and movements). Changing this misunderstanding is a challenge. Having to deal with successive governments who have disfranchised workers and failed to meet their needs, few options remain other than reticence and distrust. The challenge resides in changing the approach to engaging with workers and regaining trust.

Another challenge is the regional organization of the CISTs, which is generally attached to the Regional CERST run by the local health authority. The other municipalities in the region, which can range from a few to dozens, do not have spaces for public participation. The most recent survey of the RENAST showed that there were 126 CISTs throughout Brazil, 27 of which were state and 99 municipal. A 2014 survey showed that, of the 209 CERESTs in operation, only 34 that workers participated in workers' health actions and only 74 confirmed that workers participated in the elaboration of the Annual Health Plan (*Programação Anual de Saúde*).

Redesigning these spaces is an important task in the future planning of the RENAST.

Certain recent initiatives are also important, including the creation of the observatory of the trade union centers and growing demands made by unions in relation to workers' health care, especially in unions representing rural workers. Other spaces for promoting coordination and communication among unions, CERESTs and academic organizations, such as Interunion Forums, are recent advances that reinforce the role of CISTs not only by widening geographical reach, but also opening up new training opportunities for union leaders and workers in general<sup>19</sup>.

### Conclusion

It is evident that the greatest achievement accomplished to date in the area of workers' health in Brazil was its enshrinement as an area within the sphere of public health by the 1988 Constitution. Notwithstanding criticism surrounding

its institutionalization and the development of actions<sup>20</sup>, which are still not enough to cope with the daunting health challenges facing the world of work, huge progress has been made in this area in Brazil over the last 30 years.

The everyday reality of the system, often marked by disputes and institutional and technical prejudice, can often lead to conflict in its everyday operation and practices<sup>21</sup>. There is no choice but to overcome these challenges, elucidating the possibilities of analyzing and reflecting upon the many achievements often marred by the instabilities and weaknesses of the government, which erode the rights to health of Brazilian workers.

The field of workers' health keeps moving forward, though along tortuous paths marked by the restructuring of the production process, where it comes up against the hegemony of the market that grinds away at social relations, as Karl Polanyi would say, in its 'satanic mill'.

Although practices have been implemented slowly and subject to a number of institutional limitations and conflicting conceptions, recognizing the progress made in the last 30 years provides us with a clear vision of the challenges.

These challenges, however, dictate direction, give rise to strategies, infuse creative desires, signal new partnerships, induces changes in ethical stance and fosters the need to pursue other types of knowledge and solutions. Thirty years may seem like a long time; but not when the aim is securing dignity at work by way of workers' health. It is really just the beginning.

### Collaborations

C Minayo Gomez, LCF Vasconcellos and JMH Machado were equally responsible for writing the article.

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