PSYCHOSOCIAL AND ORGANISATIONAL WORK ENVIRONMENT OF NURSE MANAGERS AND SELF-REPORTED DEPRESSIVE SYMPTOMS: CROSS-SECTIONAL ANALYSIS FROM A COHORT OF NURSE MANAGERS

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Abstract
Objectives: The association between depressive symptoms and psycho-organisational work environment has been established in the literature. Some studies have evaluated depressive symptoms in healthcare workers, but little research has been carried out among nurse managers. The aim of the study is to evaluate the depressive symptoms prevalence among nurse managers' population and work environment factors. Material and Methods: A descriptive correlational research design was used. Data were collected from 296 nurse managers in five hospitals in the eastern area of France between 2007 and 2008. Health outcomes were evaluated by measuring depressive symptoms (CES-D scale), the exposure data by assessing psycho-organisational work environment with effort-reward imbalance-model of Siegrist. Multiple logistic regressions were used to describe the strength of the association between depressive symptoms and effort-reward imbalance adjusted for personal and occupational characteristics of the nurse managers. Results: Among the nurse managers, a third had depressive symptoms, and 18% presented an effort-reward imbalance (ratio: ≥ 1). A significant association was found between depressive symptoms and effort-reward imbalance (OR = 10.81, 95% CI: 5.1–23, p < 10⁻³), and with esteem as a reward (OR = 3.21, 95% CI: 1.6–6.3, p < 10⁻²). Conclusion: In view of the hierarchical situation of nurse managers and their primary roles in hospitals, it is necessary to take prevention measures to improve their work environment and health.

Key words:
Depression, Mental health, Psychosocial constraints, Effort-reward imbalance, Nurse managers, Health care workers
INTRODUCTION

Depression is a pathology with a significant prevalence in Europe and in France [1–5]. Annual medical costs of depression can be estimated at 1.9 billion Euros in 2011 in France [6,7]. In terms of costs borne by employers, absenteeism is associated with a high amount of days lost [8,9]. Furthermore, it is known that the risk of recurrence of depressive symptoms is major when patients had to take sick days for depression [10]. But, according to several authors, the cost of presenteeism for workers suffering from depression is higher than the cost of absenteeism [11,12]. Thus, in his study in 2003, Stewart showed that 81% of the lost productive time among depressive workers corresponds to reduced performance while at work. In a recent study on the economic burden of depression in South Korea, indirect costs related to presenteeism represented 44.7% of the total cost of depression, and 28.4% for absenteeism in 2005 [13].

Within the health care workers profession, several studies were conducted among registered nurses [14–16], nurse aids [17,18], physicians [19–23], on their burnout syndrome, their depressive symptoms or their health [24]. Nurse managers in hospital are more scarcely studied compared with other health care workers. Some studies have produced insights about their ill-being, degree of satisfaction, leadership and recruitment [25–27]. But very few studies analysed their health in relation to their organisational work environment. Regarding their health, a study carried out by Lindholm et al. in Sweden investigated self-rated health, sick leave of nurse managers according to their professional networks, psychosocial work conditions, job support, social network and support. An association was found between high job demands and low self-rated health [28]. A study carried out in Japan showed that a lack of assertiveness and satisfaction was associated with burnout among Japanese nurse managers [29]. Another study examined the influence of effort-reward imbalance on burnout level among nurse managers and showed that personal (lack of core-self evaluation) and situational (effort-reward imbalance ratio) factors were significant predictors of the score of burnout [30].

In France, only 2 studies about the health of nurse managers were published. Fanello et al. [31] analysed the mental health of 97 nurse managers using the standardised mental health questionnaire – GHQ-12 for health – questions to define their social and occupational characteristics and workplace experience. They demonstrated that 1/3 of participants were considered to be in psychological distress, that the lack of reward was associated with psychological distress of nurse managers. The second study was the European Press Next study carried out in France among a population of health care workers including nurse managers [32]. A total of 28% of nurse managers reported suffering from mental diseases.

Associations between the organisational work environment, stress and depressive symptoms have been established in the literature in the general population [33–35]. To describe the psycho-organisational work environment, different scales were established and validated. The 2 models from Karasek [36,37] and Siegrist [38,39] were translated into French, and their psychometric properties were studied in the French population [40–44].

Several studies showed links between the effort-reward imbalance and depressive symptoms or self-health assessments. The risk of depression ranged from 1.5 to 4.6 with the effort-reward imbalance model [33,38,45] and it was lower with the Karasek model, ranging from 1.58 to 3.3 for men and 1.2 to 2.8 for women [34,46,47]. The effort-reward imbalance model allowed evaluating 3 principal dimensions: effort, reward and over commitment. The model was based on the need of reward to balance the effort at work in relation to the social reciprocity theory. High effort and low reward also lead to emerging stress. The third dimension, over commitment, completes the models, thus, a population with higher over commitment