



Reduce harmful work stressors.
Improve job quality and health.

Healthy Work **Strategies**

Reducing work stress and improving the mental health of hospital workers (Quebec, Canada)

A participatory worksite program, designed to reduce work stress and improve employee mental health, was developed as part of a research project involving patient care providers at an acute care hospital in Quebec, Canada. The program was designed to reduce a number of stressful aspects of work: high work quantity and time pressure, limited ability to make their own decisions, not enough social support from co-workers and supervisors, and not enough rewards for highly demanding work, which could include respect, income, and career opportunities.

The program was carried out among 674 care providers in one hospital, with a similar hospital of 894 care workers being the “comparison” group. Care providers were nurses, nursing assistants, and orderlies, and included permanent, temporary, full-time and part-time workers.

How the process started

At the start of the process (summer 1999-spring 2000), researchers met with managers from nursing and human resources, with union representatives and with head nurses, listened to their concerns about work organization and mental health, and presented information from employee surveys about their working conditions and health (conducted February-April 2000), and an overview of the proposed program. The program was agreed to, and publicized on care units, and prizes worth \$50 for a meal at a local restaurant or a massage were offered as incentives to participate.

The patient care workers had completed working conditions and health surveys which contained questions from the province-wide 1998 Quebec Health Study. The surveys showed that, compared to all Quebec employees, the hospital workers had higher rates of psychological distress, burnout, and sleeping problems. The hospital workers also reported higher workload demands, lower job control and social support, and not enough rewards for their work efforts, compared to all Quebec workers.

The researchers also observed work practices during day, evening, night, and weekend shifts, for about 20 hours per unit in 11 care units. Notes were taken that helped to

identify themes for interviews with hospital staff. During autumn 2000, individual 90-minute interviews were conducted with the head nurse, nursing coordinator, and one staff nurse from each unit.

A labor-management committee to carry out the job stress reduction program

To carry out the program, a team was formed, consisting of two researchers and a research assistant, head nurses and staff nurses from three care units, administrative support personnel, and representatives from nursing, human resources, and local unions. One care provider volunteered, and other staff were asked to participate by head nurses or appointed by human resources or union leaders. Members of the team were selected based on their willingness to become involved, knowledge of their own units and other hospital units, ability to communicate easily with staff, interest in learning how to identify and reduce stressful working conditions, willingness to share knowledge, and ability to work as part of a team. The team held eight 3-hour meetings over the course of the first four months, facilitated by the researchers, and sub-committees were formed. Reports were developed that listed each work situation causing stress (categorized as job demands, control, support or rewards) and a proposed solution to each situation.

In 2001, the team proposed to the nursing department 56 solutions designed to reduce job stressors. The first measurement of effectiveness of the program was carried out in spring 2002. By the second measurement of effectiveness, in 2004, 80% of the proposed solutions had been implemented. However, even three years after the team's work had begun in 2001, some solutions were still in the process of being implemented. Those carrying out the solutions were nurses, nursing assistants, chief nurses, a nursing department coordinator, and union members. Some of these participants were on the intervention team and some were on the management team.

Targets for improvement included team work, staffing processes, work organization, training, communication, ergonomics, and fatigue reduction (see Table 1). Table 1 lists examples of stressful work conditions and solutions

Table 1. Targets for changes in policies and procedures	
Target or problem	Proposed solution
Team work	
Lack of respect between nurses and assistants	Team meetings, discussion of problems and solutions, adapt workload, manage conflict
Negative comments affecting the work climate	
Work overload of nursing assistants	Parity committee reviewed tasks, specifying and limiting them
Responsibility for heavy patients left to same person	
Effects of negative physician attitudes on nurses	Chief nurse wrote a letter to physicians addressing contentious relationships and
Lack of cooperation from physicians such as when awakened at night for questions	

Delays from physicians answering calls	organized meetings where chief nurses could address the issue in an informal way
Physicians leaving to nurses the responsibility to report bad news to patients	
Staffing processes	
Unskilled workers increase nursing supervision need	Unit heads to select replacements from among their regular staff unit
Frequent replacements by unskilled staff	
Delays in filling positions	Changes in hiring process to reduce delays
Last minute information about job allocation	New positions created to reduce the problem
Work organization	
Work overload for co-workers when nursing assistants transport patients off unit	Creation of stretcher bearer service began, but eventually was cut and these staffing shortage problems continued
Shortage of nursing assistants on night and weekend shifts and during emergencies	
Unpaid overtime to ensure patients' well-being	Chief nurse encourages staff to leave on time
Work that is done quickly and under time pressure	Solutions to other time constraints initiated to leave more time for caring for patients
Training	
Perceived inequity in terms of access to sessions	Annual training plans were made available
Training outside unit causing overload for co-workers	Training planned on unit during shifts
Communication	
Misunderstanding of staffing processes causing feelings of not being consulted or respected	Consultation of nurses in decision-making process was improved
Lack of communication about patients' conditions due to work schedules that do not overlap	Overlapping schedules were established
Ergonomics	
Lack of space at nurses' work station	Ergonomic rearrangements were made
Difficult access to patients' bathrooms	

Results of program

Three years after the start of the program, relative to the comparison hospital, reductions were seen in some sources of job stress, and in some measures of employee mental health. Table 2 summarizes those changes after three years:

Table 2	Hospital with job stress reduction program	Comparison hospital	Better results in hospital with program (vs. comparison)
Job demands	decline	decline	yes
Job control	no large change	no large change	yes
Supervisor support	no large change	decline	yes
Co-worker support	no large change	no large change	
Job rewards	no large change	no large change	yes
Effort-reward imbalance	decline	no large change	yes
Psychological distress	no large change	no large change	
Sleeping problems	no large change	no large change	
Work-related burnout	decline	no large change	yes
Client-related & personal burnout	decline	no large change	yes

However, improvements were not seen in all measures, due to factors beyond the researchers' and the team's control. Staffing issues occurred throughout the program, including turnover among management, nursing, and administrative staff, and key positions were left open or filled by temporary staff. A unit's transfer to another hospital and a budget deficit led to jobs being eliminated, and an inability to guarantee work hours created difficulty recruiting nurses and nursing assistants. Hospital practices were also affected by the appearance of new infections among patients, such as an outbreak of a drug-resistant staph infection in 2003 that led to some care providers refusing to work.

Conclusions

This participatory program was able to reduce some sources of stress at work and improve some measures of employee mental health. While the program was carried out in a hospital, the participative nature of the problem-solving process, along with support from researchers, may be successful in reducing work stress in other industries. However, issues beyond the control of researchers, such as employee turnover, staffing problems, and budget cuts, can be obstacles to efforts to reduce job stress.

References:

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2. Bourbonnais, R., Brisson, C., Vinet, A., Vézina, M., Abdous, B., and Gaudet, M. (2006). Effectiveness of a participative intervention on psychosocial work factors to prevent mental health problems in a hospital setting. *Occupational and Environmental Medicine*, 63(5), 335-342.

3. Bourbonnais, R., Brisson, C., and Vézina, M. (2011). Long-term effects of an intervention on psychosocial work factors among healthcare professionals in a hospital setting. *Occupational and Environmental Medicine*, 68(7), 479-486.