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# Overcoming job demands to deliver high quality care in a hospital setting across Europe: The role of teamwork and positivity

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ABSTRACT

Health care professionals deal on a daily basis with several job demands – emotional, cognitive, organizational and physical. They must also ensure high quality care to their patients. The aim of this study is to analyse the impact of job demands on quality of care and to investigate team (backup behaviors) and individual (positivity ratio) processes that help to shield that impact. Data was collected from 2,890 doctors and nurses in 9 European countries by means of questionnaires. Job demands have a negative impact on the quality of care delivered by health professionals. Backup behaviors had a mediating effect between job demands and quality of care. Also, the positivity ratio of professionals (ratio of positive and negative emotions experienced) was also found as a significant mediator between most job demands and quality of care dimensions. Finally, we found a double mediation between most job demands and quality of care, where backup behaviors influenced the positivity ratio. Quality of care in hospitals is closely related to job demands. Hospital managers should consider the importance of cooperation within health care professionals' teams and ought to find ways to develop teamwork in order to promote patients' safety.


## La superación de las exigencias laborales para ofrecer una elevada calidad asistencial en el ámbito hospitalario en Europa: papel del trabajo en equipo y la positividad

*Palabras clave:*
Demandas laborales
Calidad asistencial
Trabajo en equipo
Positividad

RESUMEN

Los profesionales de la salud tratan a diario con múltiples exigencias laborales –emocionales, cognitivas, organizacionales y físicas. También deben garantizar la máxima calidad de atención a sus pacientes. El objetivo de este estudio es analizar el impacto de las demandas laborales en la calidad de los cuidados y de investigar los procesos de equipo (*backup behaviors*) e individuales (*positivity ratio*) que ayudan a proteger al trabajador de ese impacto. Se recogieron datos de 2.890 médicos y enfermeros en 9 países europeos a través de cuestionarios. Las demandas laborales tienen un impacto negativo en la calidad de los cuidados proporcionados por profesionales de la salud. Los procesos de equipo (*backup behaviors*) tuvieron un efecto

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de mediación entre las demandas del trabajo y la calidad de los cuidados. Además, la ratio de positividad de los profesionales (proporción de emociones positivas y negativas) también se encontró como un mediador importante entre la mayoría de demandas de trabajo y la calidad del cuidado. Por último, se encontró una doble mediación entre la mayoría de las demandas de trabajo y calidad de la atención, donde los procesos de equipo influyeron en la ratio de positividad. La calidad de los cuidados proporcionados en los hospitales está muy relacionada con las exigencias del trabajo. Los directores de hospitales deben considerar la importancia de la cooperación entre equipos de profesionales de salud y encontrar formas de desarrollar el trabajo en equipo con el fin de promover la seguridad de los pacientes.


Working in hospitals as a health care professional (HP) is demanding. Doctors, nurses, and assistants must deal, on a daily basis, with emotional situations, such as the suffering of patients and relatives, cognitive challenges (for example, timely decision making and analysing several indicators in order to establish a diagnostic and a treatment plan), interpersonal tensions (conflicts between different specialties or professionals, uncooperative patients, impatient relatives), physical hassles (e.g., working nights, lifting heavy patients), and logistic complexity, such as the lack of necessary resources, time consuming bureaucratic processes, and heavy workload (e.g., Ghodse & Galea, 2009). High rates of burnout are reported in health care professionals in both Europe and the U.S. (Aiken et al., 2012; Soler et al., 2008). Consequently, the well-being and health of HPs is likely to be impaired, and their ability to work effectively may also be diminished. Stress, anxiety, and burnout have consistently shown positive relationships with decreased performance in HPs and also with maladaptive coping strategies, such as substance abuse (Firth-Cozens, 1995). Nonetheless, while working under these conditions, health professionals must assure that all the patients are given the best possible quality of care (QoC). Indeed, the quality of organizations is one antecedent of its competitive advantage. Considering quality of care in health services, there are also other fundamental issues at stake, namely human life, human rights, and human dignity. Yet, the Institute of Medicine (1999) reports that tens of thousands of American patients die every year due to suboptimal care. The existence of quality of care problems is widespread and is not restricted to the United States. For example Bartlett, Blais, Tamblyn, Clermont, and MacGibbon (2008) claim that in Norway three people might die every day due to poor hospital quality. Also, according to the European Commission (2008), it is estimated that between 8% and 12% of patients admitted to hospitals will suffer from adverse effects while receiving healthcare. Therefore, patient safety was identified as a key area for action in the Commission's Health Strategy White Paper of October 2007.

Considering the importance of quality within healthcare, the aim of the present study is to analyse the impact of job demands on quality of care and to investigate possible team and individual processes that will help to buffer the impact of high work demands on the quality of care delivered to patients, therefore ensuring their safety.

## Quality of Care - A Multidimensional Concept?

According to McGowan et al. (2011), the definition and measurement of quality of care in healthcare lack consistency across studies. The Institute of Medicine defines QoC as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (IOM, 1999). This institute defines six main pillars fundamental for delivering a high quality of care: health care must be safe, effective, patient-centred, timely, efficient, and equitable (IOM, 2001). For another author (Donabedian, 1980), QoC is also a multifaceted concept. It encompasses health outcomes, the process of care delivery (such as information obtained and coordination) as well as the structure where it is delivered (equipment, administrative processes, etc.). Campbell, Roland, and Buetow (2000) define QoC as "whether individuals can access the health structures and processes of care which they need and whether the care received is effective" (p. 1614). For the authors, the consequences of care reflect the effectiveness of the structure and processes and are assessed by the health status of patients and by user evaluation.

## Job demands in Hospital Settings

According to the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), job demands are "those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (p. 501). Within job demands that can be found in a hospital setting, we can name, for example, time pressure, physical workload, shift work, or recipient contact. According to the model, when meeting those demands requires a high level of effort from the employee and an adequate recovery from that effort is not possible, then the development of job strain develops. Consequently, workers may develop a health impairment process (because of an increased autonomic and endocrine activation and of the increased subjective effort) and their task performance may deteriorate indirectly because of the need for strategic adjustments (e.g., narrowing of attention) and of fatigue after-effects, such as risky choices.

An extensive review of all the possible job demands found in hospital settings is beyond the scope of this paper. As an example, Ecklebery-Hunt et al. (2009) searched for the antecedents of residents' burnout symptoms and found several factors: lack of control over schedule, poor relationships with colleagues, difficult and complicated patients, excessive paperwork, not enough time in the day, and perfectionism (to name a few). In Isikhan, Gomez, and Danis' (2004) study, unfairness in promotion opportunities, imbalance between jobs and responsibilities, conflict with colleagues, lack of appreciation of efforts by superiors, responsibilities of role, long and tiring work hours, inadequacy of equipment, and problems experienced with patients and their relatives were the main factors associated with the stress experienced by health professionals working with cancer patients. Other studies focused on specific stressors and their relationship with health professionals' well being, such as aggression towards them (e.g., Winstanley & Whittington, 2004).

These job demands impact on professionals' well-being and performance. Shanafelt, Bradley, Wipf, and Back (2002), as well as Toral-Villanueva, Aguilar-Madrid, and Juárez-Pérez (2009) concluded that the presence of stressors and acute stress on HPs was associated with self-reported suboptimal practices. Other studies report the relationship between job demands and decreased productivity (e.g., Kazmi, Amjad, & Khan, 2008) and between job stress and increased medical errors (e.g., Fahrenkopf et al., 2008; West et al., 2006) and mental health impairment in HPs, mainly depression and anxiety (e.g., Caplan, 1994; Chambers, Wall, & Campbell, 1996; Toral-Villanueva et al., 2009; Weinberg & Creed, 2000).