

1258**The management of the high commitment human resource practices and its relation with personal satisfaction and the management team's commitment for quality**

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INTRODUCTION. Proper management of human resources is critical in providing a high quality of health care. The staff's perception of good high-commitment human resource practices and organizational management affects directly to their job and satisfaction.

OBJECTIVES. To evaluate the relationship between the assessment of management team's commitment towards the high-commitment human resource practices and ICU healthcare personnel's satisfaction and the commitment of the management team for the implementation of a quality management in the organization.

METHODS. Information was collected from August to November 2017 through a survey adapted to each professional category. The questionnaire included a 7-score Likert scale including 24 items aimed at assessing different aspects related to high-commitment human resources management.

As a previous step, a Confirmatory Factorial Analysis (CFA) was performed to corroborate the theoretical dimensions traditionally published in the literature on high-commitment human resource practices and the unidimensionality of the scales used to measure the personal satisfaction and the organizational commitment of the management team. In spite of the statistical significance of the model [$\chi^2=201.34$, $p=0.000$], results showed that other adjustment indicators were within the value ranges recommended in the literature (CFI=0.97, NFI=0.92, RMSEA=0.08). Regarding internal consistency measurements of every dimension composite reliability (CR) reached values over 0.70 and average variance extracted (AVE) reached values over 0.50. The Cronbach's alpha values verifies those observed in composite reliability. These results indicated that the measurement model was valid and reliable.

RESULTS. In order to analyze the relationship between HPWPs and the constructs of personal satisfaction and organizational commitment, a correlation test was performed using the Pearson correlation coefficient. Results are shown in the following table.

CONCLUSIONS. There is a statistically significant positive association between the organizational commitment and all the dimensions that make up the high-commitment human resource practices, which indicated that the greater the organizational commitment, the better HPWPs. Internal promotion is the dimension with the stronger relationship.

ICU healthcare personnel's perception of a high level of organizational commitment by the hospital management is related to better HPWPs, which improves the well-being, attitude and commitment of the staff.

On the other hand, good high-commitment human resource practices are associated to greater personal satisfaction on the part of ICU healthcare personnel.

REFERENC(E). SM Kabene, C Orchard, JM Howard, et al. The importance of human resources management in health care: a global context. *Human Resources for Health* 2006; 4: 20.

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None.

Table 1 (abstract 1258). Correlation between high-commitment human resource practices and personal satisfaction and organizational commitment

DIMENSIONS	PERSONAL SATISFACTION	ORGANIZATIONAL COMMITMENT
Training	0.494***	0.719***
Participation	0.526***	0.746***
Acknowledgment	0.481***	0.798***
Internal Promotion	0.472***	0.857***

*** $p < 0.000$

1259**Vital signs alarms in the ICU do not affect noise levels in the ICU**

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INTRODUCTION. Intensive care unit (ICU) patients are mostly surrounded by life saving equipment that contribute to noise levels exceeding the WHO recommended noise levels of max 35 A-weighted decibel (dBA) by far. Although many noise studies have been performed, it is unknown what the contributing effect is of equipment alarms to the noise levels in the ICU.

OBJECTIVES. The aim of our study is therefore to explore noise levels and frequency of equipment alarms and to determine the association between alarms and noise levels in the ICU.

METHODS. A multiple single center cross-sectional observational study was performed between February 17th and March 17th 2015 in a university hospital on 4 ICUs with 36 beds. During 29 days, alarms were recorded with use of the alarm tracking software. We distinguished the following categories: red alarms (life threatening alarms), yellow alarms (alarms exceeding limits) and blue alarms (technical alarms). Noise levels were quantified in dBA and continuously measured at the nurses' station located in the middle of the unit, and at the bedside during 2 randomly chosen days. Noise and alarm datasets were time synchronized to determine the association between alarms and noise levels using linear regression analysis.

RESULTS. At the nurses' station mean noise levels were 51.1dBA (± 5.7) and bedside 46.7 dBA (± 6.5).

During daytime, noise levels were significantly higher than during evening-time, on both locations; nurses' station: 52.2 vs 50.8, $p < .01$, and bedside: 48.7 vs 46.0, $p < 0.01$. Mean noise levels during evening-time were significantly higher than during nighttime on both locations; nurses' station: 50.8 vs 48.9, $p < 0.01$, bedside: 46.0 vs 42.8, $p < 0.01$.

In 29 days a total of 175,996 alarms were recorded of which 149,764 (85%) were exceeding limits (yellow), 18,080 (10%) were red alarms and 8,152 (5%) were technical alarms. All alarms on the 2 days were statistically significant associated with the nurses' station noise levels: RED ($b=0.2$; 95% CI, 0.06-0.32; $p < .0001$) YELLOW ($b=-0.96$; 95% CI, -0.98- -0.94; $p < .001$) and BLUE ($b=0.13$; 95% CI, 0.07-0.19; $p < .001$). Bedside, this was significantly associated for YELLOW ($b=-0.97$; 95% CI, 0.87- 1.075; $p < .001$) and BLUE ($b=0.54$; 95% CI, 0.73-0.7; $p < .001$), but not for RED alarms ($b=0.28$; 95% CI, -0.09 -0.65; $p=0.14$). The R Square of the model at the nurses' station was: 0.015 (standard error of estimate, 5.7; $p < .001$) and bedside: 0.001 (standard error of estimate, 7.0; $p < .001$).