International Journal of Emergency Mental Health and Human Resilience, Vol. 17, No.3, pp. 640-643, ISSN 1522-4821

Organizational Interventions as a Strategy to Prevent Work Related Stress among Mental Health Workers

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ABSTRACT: ***Background:*** *The wellbeing of mental health workers (MHWs) is a priority for Departments of Mental Health in order to ensure a better protection of MHWs and a better health service. However, to date, several factors affecting the healthcare sector in Italy such as organizational changes involving working time and intensity, type of employment contract, psychosocial factors at work, health and safety policies within the organization, appear to interfere with the workers' wellness.* ***Methods:*** *The authors carried out an integrated analysis of stress sentinel indicators and of objective stress factors of occupational context and content, among two General Hospital Psychiatric Units (GHPUs) and four Community Mental Health Centres (CMHCs), following the European Framework Agreement on Work-Related Stress of 8 October 2004, incorporated in Italy into Legislative Decree 81/08.* ***Results:*** *All the GHPUs and the CMHCs investigated through the objective approach to w.r.s. assessment reported a medium level of w.r.s., among both psychiatrists than nurses. Following the evaluation were identified the priority organizational interventions focused on work context issues; these interventions showed effectives to minimize the sources of w.r.s. among the GHPUs and the CMHCs.* ***Conclusion:*** *The results of this study suggest that organizational interventions focused on improvement of work context issues may contribute to an effective reduction of WRS among nurses and psychiatrists employed in GHPUs and CMHCs. A special effort is required by the head psychiatrists and the head nurses of GHPUs and CMHCs to implement effective policies about the management of WRS.*

Key words: *Work related stress, mental health worker, stress assessment*

INTRODUCTION

Work related stress (WRS) is a major problem for employees and organizations, and it may be cause of burnout, illness, labour turnover, absenteeism, poor morale and reduced efficiency and performance (Sutherland & Cooper, 1990). Health care professionals around the world are exposed to pressures resulting from the ongoing changing of health organizations, growing economic pressures, technological advances, increasing patient expectations, optimization of health care organizations evolving towards models based on the effectiveness, efficiency and appropriateness of health interventions, and the requirement for more evidence-based and high quality health care. Literatures data evidenced that health workers experience higher levels of stress and stress related health problems than other occupational groups (Reem et al., 2012; Gardiner, Lovell & Williamson, 2004; Voltmer et al., 2008; Lemaire & Wallace, 2010; Kumar, 2007).

Mental health workers (MHWs) appear particularly vulnerable to the experience of stress related to the healthcare activity; in fact MHWs are exposed to work related stressors such as the need to rescue the patient, a sense of failure and frustration when the patient's illness progresses or does not respond to treatment, feelings of powerlessness against illness and its associated losses, grief, fear of becoming ill oneself, or a desire to separate from and avoid patients to escape these feelings. Among the psychiatrists, was found a large number of occupational stress sources as well as violence and fear of violence, limited resources, crowded inpatient wards and an increasing "culture of blame creeping" into the mental health services (Deahl & Turner, 1997). Moreover Thompson (1998) identified as sources of stress among mental health staff the high work demands without adequate resources, the poorly defined roles of consultants, the responsibility without authority, the inability to effect systemic change, the conflict between responsibility toward employers and toward the patient, the isolation of consultants in community mental health teams and the lack of feedback. The current financial crisis that is resulting, in Italy, in the need to work with fewer staff and consequent overwork, increase, already, pressure on healthcare workers to show change ability and resilience (Giorgi, Arcangeli, Mucci`& Cupelli, 2014; van den Heuvel, Demerouti, Bakker & Shauffeli, 2010; Kinnunen-Amoroso & Liira, 2014).

Already in the past numerous studies undertaken throughout the United Kingdom (UK) have indicated that mental healthcare nurses working as part of community teams are experiencing increasing levels of stress and burnout (Edwards et al., 2001).

Similar to that observed among other health care professionals, MHWs are intrinsically exposed to a variety of occupational stress factors specific of their work, that may cause discomfort and increase the likelihood of mistakes and practice errors (Fileni, Magnavita & Mammi, 2007).

The wellbeing of MHWs, trough the work environment improvement, is a goal to which the Departments of Mental Health (DMHs) have to stretch in order to ensure better protection of MHWs and better health service (Scanlan & Still, 2013; Hanna & Mona, 2014); however organizational changes, involving working time and intensity, type of employment contract, actually involving the healthcare sector in Italy, together with the psychosocial factors at work, appear to interfere with the employees health (Head et al., 2006; Adib-Hajbaghery, Khamechian & Masoodi, 2012; Knutsson,

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2003; Alessio et al., 2008; Gandham, 2000).

Data of literature showed the effectiveness of organizational-level workplace interventions based on the occupational health principle of "hierarchy of controls", with the aim to produce more sustainable effects on the health of healthcare employees than interventions targeting individual behaviors (Halperin, 1996; Argentero et al., 2010; d'Ettorre & Greco, 2015; Montano, Hoven & Siegrist, 2014); according to this evidence the authors conducted a retrospective observational study to detect and analyze the level of WRS in different work settings before and after some organizational changes decided by two General Hospital Psychiatric Units (GHPUs) and four Community Mental Health Centres (CMHCs) in a sample of their employees. This study follows a previous study conducted by the authors among healthcare hospital departments and healthcare units of health district, that showed the opportunity of interventions aimed at the level of work organization and work environment (d'Ettorre & Greco, 2015).

The authors carried out an integrated analysis of stress sentinel indicators, objective stress factors of occupational context and content, among two GHPUs and four CMHCs, following the European Framework Agreement on Work-Related Stress of 8 October 2004 (European Social Partners, 2008); the identification of these indicators could be useful in future work to identify the actions necessary to prevent WRS.

MATERIALS AND METHODS

The study was performed in Brindisi, Italy, from June 2012 to February 2015. The authors conducted interviews with the Directors and the Head Nurses of 2 GHPUs and 4 CMHCs belonging to the same DMH, to investigate the objective indicators of WRS.

In the Italian National Health Service, the DMH is the health organization responsible for specialist mental health care in the community; within the Department there are CMHCs and GHPUs. The GHPUs provide hospital care for acute inpatient; these Units usually provide only secondary care. The CMHCs are geographical Units responsible for coordinating and providing primary care and non-hospital-based psychiatric diagnosis and rehabilitation care. The DMH is in charge of the planning and management of all medical and social resources related to prevention, treatment, and rehabilitation in mental health within a defined catchment's area.

The interviews with the Directors and the Head Nurses of 2 GHPUs and 4 CMHCs were conducted by the authors using the multidimensional validated tool developed by the Italian Network for the Prevention of Work-related Psychosocial Disorders, in compliance with the Consultative Committee's specific requirements. (Persechino et al., 2013; ISPESL, 2010; INAIL, 2011; Coordinamento tecnico interregionale per la prevenzione nei luoghi di lavoro, 2010). The tool is aimed to identify indicators of *w.r.s.* risk in an organization, under three headings (Table 1): (1) sentinel events; (2) work content factors; (3) work context factors.

The tool permitted to identify three levels of risk: low (score 0 to 17), medium (score 18 to 34), high (score > 35) (INAIL, 2011). For each of three areas of indicators, the tool identify three levels of risk (Table 2). Actions needed depend on the resulting level of risk and may vary from a monitoring plan for low risk to corrective measures and, if required, in-depth evaluation for medium and high risk. The authors proceeded to draw up a corrective action plan aimed at solving the problems identified by the WRS assessment, specific to each GHPU and CMHC, addressed to participants and Company's management. The authors have taken steps to train the participants about WRS and the consequent organizational corrective actions to prevent it, based on the results of assessment. The training took place through meetings with each participant about the organizational changes necessary to prevent WRS. The authors assessed the level of stress of each GHPU and CMHC after the implementation of improvement organizational actions by the same head physicians and the head nurses interviewed. The participants were the same before and after the organizational interventions.

The study was performed as part of the obligatory evaluation of work related stress, required by Italian Legislative Decree 81/08, and needed no formal approval by the local ethics committee.

RESULTS

All the GHPUs and the CMHCs investigated through the objective approach to WRS assessment and utilizing the multidimensional validated tool reported a medium level of WRS, among both psychiatrists than nurses. Following the evaluation was conducted an analysis of the issues to identify the objective stress factors related to work; this analysis gave us suggestions to reduce the sources of WRS among GHPUs and CMHCs. The results are reported in the Tables 3 and 4.

The mean scores of WRS level after improvement organizational interventions, resulted reduced to low level both for psychiatrists (15.5 vs. 22.5), and nurses (16 vs. 25) of GHPUs and for psychiatrists (14,2 vs. 22,2) and nurses (14,8 vs. 22,5) of CMHCs.

DISCUSSION

The findings of our investigation showed that psychiatrists and nurses of GHPUs, incur a similar risk of WRS than psychiatrics and nurses of CMHCs. The analysis of work context area factors showed that GHPUs and CMHUs investigated were characterized by medium risk level. The area of work content factors evidenced a low risk among CMHUs and a medium risk among GHPUs. These findings are due to the specificity of hospital healthcare activity that is characterized by typical stressors, linked with the hospital care of acute inpatient, such as three shift work, high exposure to physical and biological risks (Adib-Hajbaghery, Khamechian & Masoodi, 2012; Knutsson, 2003; Alessio et al., 2008; Gandham, 2000; Halperin, 1996; Argentero et al., 2010; d'Ettorre & Greco, 2015; Montano, Hoven & Siegrist, 2014; European Social Partners,

Table 1.
Indicators of work-related stress risk identified by the checklist (26-28).

(I) Sentinel events (10 organizational indicators)	(II) Work content factors (4 indicators)	(III) Work context factors (6 indicators)
1. Work-related injuries culture	1. Work environment and work equipment	1. Function and organizational
2. Sick leave*	2. Task planning	2. Organizational role
3. Absences from work†	3. Workload, work pace	3. Career path
4. Unused vacations	4. Work schedule	4. Autonomy in decision making, job control
5. Job rotation		5.Interpersonal relationships at work
6. Turnover		6.Home/work interface, home/work balance
7. Disciplinary measures		
8. Requests for extra medical checks		
9. Work-related stress notifications		
10. Juridical petitions		

Table 2.
Risk levels identified by the scores of WRS indicators (28).

Indicators	Lowrisk	Medium risk	High risk
Sentinel events	0-10*	11-20**	21-30***
Work content factors	0-13	14-25	26-36
Work context factors	0-8	Sep-17	18-26
* score converted into 0, ** score converted into 2, ***score converted into 5			

Table 3.
Mean values of w.r.s. index identified by the checklist before improvement interventions.

Unit of Mental Health Department	Level of w.r.s. risk (mean ± std)
GHPUs (Psychiatrists)	22.5 (±2.5)
GHPUs (Nurses)	26 (±0.0)
CMHCs (Psychiatrists)	22.2 (±0.5)
CMHCs (Nurses)	22.5 (±0.6)

Table 4.
Mean values of stress indicators among Psychiatrists and Nurses before improvement interventions.

Unit of Mental Health Department	Sentinel events	Work content factors	Work context factors
		(mean ± std)	(mean ± std)
GHPUs (Psychiatrists)	0	14 (±1.0)	8 (±1.0)
GHPUs (Nurses)	0	15 (±0.0)	10 (±2.0)
CMHCs (Psychiatrists)	0	9.2 (±0.5)	12.2 (±0.5)
CMHCs (Nurses)	0	11.2 (±0.5)	10.2 (±0.5)

2008), variable workloads and often non-programmable (Engström, Ljunggren, Lindqvist & Carlsson, 2006; Teng, Hsiao & Chou, 2010). These objective critical issues, related to the work content, appeared unsusceptible to be modified because they are intrinsically characteristic of the hospital healthcare work and required safety training courses among the workers, aimed at protect them.

In our study, the work context appears to be the main area on which intervene to moderate WRS among psychiatrists and nurses of GHPUs and CMHCs.

The consequent corrective actions planned to moderate WRS were targeted on the areas of function and organizational culture, role within the occupational organization, relationship at work (Table 5). About the occupational training the Occupational Prevention and Safety Service proceeded to the organization of safety training programs to assist the workers to adopt effective safety strategies to manage occupational risks, including the WRS., and to better the healthcare worker's awareness of WRS risk.

Our study has some limitations: the analysis is imprinted on objective evaluation without consequent subjective analysis. Although this kind of evaluation is reported by some Authors as better compared to subjective because it is not influenced by felt stress (Montano, Hoven & Siegrist, 2014).

As consequence of the implementation of corrective measures aimed at improving these aspects, the scores of objective WRS measured by the checklist among GHPUs and CMHCs were reduced to a low level.

In the field of primary prevention of WRS, it is useful to include interventions on the organization (Kinnunen-Amoroso & Liira, 2014), targeted to the improvement of context area, as a useful tool to ensure the worker's wellness and to minimize WRS (Gunnarsson, Andersson & Rosen, 2010; Kirsten, 2010; Bourbonnais et al., 2006).

CONFLICT OF INTERESTS

All the authors declare they have no financial or personal relationship with people or organizations that could inappropriately influence their work.

Table 5.
Work context critical issues and improvement interventions.

Area of critical issues	Intervention
Function and organizational culture	- working towards goals that include occupational safety and wellness - adoption of a safety management system - adoption of code of ethics for healthcare workers
Role within the occupational organization	- clear definition of occupational roles - knowledge of hierarchical roles for occupational safety - employee involvement in corporate decision making
Relationship at work	- improve communication with management staff - improve reflective dialogue and feedback among workers - ensure clinical supervision in relationship to w.r.s. - implement institutional supervision

AKNOWLEDGMENTS

We thank Mrs. Francesca Medico for secretarial help, Dr. Chiara Maselli and Dr. Ilaria Gagliani for technical support and all head physicians and head nurses who participated to this study.

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