Starting at Home: The Experience of the Change Laboratory in Surveillance Activity at CEREST Piracicaba

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Summary
The relationship between work and health is increasingly complex and challenges public policies on worker health surveillance. Acting on the determinants at the origin of these problems is a strategic objective in the VISAT (Occupational Health Surveillance) guidelines defined by the Ministry of Health since 1998, however this object seems to appear more in the official discourse than in the daily practice of the services it sees. As a rule, they are inundated by specific demands, which force them to face an exhausting routine of conflicts with companies, often resulting in the loss of meaning in their work. Faced with demands of this nature and the opportunity to pilot the Change Laboratory Methodology (LM), in cooperation with academia, the service chose to apply the LM to itself with the aim of improving its working conditions and mastering learn the methodology for future applications in the territory. The objective of the article is to describe its results and reveal the central ideas and principles of the method. The findings reveal the power of the methodology both in resolving contradictions found in the quantity and quality of work, as well as in the growing protagonism (agency) of actors in the search for more sustainable and lasting solutions.

Keywords: Change Laboratory, Work, Surveillance.

1. Introduction (demand, objectives and method)
Given the complexity of worker health surveillance actions, the multi-disciplinary professional team at CEREST Piracicaba, Brazil, with twelve years of existence, despite the recognition achieved by the service and relative success in some sectoral initiatives (JACKSON-FILHO and BARREIRA, 2013), had among its professionals complaints of excessive work, frustration with demands that prevented the prioritization and completion of more significant actions, technical and conceptual difficulties in facing more complex cases that required teamwork, in addition to more time for interventions. This situation caused manifestations of frustration and low involvement in tasks, irritability and tension.

On the other hand, some members of the team make up a research group that conducts a thematic project with FAPESP, whose main objectives are to develop and apply, in the Brazilian context, the Change Laboratory (LM) methodology developed by researchers from the University of Helsinki (ENGESTRÖM, et al., 1996; VIRKKUNEN and NEWNHAM, 2015). CEREST presented itself as an opportunity to pilot the methodology in the Brazilian context, taking into account the good
relationship and trust between the research team and the service, as a way of improving the work situation, in addition to provide knowledge and mastery of the proposed tool.

1.1 What is LM?
This methodology can be summarized as a meta tool for developing productive activity. Its main pillars are found in the cultural historical theory of Vigotsky (1978) and followers and consists of the following main elements systematized in Virkkunen and Newnham (2015): (a) the unit of analysis and development consists of the activity system (SA), a dialectical unity of mediations between the subjects and the object of SA, which comprises theoretical and material tools; the division of labor; the rules, the community that shares the same object (Figure 1); (b) anomalies, complaints and disturbances arise as a result of internal contradictions in the system, the identification of which implies that subjects focus on their analysis both from the current situation and from its historical origins; (c) the participating subjects learn and master the situation in a collaborative process when they confront each other and the problem situation (first stimulus) and with the offer of concepts and conceptual/intellectual tools (second stimulus) that constitute the basis of collective learning and individual in facing reality; (d) the process is designed to enable joint expansive learning that begins with the recognition that something needs to be done, and gradually evolves through understanding the systemic origins of problems, until the visualization of a solution, which goes through creation, testing, development and evaluation of solutions produced by the group (figure 2); (e) the methodology consists of collecting ethnographic data on the functioning of the system, the data of which is offered to participants with the help of interventionist researchers who operate as facilitators of the learning process and development of the activity.
2. Objective
The objective of this article is to explore and illustrate, based on a case of training intervention applied at CEREST, the main dimensions and stages of LM.

3. Methodology
This is a qualitative descriptive study that rescued data, information and documents produced/collected in the LM sessions held at CEREST Piracicaba in 2014 and 2015. The process began with the negotiation of interventionist researchers for the application of the LM with the coordination of CEREST, in June 2014. The two demands presented were voluntary participation and the commitment to be present at the sessions, although everyone was aware that they could interrupt participation at any time, without consequences. At the beginning of September, the sessions began and participants signed the Free and Informed Consent Form (TCLE). 14 sessions were held between September 2014 and April 2015. The number of participants during the sessions varied from 9 to 14, with 19 people at the time of deciding on the change proposals presented in the last sessions. The sessions were recorded to enable the interventionist researchers to analyze the sessions themselves and plan future meetings.

4. Results and Discussion
In the situation mapping phase, participants' complaints regarding the current work situation were explored. Data collected during the preliminary interviews were used as mirror data; To deepen the understanding of the current situation, the stimulus used by the interventionists was the question: What is the purpose of CEREST? The main focus was the distinction between having accident inspection as its object or having worker health surveillance as its object. The workers began to reflect on their own activity, express their different opinions about CEREST's activity and began to look for explanations and possible ways of overcoming a common object in everyone's activity.
In seeking to understand the causes of the problems raised, we sought to carry out a historical analysis of the service to stimulate discussions about changes in the service and the consequences for their activity. This stimulus provoked the participation of actors in discussing the effects of the various changes on the activity. They interpreted that there was progress in the work method, in the relationship with the community, which led to an increase in the demand for work, as users began to seek out the service more and complaints also increased significantly. Another stimulus used was the crossing of the quantification of tasks in this timeline. It was possible to verify that there was an increase and diversification of tasks, but the increase in staff was not enough to keep up with the increase in work demand. The participants were unanimous in stating their dissatisfaction with the low quality of the intervention carried out due to the pressure for quantity like the one they claimed to suffer.

In the phase of analyzing the contradictions in the activity system, the finding that there was a double tension between work in quantity versus work in quality was the main contradiction found in the LM sessions at this CEREST. This is an intrinsic (primary) contradiction in the object itself.

In the solution creation stage, participants presented a redesign of the activity system, in which each element was replanned. In the current model the subject was the inspector individually, in the redesign the subject became collective, also including professionals from the assistance sector; As for the object of surveillance, in the redesign the expanded concept of surveillance gained strength; the instruments were added by the LM, team meeting, negotiation meeting, among others; as for the rules that were focused on meeting reporting demands, in the redesign they became planning, autonomy supported by team consensus and participation in team meetings (in which differences of opinion and the search for consensus could be explored); and the division of work that divided CEREST into assistance and inspection began to be divided into emergency actions, planned actions and the information room.

It was possible to highlight the strength and consistency of the methodology regarding the variables of interest in the present case evaluation. The climate of discouragement and low commitment showed a positive change during the sessions with the engagement of the actors who became increasingly more participative. The debates were intense, providing space to talk about the different perceptions of the actors, consistent with one of the principles of the method, which is multivocality. In the initial sessions it was found that the actors were looking for individual explanations and systemic explanations gradually emerged more strongly. Ethnographic data such as interviews, collection of service production data and success and failure cases served as the first stimulus for the discussion of current practice. Conceptual devices such as the concept of surveillance and the triangle that represents SA (figure 1) worked as triggers for understanding the contradictions existing in the system that prevented the achievement of more lasting results in surveillance activities. The discussion and reevaluation of the timeline together with the expansive learning cycle made it possible to identify in history changes in the object of the activity, the introduction of new tools such as MAPA (ALMEIDA and VILELA, 2010) and Ergonomics (GUÉRIN et. al, 2004), the advances achieved with these new tools as challenges that still persist and need to be addressed. The provision of these second stimuli was appropriated by the participants and enabled the deepening of learning, collective mastery of the subjects over the lived reality and the visualization of the necessary innovations that have been tried and are underway.

5. Conclusion

The LM enabled actors to expand the object of surveillance activity, which went from acting on isolated factors to a search for intervention on organizational determinants. This new object that previously appeared distant and in the official discourse was introjected into the system that, to give it consequence, required the reinvention of new mediating elements (new tools, new rules, a reinvention of the team itself). It was also realized that the new objective will not be achieved through external demands of the state command and control type. Without greater involvement from the companies' internal community, the chances of prevention are minimal. This implies
important changes in the role of the external public agent, who without giving up their role of control and regulation faces new challenges, which is to induce profound changes in predatory production models. Without an internal alliance, expansion and involvement of the companies’ internal community, the possibility of prevention seems very remote. The LM seems to be a powerful tool that allows us to make this bridge.

6. References
ENGESTRÖM, Y. et al. The change laboratory as a tool for transforming work. Lifelong Learning in Europe, v. 1, n. 2, p. 10-17, 1996.

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