# Research-intervention: a mediator for transforming the health conditions of telemarketers in Pernambuco, Brazil

Pesquisa-intervenção como mediadora de transformação das condições de saúde dos teleoperadores de Pernambuco

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# **Abstract**

In the wake of the globalization process and the transformations in the telecommunications sector, resulting from the productive restructuring, the last ten years in Brazil were marked by the significant increase in the number of telemarketing services being provided by outsourced companies. This article describes the methodological process of research-intervention on the profile of living, working and illness conditions of telemarketers in the state of Pernambuco. Its descriptive analysis is based on the Ecosystem Health, approach centered on the integrated understanding of human health for constructing action-oriented knowledge. The project developed allowed us to propose a diagnosis and start planning interventions to be implemented jointly. Its participatory approach favored a knowledge based on dialogue, practice that strengthens the development of health promoting actions and of a citizen science based on participatory research.

**Keywords:** Occupational Health; Worker health surveillance; Occupational risks; Health promotion; Participatory Research.

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## Resumo

Com o processo de globalização e as transformações no setor de telecomunicações, provenientes da reestruturação produtiva, os últimos 10 anos foram marcados pelo crescimento significativo do número de empresas terceirizadas na prestação de serviços de teleatendimento no Brasil. Este artigo objetivou descrever o processo metodológico da pesquisa-intervenção sobre perfil das condições de vida, de trabalho e de adoecimento dos teleoperadores do estado de Pernambuco. Esta é uma análise descritiva de pesquisa, ancorada na Abordagem Ecossistêmica em Saúde, centralizada na compreensão integrada da saúde humana, na construção do conhecimento direcionado para a ação. O projeto desenvolvido permitiu realizar um diagnóstico e iniciar o planejamento de intervenções a serem implementadas conjuntamente. A abordagem participativa permitiu a aplicação do diálogo sobre o conhecimento, que fortalece o desenvolvimento de ações na perspectiva da promoção da saúde, mas também de uma ciência cidadã baseada em pesquisa participativa.

Palavras-Chave: Saúde do Trabalhador; Vigilância em Saúde do Trabalhador; Riscos Ocupacionais; Promoção da Saúde; Pesquisa Participativa.

# Introduction

The process of work precarization directly affects the workers' lives, especially concerning their health (Fernandes; Pace; Passos, 2002). The workers from the telecommunications industry are among those suffering the most effects for they work with information and most sophisticated information systems, as is the case with call centers or customer service services. In these centers, the attendants find themselves exposed to the intensification of work and submitted to management devices based on psychological stress, characteristics that contribute for the emergence of morbidities related to work (Antunes; Praun, 2015; Braga, 2012).

This information industry results from the massive "globalization" of production and interpersonal relationships, which is characterized by the dynamism and speed at which it spreads information (Alves, 2007). Along with this process, the neoliberal economic policies and the technical-industrial revolution established a set of changes within the work sphere, having as the dominant dynamic process the precarization of the labor social relationships (Cordeiro, 2011; Druck, 2011). The low wages, high turnover of workers, and the low possibilities of internal promotion in the companies are the characteristics of the precarization that control the workers to a considerable extent (Cordeiro, 2011).

This process results from the context of the productive restructuring of capital (Peliano, 1997), consequence of a flexible cumulative standard instituted to respond to the capitalist crises of the 1970s (Harvey, 2012), which introduced new forms of labor exploration to ensure the maintenance of wealth accumulation through the capital. The process encompassed the deregulation and opening of markets, financialization of the economy, and relaxation and precarization of labor conditions and its fragmentation, in addition to the deterritorialization of productive processes.

The telecommunications industry had been introducing technological innovations through the incorporation of information and communication technologies, which occupy a privileged spot in the world's productive system and led to a significant

increase of enterprises within the last 10 years (Mocelin; Silva, 2008). In Brazil, the industry traded US\$ 38 billion in 2016, employing roughly 550,000 people, which resulted in a significant growth in the number of telecommunication companies specialized in call center services (Nogueira, 2011). Big corporate groups control the Brazilian call centers which, concentrating the majority of workers in these services (Braga, 2012).

These workers directly suffer from the high competitiveness in the market, exhausting routine, the fast-paced work environment, the high industry turnover characterized by high levels of dissatisfaction and absenteeism (Batt; Doellgast; Kwon, 2005; Cordeiro, 2011; Nogueira, 2011; Silva, 2010). Nearly 70% of the workforce is female, while 45% are of young people between 18 and 25 years, being one of the entry doors of female young workers into the labor market (Nogueira, 2011).

The most frequent health issues found in these workers are Repetitive Strain Injuries, Work-related musculoskeletal disorders (RSI/WMDs) and Noise-induced hearing loss (NIHL). Mental disorders related to the labor activity are also common and present themselves in the form of alcoholism, work-related depression, stress, fatigue, professional neurosis, among others (Braga, 2012; Nogueira, 2011). These conditions occur because of the lack of autonomy, heavy workloads, both physical and psychical due to the fast-paced execution of duties, in addition to constant auditing on the work (Braga, 2012; Fernandes; Pace; Passos, 2002; Ogido; Costa; Machado, 2009; Santos, 2006).

Thus, comprehending the workers' health, through the analysis of the historic-social process in which they are inserted, is required to base actions aimed at the surveillance and promotion of their health. From the understanding of the interrelationships among production, work, environment, and health, it is possible to understand the living conditions, the profile of illness and death of the individuals, and to build alternatives for changes that can guarantee life and health for the environment and the population.

The National Workers' Health Policy (PNSTT) assigns to the Brazilian National Health System (SUS) the responsibility for promoting actions for

the workers' health. These actions must focus on surveillance, aiming the promotion, protection, care, and rehabilitation of the workers' health and the reduction of the morbimortality caused by the development of the productive processes, without distinction of employment relationship and prioritizing the most vulnerable groups (Brasil, 2012).

Among the PNSTT objectives, the comprehension of the productivity activities and hazardous environments for the workers, identifying their needs and health issues. When there are hazardous environments, protecting measures in the work and environment processes, intervening in both and in their surroundings (Brasil, 2012).

As a guideline for the action strategy, the PNSTT considers to be critical the participation of workers and their different organizations in the planning and execution of health actions, especially those specific by the Workers' Health Surveillance (VISAT) (Brasil, 2014).

The VISAT has as one of its principles the workers' right of knowing the processes that may affect them and the right to the participation in the processes of identifying hazard and danger present in work environments and the repercussions on their health, as well as in the formulation, planning, monitoring and evaluation of interventions on the conditions that generate hazard and work-related injuries (Brazil, 2014).

This article presents a descriptive analysis of the research-intervention process on the living, working, and health conditions of telemarketers in the state of Pernambuco. We conducted this counter-hegemonic approach to the knowledge construction process related to the health of call center workers in a participatory, interdisciplinary, and interinstitutional way, involving research institutions (academia), labor unions (workers), and the SUS worker health management (health).

## Method

This is a descriptive analysis of the methodological process of research-intervention, anchored in the Ecosystem Approach to Human Health (Ecohealth), whose approach aims at the integrated

understanding of human health, taking into account relationships between the conditioning factors that make up the determination of the health-disease process for the construction of action-oriented knowledge (Augusto; Mertens, 2018).

The research-intervention breaks with the logic of positivist science, ignoring the opposition between subject and object, social and biological. We do not focus only at data collection, but rather we propose to build paths to transform reality, inaugurating a new look on the active participation of the subjects, valuing their knowledge and subjectivity in the construction of knowledge. In addition, we establish the involvement of the researcher in the critical perspective of reality placed throughout the dynamics of research and intervention, thus, the objects and products are identified and defined during the process, relying on the active participation of all involved (Chassot; Silva, 2018).

The Ecohealth considers that identifying relationships among health conditions and their social, cultural, environmental, economic determination processes in ecosystems modified by human intervention is fundamental for research and action (Betancourt; Mertens; Parra, 2016; Lawinsky; Mertens; Passos, 2012). This methodological perspective enables studies that are more comprehensive and participatory interventions for problem solving/intervention. It does it by recognizing the interaction between the different components of the ecosystem and focusing on the promotion of human health, while encouraging the approximation of society with decision-makers and social policies, as highlighted in the PNSTT, which advocates participatory methodologies involving workers (Gomez; Vasconcellos; Machado, 2018)

The idea for this research arose from demands by workers' representatives about the need to obtain information about the health of telemarketers and, based on this, articulate with decision-makers on health policies and VISAT actions, as advocated by the SUS principles of participatory democracy (Gomez; Vasconcellos; Machado, 2018).

Through a mixed approach, with qualitative and quantitative techniques, we used participant observation, field diary, field notes for action planning, and a seminar to discuss the health of telemarketers, and the application of a structured questionnaire with the workers for the data construction.

We conducted the research was conducted in 2017 and 2018, with a team consisting of representatives from academia, state health management, and workers' union representation.

We organized this research-intervention in two phases (Chart 1):

- Diagnosis construction to carry out a critical analysis of the entire process of collective construction of the research, covering the conception of the project, literature review, methodological definition and objectives, data collection and analysis, and results. In this first phase of the project, we developed a diagnosis of the living, health, and working conditions of telecommunication workers in Pernambuco. We held problematization workshops with the subjects involved in the research-intervention to identify the main demands and to build the diagnosis;
- Construction of interventions for the description and application of steps for the planning and outcomes of the interventions. In the second phase of the project, focused on the definition of health promotion actions in the work environment and process, we carried out activities aiming the construction of participatory strategies that provided reflections focused on health intervention. We organized workshops for action planning and a seminar to present and discuss the results found in the initial diagnosis.

Chart 1 - Stages of the research-intervention development

OBJECTIVE	RESEARCH STAGES	ACTIONS
To analyze the living, work, and health conditions of telemarketers workers in the state of Pernambuco	Diagnosis construction	<ul> <li>Workshops for identifying needs and project development;</li> <li>Literature review;</li> <li>Elaboration of the research project;</li> <li>Submission to the Ethics Committee;</li> <li>Analysis of the territory and the context in which the problem is;</li> <li>Construction/establishment of the collection tools;</li> <li>Pilot data collection;</li> <li>Primary data collection;</li> <li>Data organization;</li> <li>Data analysis and consolidation;</li> <li>Reports for health management;</li> <li>Defense of the Residency Final Assignment;</li> <li>Partial report for the Research Ethics Committe;</li> <li>Writing of articles.</li> </ul>
	Construction of interventions	<ul> <li>Workshops for establishing action strategies;</li> <li>Establishing parameters to carry out intervention;</li> <li>Executing health intervention actions.</li> </ul>

The telemarketers union promoted a process of mobilizing the workers and their leaders (union directors and delegates) to participate in the activities of the intervention research, with the purpose of defining the whole process. We held systematic meetings, in different formats and objectives: workshops, meetings, study and discussion groups, for the design and execution of the research project from its theoretical framework, literature review, methodological construction, research objectives, field work, data analysis, consolidation of results, and construction of intervention and health promotion actions. The subjects involved carried out the entire research-intervention process collectively.

# Results and discussion

The topics "Developing knowledge for diagnosis in workers' health" and "Transforming the knowledge developed into actions to promote workers' health" systematize and present the results and discussion

# Developing knowledge for diagnosis in workers' health

From the workshops, the telemarketers identified four main demands: develop the

workers' sociodemographic profile; describe the organization and work relations; identify health conditions referred to by the workers; identify the predisposition to mental disorders related to work (Chart 2).

To meet the demand a diagnosis of the sociodemographic profile of telemarketers in Pernambuco, we developed a questionnaire in two workshops held with the representation of workers, taking as reference the worker survey (Alves; Jackson Filho, 2017). The questionnaire encompassed 65 questions categorized into three axes: (1) sociodemographic characteristics, (2) work aspects, and (3) health aspects, including a self-administered instrument (SRQ-20) to gauge the occurrence of Common Mental Disorders among workers (Mari; Williams, 1986).

We applied the questionnaire to telemarketers from two call center companies, located in the municipalities of Jaboatão dos Guararapes and Recife, at end of the four work shifts. The survey team stood at the entrance of the companies and a pilot collection was carried out with 80 individuals to outline the sampling plan and final definition of the questionnaire's content. The final sample was set at 355 individuals.

Chart 2 — Workers' needs and results of the diagnosis on the living, work, and health conditions of telemarketers in Pernambuco

WORKERS' NEEDS	DIAGNOSIS RESULTS
How to develop a sociodemographic profile of workers;	The profile of workers characterizes as young adults between 18 and 25 years old, mostly female, cisgender, brown or black, single, and with a complete high school education.
2. To describe the work organization and relationships;	Regarding work organization, most of them are at their first jobs; they have been working at the company for 1-2 years, with a daily workload between 6-7 hours and short breaks for rest and meals. Most of the interviewees perform other activities in addition to their work at the call center.
3. To identify health conditions referred by the workers;	The main health problems identified are related to posture, repetitive motion, and mental disorders.
4. Identify the predisposition to work- related mental disorders.	The results suggest that there is a high predisposition for mental illness processes in telemarketers.

The results show that the workers are young adults between 18 and 25 years old, mostly female (66.9%), cisgender (84.3%); data similar to those evidenced by Nogueira (2011). More than 70% of the interviewees identified themselves as Brown or black. Regarding marital status, the majority is single and has no children. Young adults who have completed high school (51.2%) and who develop other activities parallel to work, such as studying mark this labor force. The early insertion in the labor market provides the opportunity to finance their own studies, since we observed that, among those who are studying, 86.1% are in private institutions, an issue that, as Cavaignac (2011) points out, reflects the lack of public investment in education.

Regarding work organization, most of them are at their first jobs; they have been working at the company for 1-2 years, with a daily workload between 6-7 hours and short breaks for rest and meals. Most of the interviewees perform other activities in addition to their work at the call center.

The second demand was to describe work organization and relations. Almost half (46%) of the telemarketers reported being in their first job; working in the company for 1-2 years, with a daily

workload between 6-7 hours and short breaks for rest and meals. The daily home-work-home commute takes between 1-2 hours, causing recurrent fatigue. The majority of the interviewees perform other activities besides work at the call center, a result of the low pay. The result-oriented model drives, in the work routine, an increase in the pace and intensity of work, strict technological and human control, which is reflected by the 63.6% of respondents who said that something at work harms their health, and 32.3% of these reported the management to be the cause of damage to health.

Due to the precariousness of the work in these companies, the employees cannot stay in their jobs for a long time, which leads to a high turnover and the fact that they are always in the hiring process. In addition to it, there is the difficulty of getting their first job, especially among women, which makes young adults their biggest workforce. This configuration of the labor world has expanded in different areas with the so-called "new" hiring models, such as temporary, partial, outsourced, intermittent, and autonomous work relationships, considered in flexible accumulation as "modern," but which have in their essence the mark of labor precarization (Antunes, 2018).

The low adhesion of the category to the union revealed fragilities related to the new domination strategies of the capital, which result in the loss of bonds and the perspective of collective identity, a scenario already announced by Druck (2011) and that impacts the entire working class, despite its particularities.

The third demand concerns the identification of health conditions reported by the workers. The survey found the presence of work-related diseases, such as hearing loss (58.8%), tendinitis (21.7%), and mental disorders (12.3%). The main reasons for absence from work relate to repetitive strain during long working hours, such as wrist, elbow, and shoulder pain, justified by the need to produce to meet the goals, thus avoiding losing their jobs. Nearly 33% of the workers interviewed had suffered work-related accident(s).

This picture relates to the work process and organization, which imposes the fulfillment of goals, an exhaustive day of work with little time for rest. This causes them to stay in a certain position for a long time, causing RSI/WMDs and the constant use of the headsets, causing hearing problems (represented by 58.8% of respondents), similar to the findings exposed by other studies (Braga, 2012; Nogueira, 2011).

Most workers (64%) relate their illness to the work organization and the pressure to achieve goals. This fact reflects the influences that the work organization exerts on the workers, forcing them to respond quickly and efficiently to market demands, thus suffering severe consequences to their health. In addition, the insecurity that permeates daily work relationships imposes a constant vigilance to keep the job (Druck, 2011).

The fourth demand refers to identifying the high predisposition for mental disorders processes in telemarketers. This is a result of the intense pressure to meet goals, in which they are often given the option of working unpaid overtime so that these goals can be met. Depression is one of the main causes of work-related illness (12.3%) and moral or sexual harassment, in the case of female workers, is a constant target of embarrassment from managers and supervisors.

The conditions related to work organization, such as low wages and additional responsibilities, are important determinations to be considered in the mental health process of these workers. According to Vilela and Assunção (2004), the mental exhaustion of workers is useful to impose a conditioned behavior favorable to production.

Such affections result from the lack of autonomy of the workers, high physical and psychological workloads due to the demand for accelerated execution of duties, and constant auditing of the work (Braga, 2012; Fernandes; Pace; Passos, 2002; Ogido; Costa; Machado, 2009; Santos, 2006).

# Transforming the knowledge developed into actions to promote workers' health

Transforming the knowledge acquired in the diagnosis about the health-disease process of telemarketers into actions of surveillance and health promotion is one of the great challenges for the performance of workers' health, especially when the intent is to perform inter and intrasectoral actions, in a participatory way, involving different institutions, with organizational, administrative aspects and particular dynamics. This effort comes from the need for aggregating several knowledge and practices around common purposes, considering the diversity of actions, in this case, namely for intervention in the health-disease process of telemarketers (Mendes; Pezzato; Sacardo, 2016).

This perspective aims to propose interventions within the positive transformation of the reality of the subjects and provide subsidies so that they can be subjects of reflection and transformation of their living conditions. In the ecosystem approach, the process of intervention in a reality should be done with the participation of representatives of all actors involved: everyone should be aware of the addressed matter and should have their ideas on how to solve it respected and taken into account (Lawinsky; Mertens; Passos, 2012).

The intervention proposals to respond to the issues identified in the diagnosis were defined in workshops involving the subjects, as systematized in the Chart 3.

#### Chart 3 - Proposals for the development of workers' health actions for telemarketers in Pernambuco

- 1) Hold a thematic seminar for telemarketers and professionals from the National Network for Integral Care of Workers' Health in Pernambuco (RENAST-PE);
- 2) Hold a workshop on popular surveillance in workers' health to build health planning and protective elements for the workers' health;
  - a) training activities;
  - b) organization of educational material;
  - c) meetings with companies;
  - d) engagement and communication.
- 3) Scientific dissemination of the t diagnosis through publication in scientific journals and presentations in scientific events;
- 4) Develop communication strategies to promote the health of telemarketers;
- 5) Develop Worker Health Surveillance actions in an articulated and participatory manner;
- 6) Develop a shared work with the Pernambuco State Workers' Health Network involving all the Workers' Health Reference Centers (CEREST).

The "Precarização do trabalho e saúde dos trabalhadores: desgaste e adoecimento dos(as) teleoperadores(as)" (Precarization of work and workers' health: weakening and sickness of telemarketers) seminar aimed to discuss the findings of the diagnosis with the category and workers of the National Network for Integral Care of Workers' Health in Pernambuco (RENAST-PE). The mobilization of the workers was carried out through publicity, pamphlets at the entrances to the companies, presenting some specific results of the diagnosis and inviting them to the seminar (Figure 1), posters and cards for dissemination in print and digital media (Figure 2).

The seminar had an attendance of 96 people, among them: telemarketers, leaders of the union of this and other categories, representatives of research and teaching institutions and of the CEREST, undergraduate students. The seminar took place in two parts, the first presenting three round-tables on the theme. The second happened in the afternoon, presenting the workshop on popular surveillance in worker's health to build the planning of protective elements of workers' health. In addition, the seminar took as a reference for its organization the Altadir Method of Popular Planning (MAPP), which is a practical and integrative strategic planning tool aimed at the participation of actors involved in the processes of preparation and execution of actions (Pereira et al., 2018).

Even though the MAPP proposes the realization of 15 steps, it was adapted to 5, which are:

- Step 1 (explanatory moment) Selection of the Plan's problems: based on a survey of the various problems observed by the actors, the most relevant was selected;
- Step 2 (explanatory moment) Explanation of the Problem - explanation tree/problem tree: in this step, the problem situation was described as to its causes and consequences for more clarity in the planning of actions to intervene on the causes pointed out (critical node);
- Step 3 (explanatory moment) Identification and selection of critical nodes: consisted in identifying among the causes that explain the problem those that, when modified, by themselves promote the change in another cause or in a series of causes;
- Step 4 (normative moment) Designing the operations demands: the objectives were established to overcome them by means of actions (defined with their respective responsible parties, execution deadlines, and necessary resources);
- Step 5 (strategic moment) Vulnerability analysis of the plan: finally, each operation was analyzed and the condition that makes it vulnerable was highlighted, the risks of not meeting the objectives to identify corrective measures and ensure the execution of the plan.

This method presented applicability by allowing reflection on problem situations in the work process of telemarketers and the development of an action plan in a collective way and with shared responsibility among those involved. The workshop had as a starting point the main results of the diagnostic study for the development of health promotion and prevention actions related to working conditions in call centers, as well as the continuation of the research with another profile of telecommunication workers (telecommunication technicians responsible for network installation and maintenance).

Four axes organized the actions planned by the participants:

 Training activities: inter-sectoral courses and/or organized by the workers themselves, workshops and thematic snacks such as the "coffee with ideas" proposal; training with managers to address aspects related to labor legislation, worker health, and moral harassment;

- Organization of educational material: preparation and dissemination of a booklet on worker's health;
- Meetings: meet with the companies to discuss abusive goals and aspects related to the organization of work, such as making break times more flexible without affecting the adherence goal;
- 4. Mobilization and communication: mobilization of the actors involved in the process and organization of work to execute a participatory planning; empowerment of union leaders for general mobilization of the category; dissemination of information about moral harassment on computer home screens to alert workers; use of rapid media to inform about moral harassment.

Figure 1 - Pamphlet announcing the survey results distributed at the companies doors.



Figure 2 — Poster announcing the I Seminar "Precarização do trabalho e saúde dos trabalhadores: desgaste e adoecimento dos(as) teleoperadores(as)".



Some of the proposed actions are still in progress and need to be directed and made viable. These are (1) the scientific dissemination of the developed diagnosis through publication in scientific journals and presentations in scientific events; (2) elaboration of communication strategies to promote the health of telemarketers; (3) development of surveillance actions in Workers Health in an articulated and participatory way; and (4) construction of shared work with the RENAST of the state of Pernambuco. To accomplish this, meetings will be necessary between the institutions participating in this research, open to workers and health professionals.

As argued by Machado, Martins, and Souza (2018), "in the face of increasingly complex everyday situations, it is paramount to promote the articulation of theory and practice in order to devise appropriate solutions for specific territories" (p. 247). In this research-intervention, besides the identified and executed intervention actions.

this process enabled a critical construction of social relations for the subjects and territories involved.

It is worth mentioning that the construction process and the definition of actions, especially in worker's health, is permeated by the capital/labor contradiction. The particular processes studied are socially determined and relate to the work process and the living conditions and health of workers. Because this project was a research-intervention, it is necessary to emphasize that the development of knowledge for action and decision-making is a pillar that permeates the entire process. It includes the intervention itself, using dialogue between different fields, scientific and non-scientific, which crosses disciplinary boundaries for the construction of new knowledge, methodologies, and actions. This approach aligns with the field of worker health and contributes to knowledge of the aggravations and proposition of change of harmful practices to health in the environment or work (Betancourt; Mertens; Parra, 2016; Chassot; Silva, 2018).

## Final considerations

Contemporary challenges in research processes require openness to models that enable dialogue with distinct fields in an interdisciplinary way, and the ecosystem approach to health has been constituted as part of an innovative field to analyze in an integrative and participatory way the multifactorial and dynamic impacts that affect health. By breaking the separation between humans and ecosystems, this approach makes it possible to respond to persistent public health challenges with adaptive solutions.

The complexity with which the new forms of work are presented, with the precarious working conditions, withdrawal of rights, weakening of union organizations, added to structural unemployment, pressures the subjects to accept "any" condition imposed. It expresses the need for a more sensitive look by health managers and competent institutions with a more active and participatory surveillance in relation to the health of these workers.

This research-intervention provided knowledge about the work and illness process of telemarketers in Pernambuco, indicating the need to build interventions articulated with various institutions and the workers themselves to transform the reality of the work-related health-disease process of this category of workers. However, the greatest challenge remains the transformation of the reality found through the implementation of the planned actions.

The methodological approach used brings the need for dialogues both inter-institutional and with workers as an important tool for building good practices of health promotion and surveillance. Specifically, this article will serve as a model for the development of other research-actions with the purpose of reaching the demands presented by several categories of workers about the aggravations, dangers, and risks to their health.

The results presented indicate that the challenges are numerous and complex for the transformation of the reality of labor world. In this sense, surveillance in worker health can guide the actions of the services and the analysis of the relationship between health and the work process.

The research-intervention enabled a critical reflection with the workers about their illness

processes and work organization, the definition of directions to be executed by the union, health management, and workers. The results of the research, aligned with these activities, build tools between the academy, health services, social representations, and the workers themselves that can consolidate information and strategies through situations of health vulnerability.

This research process proved to be important for the training process of the actors involved, whereas also providing subsidies for decision-making by different institutions to implement promotion and surveillance actions in worker health in the SUS. Thus, the experience of this research-intervention contributes to the strengthening of the collective health field, while introducing this manner of doing a critical science, committed to the health of the working class.

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