INTENTION TO LEAVE OF EUROPEAN HOSPITAL NUSES AND PHYSICIAN: THE METEOR STUDY

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Introduction

The global shortage of healthcare workers strains healthcare systems. The global shortage is estimated at 6.4 million physicians and 30.6 million nurses, based on the minimum required numbers for universal health coverage [1]. Consequences for patients are long waiting times and limited access to care, while healthcare workers could have higher workload and risk of errors, as well as chronic stress and burnout, which contribute to turnover intentions [2,3]. Factors like job satisfaction, career development, and work-life balance are detected as key determinants of intention to leave among nurses and physicians in hospitals [4]. In the "Mental Health: focus on Retention of healthcare workers (METEOR)" project, funded by EU, through a cross-sectional survey, we have assessed job satisfaction, burnout, and turnover intention, using the theoretical framework of the Job Demands-Resources (JD-R) model [5,6].

Objectives

The objective of the study was threefold. Firstly, to estimate the prevalence of intention to leave both the hospital and the profession in a sample of physicians and nurses. Secondly, to assess the determinants of the intention to leave. Lastly, to verify the construct validity and the internal consistency of the proposed questionnaire.

Materials e Methods

The Meteor for Turnover Intention (MTI) questionnaire included 75 items mostly based on the JD-R. It was administered to a sample of physicians and nurses recruited from eight European hospitals (two per each country in Belgium, the Netherlands, Italy, and Poland). A total of 381 and 1,351 complete responses were obtained for physicians and nurses, respectively.

Confirmatory factor analysis (CFA) was conducted using a structural equation model that incorporated a measurement component to evaluate the MTI model. The model includes seven latent variables, Job Demands (JD), Job Resources (JR), Work Engagement (WE), Job Satisfaction (JS), Emotional Exhaustion (EE), Depersonalization (DP), and Intention to Leave (IL). The IL construct was defined with a particular focus on intention to leave the hospital and the healthcare profession.

Multiple goodness-of-fit indices were utilized: the chi-square statistic, the root-mean-squared error of approximation (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index (TLI), the standardized root mean squared residual (SRMR), the coefficient of determination (CD), and the modification index (MI). Internal consistency was assessed using the Cronbach's alpha coefficient. Data were analysed using the R software (version 4.1.2), and a $p\text{-value} < 0.05$ was considered statistically significant.

Results

Among the 381 complete responses of the physicians, the majority of 229 (60%) were female, with a mean age of 44.7±10.2 years. Sixty-two physicians (16.3%) intended to leave the hospital, and thirty-four (8.9%) the medical profession. The internal consistency of the questionnaire was overall excellent (alpha = 0.934), with the seven domains demonstrating varying levels of internal consistency ranging from 0.598 (for IL) to 0.908.

The model for physicians highlighted a positive direct effect of DP (coeff=0.21, p=0.002) and the negative effect of JS (coeff=-0.61, p<0.001) on IL. JD positively affected DP (coeff=0.29, p<0.001) and negatively affected JS (coeff=-0.28, p<0.001). Conversely, JR positively impacted JS (coeff=0.71, p<0.001) and negatively DP (coeff>=-0.26, p<0.001). WE was neither a direct nor an indirect determinant of IL in this model. Furthermore, significant covariances between JD and JR, between EE and DP and between EE and JS were found (p-value<0.001) (Figure 1a).

Out of the 1,351 complete responses from nurses, the majority were female (1,111, 82.2%), with a mean age of 43.8±11.8 years. One-hundred and thirteen nurses (8.4%) were intent to leave the hospital, and one-hundred eighty-four (13.6%) the nursing profession. The internal consistency of the MTI questionnaire for nurses was found to be excellent overall (alpha = 0.934), with the seven domains demonstrating acceptable values ranging from 0.725 to 0.914.

The model for nurses showed that the positive effect of DP (coeff=0.19, p<0.001) and the negative effect of JS (coeff=-0.56, p<0.001) are direct determinants of IL. The relationship between JD and IL was found to be indirect, mediated by DP and JS. Specifically, JD had a positive impact on DP (coeff = 0.33, p < 0.001) and a negative impact on JS (coeff = -0.38). On the other hand, JR positively influenced JS (coeff = 0.62, p < 0.001) and negatively affected DP (coeff < -0.36, p < 0.001). Significant covariances were identified between JD and JR, between EE and DEP, and between WE and JS (p<0.001) (Figure 1b).

Table 1 – Construct validity of the MTI Questionnaire for physicians and nurses from four European countries

a) Model for physicians   b) Model for nurses
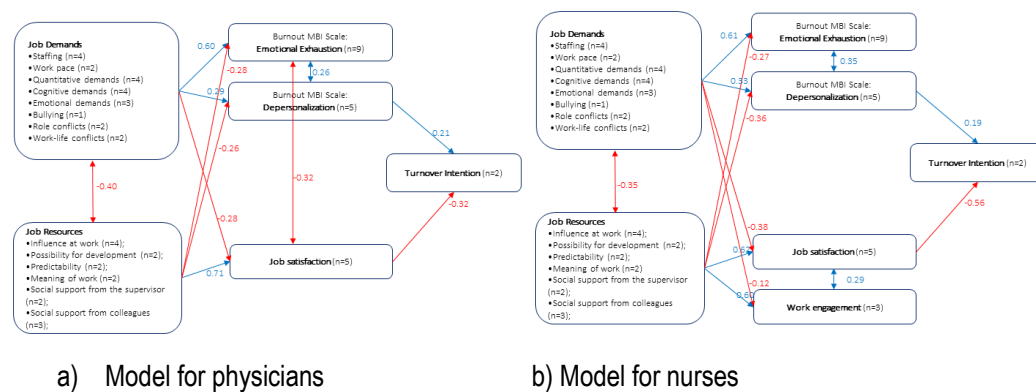
Conclusions

Our study suggests that a bad hospital environment contributes significantly to increased doctors' turnover intention, whereas for nurses, turnover intention seems to stem from unsatisfaction with professional practice rather than the hospital context. Furthermore, our study indicates that work engagement is an important determinant of nurses, as well as depersonalization for both nurses' and physicians' intention to leave. For these two reasons, nurses and physicians need appropriate recruitment and retention policies. Specifically, prioritizing job satisfaction, work engagement, and fostering a positive working climate are strategic factors for promoting job retention.

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