

PERCEPTION OF DEMAND AND CONTROL, EFFORT AND REWARD, OF DAILY TASKS, IN HOSPITAL WARD NURSES



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Background- why?

- Work-related stress is a prevalent condition in the nursing profession
- Its influence may vary according to changeable individual and situational factors.
- It is, therefore, important to investigate the real-time momentary changes in these factors and their relationship to stress experienced by nurses (Fernández-Castro et al., 2017).
- The Job Demand-Resources model (Bakker et al., 2014) was followed to assess the characteristics of the tasks that lead to stress.
- We aim to analyse how their perceptions of demand, control, effort and reward change according to the task performed through real-time assessment.

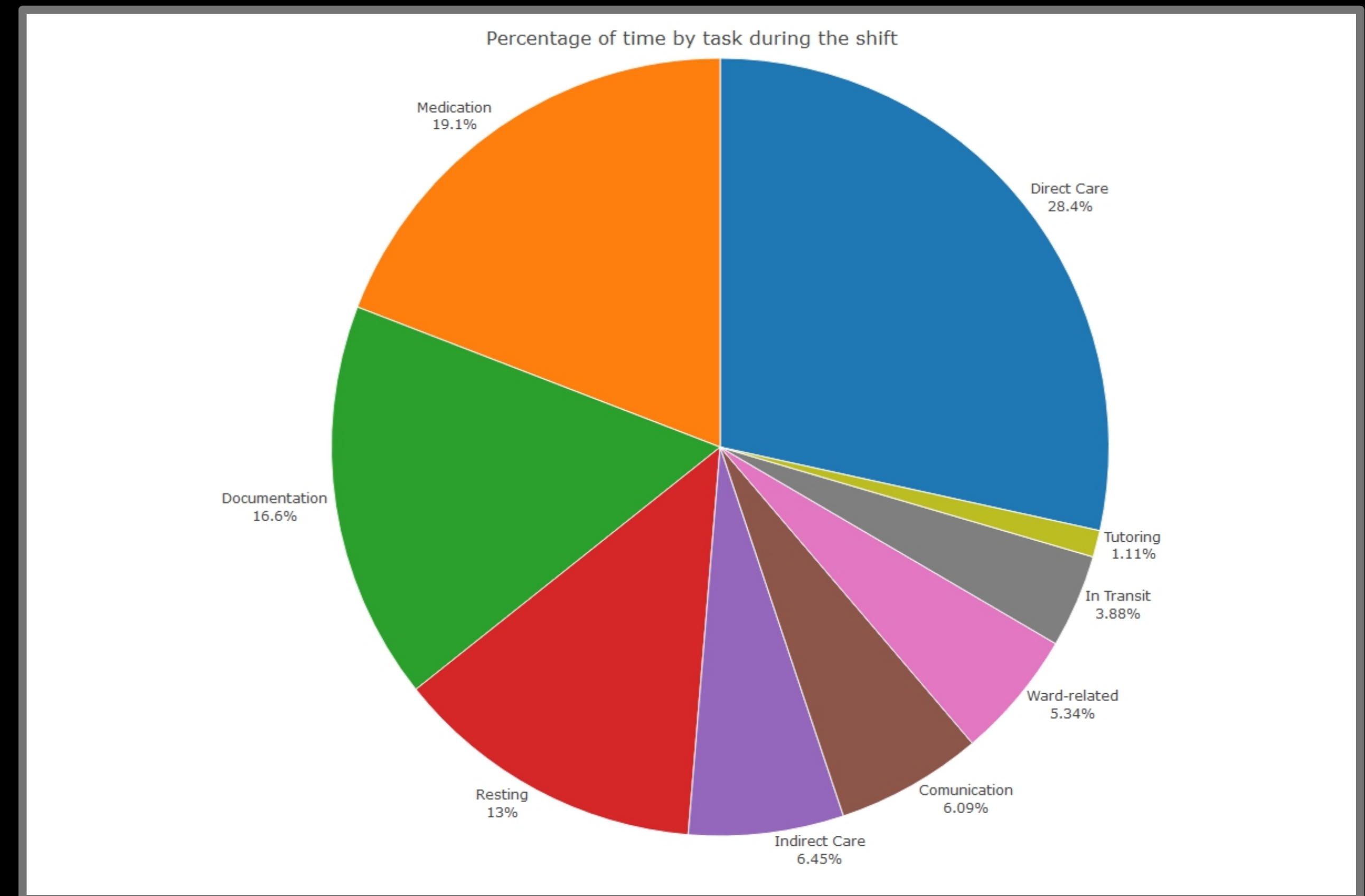


Figure 1. Percentage of dedicated time by task during all the working shifts.

Methods- how?

- A longitudinal design was used to assess the momentary self-reports of 96 hospital ward nurses, completed using a smartphone programmed with random alarms by 5 consecutive shifts.
- Four multilevel models were analysed by HLM 6 (Raudenbush et al., 2004), one for each stress-related factor (demand, control, effort, and reward), with tasks as the independent variables.
- Demand, control, effort and reward (single-items measures, analog scales), and task (WOMBAT; Westbrook & Ampt, 2009) were measured by Ecological Momentary Assessment (EMA).

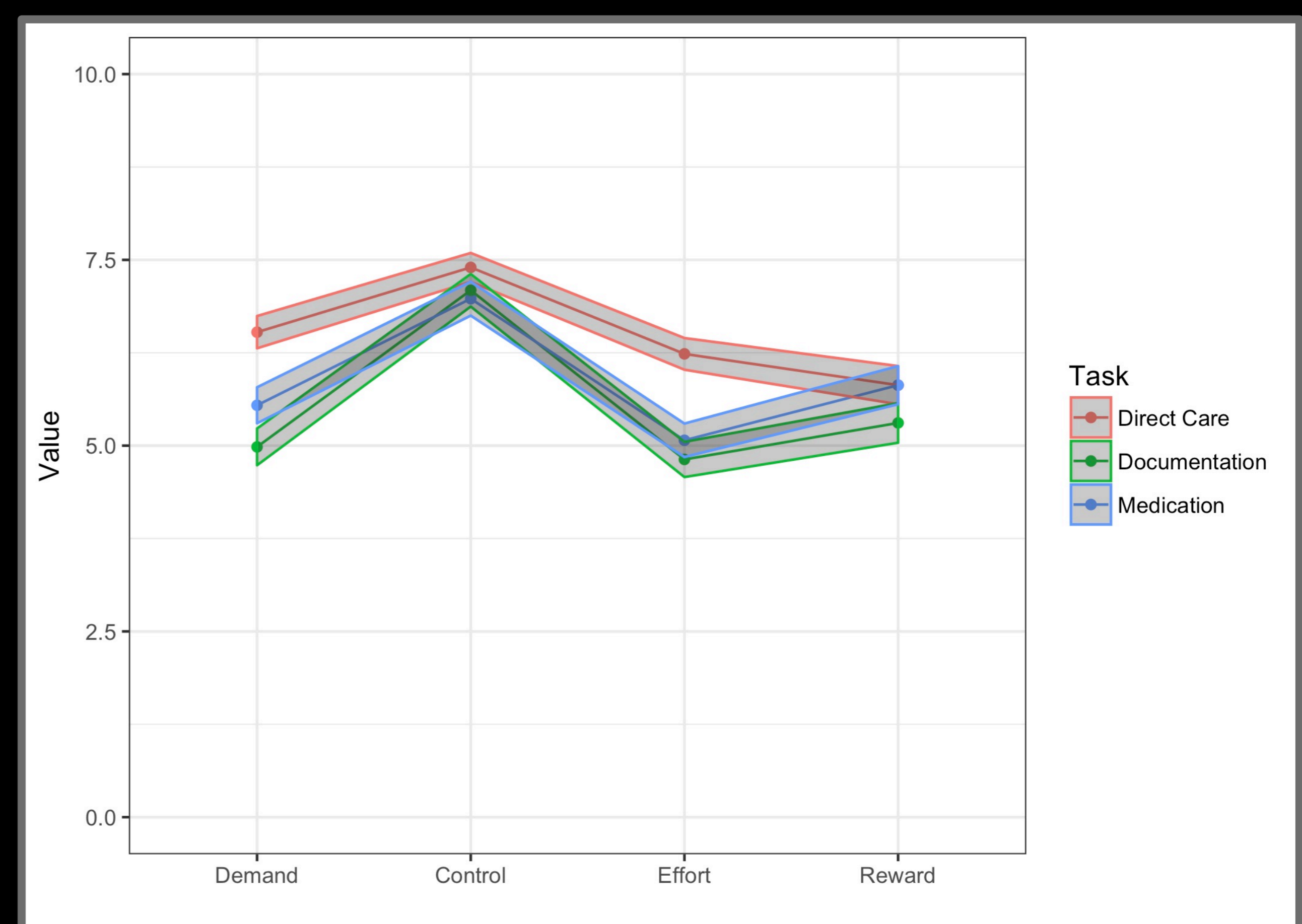


Figure 2. Confidence intervals of work-related factors (control, demand, effort, and reward) of the direct care, documentation and medication tasks (0-10 range).

Results- what?

- Direct care occupied 28.4 % of the total time of the shifts (see Figure 1).
- Direct care tasks were perceived as demanding and requiring lots of effort, but were also perceived as highly controlable and rewarding (see Figure 2).
- Medication task, although less frequent and less demanding ($t = -6,106$, $p < .001$ for demand, $t = -7,146$, $p < .001$ for effort), presents less control ($t = -3,055$; 003). Documentation, also presenting less demand than direct care ($t = -8.402$, $p < .001$ for demand, $t = -7.384$, $p < .001$ for effort), has lower reward levels ($t = -3.378$, $p < .001$).

Conclusions- so what?

- Direct care is considered a very important task in a nurse professional role context
- Even if it can be very demanding, this demand is balanced out with high levels of control and reward.
- Although the most frequent task is the most demanding, it could be other less frequent tasks to which special attention should be given, due to the lower levels of control (medication) or reward (documentation).

References

- Bakker, A.B., Demerouti, E., & Sanz-Vergel, A.I. (2014). Burnout and Work Engagement: The JD-R Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 389-411. doi: 10.1146/annurev-orgpsych-031413-091235
- Fernández-Castro, J., Martínez-Zaragoza, F., Rovira, T., Edo, S., Solanes-Puchol, A., Martín-del-Río, B., García-Sierra, R., Benavides-Gil, G., & Doval, E. (2017). How does emotional exhaustion influence work stress? Relationships between stressor appraisals, hedonic tone, and fatigue in nurses' daily tasks: A longitudinal cohort study. *International Journal of Nursing Studies*, 75, 43-50. doi: 10.1016/j.ijnurstu.2017.07.002
- Raudenbush, S.W., Bryk, A.S., & Congdon, R. (2004). *HLM 6 for Windows* [Computer software].
- Westbrook, J.L., & Ampt, A. (2009). Design, application and testing of the Work Observation Method by Activity Timing (WOMBAT) to measure clinicians' patterns of work and communication. *International Journal of Medical Informatics*, 78(Suppl. 1), S25-S33. doi: 10.1016/j.ijmedinf.2008.09.003