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A case study of the implementation of an ergonomics improvement committee in a Brazilian hospital – Challenges and benefits

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ABSTRACT

This article discusses the creation of an improvement committee (IC) to implement policies aimed at improving working conditions in a public health institution in the city of São Paulo. Suggestions were proposed for future implementations of this organizational mechanism, pursuant to the presentation of the process of its formation and the main results achieved. The findings led to the conclusion that good outcomes require autonomy and support from management, and the adoption of effective measures to improve and legitimize the improvement committee's existence. Another important issue is facilitating worker involvement and creating a locus for dialog among people with different visions within the organization. Thus, two approaches converge: a top-down approach in which policies are defined and improvement actions are actually implemented based on a general outlook of the production and work system, and a bottom-up approach specific to employees who are also engaged in improvement policies and in putting them into practice. It is also possible to point out problems and opportunities arising from actual work situations to the higher levels of management. This kind of approach fits with macroergonomics, because it integrates strategy, organization and work issues. It is possible to discuss the benefits of this approach for companies and provide conditions for workers to engage effectively in these processes. In conclusion, these proposals can be considered from an emancipatory perspective, given that different actors should be able to codetermine working conditions and work content, thus directly influencing their individual and collective experiences. The support and commitment of upper management are essential elements of success in maximizing the effectiveness of this organizational approach.

1. Introduction

The purpose of this article is to describe and analyze an experience in implementing an improvement committee (IC) at a university hospital in Brazil. Based on a macroergonomic perspective, what can be learned about implementing an improvement committee in a healthcare organization and about its role and impacts? The principal aim of this paper is to describe the process that led to the formation of an improvement committee in an organization and to analyze the interest in implementing this kind of organizational approach in order to achieve benefits for the organization as well as for workers. The point of view supported by this paper is that the improvement of working conditions is an issue not limited to specialists, since different actors within production systems have contrasting experiences and can contribute to those processes, as proposed by various macroergonomics-based participatory approaches and activity-centered ergonomics. As such, a focus of this paper is the role played by hospital management, technical divisions, supervisors, and workers directly involved in different operations.

The main requirement for the intervention that served as the basis for this case study was to incorporate an ergonomic approach into institutional policies and into the organizational structure, given that various improvement actions proposed in the past produced only partial, limited or short-term results. This was attributed to the fact that ergonomics was not a reference for conceiving tasks and production processes (Seim and Broberg, 2010).

2. Literature review: ergonomics committees

One of the concepts of macroergonomics is the implementation

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of ergonomics committees to address issues that go beyond purely workplace-based approaches. Work design must be treated at a broader level (Haro and Kleiner, 2008; Hendrick and Kleiner, 2001; Hendrick, 2005; Imada and Carayon, 2008). Implementing this type of mechanism is essential for participatory processes, just as it is central to an activity-centered ergonomics approach (Wisner, 1997; Guérin et al., 2001; Falzon, 2004). Participatory processes are considered essential for obtaining better and more permanent results (Haines et al., 2002; Hendrick and Kleiner, 2001). Participatory approaches consider that workers have different kinds of knowledge about the reality of the work they do, and their engagement is important for analysis and to devise solutions (Daniellou, 2004).

Innovating within the organizational structure is a major challenge for companies (Nelson, 1991). One possible innovation is the establishment of committees. Snook (1993) defines committees as working groups that may be permanent or temporary, usually composed of people from different areas who share common goals, such as the completion of specific projects or the management of a process that involves many areas. Committees in an organization, for example, aim to increase productivity and efficiency (Sajjadi et al., 2011) as well as quality (Jiang et al., 2009). Committees can also be established to address health and safety issues or to devise improvements aimed at providing the conditions required for workers to develop professionally and safeguard their health.

Ergonomics can be introduced into organizations through one or more specialized professionals or by specialized departments. However, the scope and size of projects, as well as the number of workers involved, have revealed the need to bring together a larger number of professionals from different areas of expertise. When the field of ergonomics was expanded to include organizational design, new corporate initiatives for the organizational implementation of ergonomics were introduced, which included ergonomics committees – EC (Hagg, 2003), a type of improvement committee. The EC is an application that is set up according to the needs and opportunities of each specific situation. Improvement committees deal with safety and health problems, but their purpose is to provide a broader view of working issues, relating them to strategic decisions rather than leaving the discussion to specialist groups, such as ergonomics teams.

Ergonomics committees have been established in different business sectors to address different requirements and purposes (see Table 1).

One or more committees may be established, depending on the size of the company and the number of manufacturing plants. In larger companies, two types of committee are introduced at different organizational levels, with a central committee responsible for the overall activities and other local committees with operational responsibilities (Hagg, 2003; Moore and Garg, 1998; Silverstein et al., 1991). Up to three types of committees with separate but complementary mandates can be introduced in a large-scale project (Villeneuve et al., 2007). It is also possible to have two different structures working cooperatively: a steering committee and a technical committee. The former, which defines the project guidelines and makes strategic decisions, comprises all the key stakeholders and should be clearly supported by senior management (Torma-Krajewski et al., 2007; Villeneuve et al., 2007). The technical committee is responsible for designing and carrying out the project. It is also useful to propose a user committee in order to define requirements and offer informed opinions about the design proposals, based on executives' and workers' expertise in the field (Villeneuve et al., 2007).

The participants in ECs (divided among committees of different levels) are from heterogeneous areas. According to Marras (1997), there should be a balanced representation of management and workforce, and it is advisable to have the presence of people involved in the physical layout of the work area, who are empowered to control scheduling. ECs may include ergonomists (Hagg, 2003; Moore and Garg, 1998; St-Vincent et al., 1998) and representatives from the plant manager's staff and health and safety, medical, engineering, and maintenance sectors (Silverstein et al., 1991; Torma-Krajewski et al., 2007). Engineers responsible for projects and other professionals may also play a helpful role in the articulation of different viewpoints. There should also be an initial training phase to help the committee gain an understanding of ergonomics and foster more effective dialogue among the members, as ergonomics is not the only concern at hand – there is also the challenge of exchanging experiences and developing a common and shared language (More and Garg, 1998; St-Vincent et al., 1998; Torma-Krajewski et al., 2007).

ECs are proposed based on needs identified by top management and are chaired by individuals at senior management levels (Acosta and Morales, 2008; Marras, 1997; Moore and Garg, 1998; Villeneuve et al., 2007). However, in some cases, they are implemented based on a middle-out and bottom-up vision (policies drawn up with the participation of operational workers), in which one of the priorities is to facilitate information collected from the workplace to be discussed by the participants (St-Vincent et al., 1998; Torma-Krajewski et al., 2007). It is possible to have a dedicated professional within the organization, whose role is that of coordinator and facilitator. This responsibility may, but does not

Table 1
Business sector and aims of several ergonomics committees.

Business sector / Industry	Authors
Red meat packing	Moore and Garg, 1998
Mining	Torma-Krajewski et al., 2007
Healthcare	Villeneuve et al., 2007
Food	Acosta and Morales, 2008

Purpose / Request	Authors
Musculoskeletal hazards	Marras, 1997; Moore and Garg,
Implement and validate a participatory process	St-Vincent et al., 1998; Villeneuve et al., 2007
Ergonomics training	Silverstein et al., 1991
Designing a new distribution center	Acosta and Morales, 2008