

# Nurses' Health Risk Perception on the Influence of Professional and Personal Time Management: A Cross-Sectional Descriptive Study

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*Occupational health risk self-perception among nurses is linked to professional time management and well-being. In contrast, most of the activities done during personal time seem to have a visibly low effect on the subjects. The importance of time management in nurses' regular work shifts and the relevance of harmonizing personal and family life with each professional's particular circumstances are highlighted.*

The relationship between work management and health is complex and intriguing. On the one hand, a corpus of evidence seems to confirm that unemployment is associated with some levels of health deterioration. On the other hand, others claim having a job can positively contribute to general enhancement of healthiness and well-being. The latter has been validated considering age, employment, and labor market in balanced settings (FitzGerald et al., 2017). However, work environments may have adverse effects on employees' health self-perception (Taouk et al., 2019).

In this sense, much of the controversy over what should be defined as *balanced* in terms of occupational health relates to self-control when managing both professional and personal time. In the sphere of service provision, for instance, managing time has been traditionally observed as a particular challenge for nurses,

not only due to the overload of multiple tasks and endless shifts at work (Vargas et al., 2014) but also due to the risk of health decline. This pace of work can potentially cause to nursing staff.

In this regard, Gómez-Urquiza and coauthors (2017) suggest taking into account both working conditions and personal factors when evaluating burnout risk profiles of emergency nurses. Furthermore, work schedules and long working hours seem to influence personal time management, especially among nurses with family responsibilities (Galatsch et al., 2013). Conversely, Gyllensten and colleagues (2017) claim that reducing work hours might lead to some significant and positive effects on nurses' work and family life balance.

To shed light on how working conditions and personal factors may affect nurses' health risk self-perception, several studies have focused on their association with occupational settings. However, further

comprehension of its connection to specific personal characteristics (gender, parental status, etc.), working conditions (type of contract, salary satisfaction, etc.), and variables associated with the professional (working time, night shift, working on Sundays, etc.) and personal (voluntary activities, education courses, caring for kids, etc.) use of time are still needed in European studies about nursing staff. Thus, it is imperative to examine these constituents to understand better their potential influence on health risk self-perception among European nurses.

## Conceptual Approach

### Working Hours and Schedules

Most employees in contemporary society tend to associate their workdays with a specific time to arrive and leave their offices or factories; however, this condition is evolving rapidly, mainly because of changes in consumer demand. These adjustments have led to the emergence of new human resource management models in organizations, which is even more evident in service providers, especially in the health sector. One of the most useful tools employed to manage staff schedules is shift work.

The concept of shiftwork comprises practices for managing working time, including working beyond regular hours of the day, namely night shifts, holidays, overtime,

and irregular or rotating shifts. Indeed, shiftwork and long working hours are common in health care, particularly among nurses, who claim to be significantly affected by inflexible workdays and shift systems (Hirsch Allen et al., 2014). In this context, many internal and external conditions can prompt the rearrangement of scheduled working time in clinics and hospitals, including nurses' availability, sick leave, or seasonal demand.

Reassignment of working time relying on these conditions may potentially impinge on employees' health (Andersen, 2005), resulting in excessive sleep deprivation and stress (Hirsch Allen et al., 2014). Given this situation, nurse leaders need to understand the importance of shiftwork on staff health (Hakola et al., 2010). Yet, personal health assessment depends on the combination of physical, psychological, and social factors (Belkic et al., 2004). Therefore, it is crucial to understand the effect that shift work and long working hours have on nurses' subjective health (den Boer et al., 2017).

### Effects of Work Hours and Schedules on Physical Health

Several researchers have examined the effect of long working periods on health; for instance, cardiovascular diseases (Conway et al., 2017), obesity (Hye-Won Kim et al., 2017), sleep disorders or fatigue (Neville et al., 2017), among others, have been observed in nurses. However, according to some academics, the association

between shift work and chronic diseases remains unclear (Arne & Moreno, 2014); additionally, there are disagreements about the point from which overwork can trigger adverse consequences for employees (Rodriguez-Jareño et al., 2014).

### Effects of Working Hours and Schedules on Psychosocial Health and Well-Being

Research on the effects of long working hours and work schedules on psychosocial health and well-being has focused on the examination of constructs that encompass psychosocial factors (Arne & Moreno, 2014), differences among working populations and their conditions (Ganster et al., 2018), as well as well-being associated with work schedules.

There is evidence of the beneficial effects of reducing working hours on the subjective perception of quality of life, well-being, and burnout among healthcare workers (Rodriguez-Jareño et al., 2014; Vargas et al., 2014). Additionally, researchers have found adaptation to work shifts improves when employees manage to harmonize work with personal needs – even though this may mean working more days consecutively – making healthier personal time management outside the workplace possible (Hakola et al., 2007) and greater quality time with family (Lee et al., 2017).

Hakola and associates (2010) stated shift systems could elicit occupational stress in nurses. According to Correia Dinis and Fronteira (2015), allowing nurses

to meet their personal needs, normalize their total weekly working hours, and take sufficient free time could prevent stress.

Galatsch and coauthors (2013) collected data from ten European countries of similar patterns of work rotation among respondents, revealing most nurses ( $N=36,492$ , nine countries) were satisfied with their schedules and shifts regarding well-being status (72%) and private life (64%). These figures were even higher for nurses in six countries working night shifts (74% and 80%, respectively). These results may sound unlikely. However, Ogińska and colleagues (2003) noted it is not the type of shift that generates dissatisfaction, stress, or other psychosocial problems, but the discrepancies between preferences in schedules and what the nurses obtain. These reasons may explain why much of the research on the burden of stress related to shift work among nurses is associated with the difficulty of reconciling work and family life.

Family conflicts linked to work overload (work-family conflict) have been studied extensively in occupational health and well-being perception. They are classified as some of the most critical stressors experienced by shift workers, and an important source of job dissatisfaction (Ingre et al., 2012; Takeuchi & Yamazaki, 2010).

### Effects of Stress on Health Risk Perception

Over the past 10 years, research has focused on understanding the relationship between poor working conditions (stressors), well-being, and employees' health perception in organizations (Muniz et al., 2017). Theoretical models have also been developed to explore potential sources of job stress and its consequences for subjects. A noteworthy example is the Demand-Control-Support Model proposed by Lansbury (1991). Through this approach, high psychological job demands, low job control, and reduced social support in the workplace can have detrimental effects on workers' well-being and health perception (Belkic et al., 2004).

### Role of Time Management in Health Status

Job demands and low job control of employees' work tasks are variables significantly correlated to time management in nursing personnel because of their association with insufficient staff, time demands, and stressful work environments (Hinno et al., 2012). Consequently, when nurses cannot properly manage personal and professional time, stress tends to emerge. In this sense, Bégat and associates (2005) affirm that the less time nurses have to fulfill their duties, the more physical symptoms associated with stress they experience, demonstrating a clear correlation between time allocation for tasks and physical symptoms.

This article aims to contribute to the existing literature on well-being among nurses by relying on health risk self-perception of European nurses. An integral model analyzes how personal characteristics, working conditions, and professional and personal time management may elicit health risk perception in nursing staff.

## Methods

### Design

The researchers sought to address how personal characteristics, working conditions, and professional and personal time management may elicit health risk self-perception in nursing staff. Study design was based on a secondary data analysis – the Sixth European Working Conditions Survey (EWCS) – collected by the European Foundation for the Improvement of Living and Working Conditions in 2015. Its questionnaire-based survey gives, for this research, a suitable insight into the working environment and employment situation of 35 countries, providing the opportunity to conduct a descriptive and predictive analysis for the continent: the proneness of a European nurse to experience health risk self-perception or not, given the four sets of variables aforementioned.

### Sample and Data Selection

Nearly 44,000 workers aged 15 or older employed at the time of the survey were

interviewed regarding exposure to physical and psychosocial risks, work organization, work-life balance, and health and well-being. From this dataset, a data filtering of the sample for the concrete selection of target subjects was performed, using as exclusion criterion the International Standard Classification of Occupations (ISCO). Two subgroups were included *nursing and midwifery professionals* and *nursing and midwifery associate professionals*. This exercise yielded a sample of 1,056 nurses. The database was drawn in May 2019 from the webpage of the EWCS, an open-access database.

*Nursing professionals* or *staff* refer to the studied subjects in the research. A multi-stage stratified random process shaped the general sample of the research.

### Statistical Analysis

The statistical exploration starts with an analysis of a contingency table and Pearson's chi-square test. This procedure examines the bivariate relationship between the dependent variable of the study (perceiving or not perceiving health risk at the workplace) and a set of independent features grouped into four categories: personal characteristics, working conditions, personal use of time, and professional use of time.

This initial statistical approach lays the groundwork for the ensuing multivariate analysis that will demonstrate the combined effect of the independent variables based on

a logistic regression model. Additionally, it will statistically reflect the significant predictive power needed to determine the likelihood of self-perceiving health risk or its opposite case.

The statistical analysis employs the Hosmer-Lemeshow goodness-of-fit index as global measurement to assess the overall model fit (usefulness of the model). It utilizes the Wald test for individual analyses to determine the validity of the hypotheses in global and individual terms. (Global analysis evaluates the possibility of the investigated phenomenon to be suitably modeled, mainly when there may be many predictor variables. Individual analysis, in which validity is subject to the global analysis performed, examines the appropriateness of including each of the variables in the model considered.) IBM-SPSS Statistics V21.0 for Windows was used to measure the observed variables.

### Results

On the subject of *personal characteristics*, 90.1% of respondents were female with an average age of 43.3 ( $SD=11.45$ ), who lived with a partner (65.8%). Only 34.7% of nurses raised children under the age of 15 years at home, decreasing to 23.7% for those who cared for children greater than 15 at home in the same dwelling. The level of formal education varied as well: 32.6% of the subjects held a bachelor's degree, while 67.4% remained at some stage of undergraduate

education (see Table 1).

*Working conditions* revealed 87.7% enjoy a permanent contract, 76.6% work mostly in the public sector, and 40.8% experience significant dissatisfaction with salary. It is worth noting 12.4% of the respondents affirmed taking pay cuts during the year before the survey. The salary was the primary family income in 58.7% of the cases.

Regarding *personal time*, 13.5% acknowledged participation in political or trade union activities, 39.8% were involved in voluntary or charitable activities, 53.5% attended training or educational courses, and 43.1% cared for elderly or disabled relatives at home. The frequency of participating in sports, cultural, or leisure activities was 78.4%. Additionally, 71.7% cared for and educated children at home, while 97.9% spent personal time cooking and doing housework. Three out of four nurses (75.6%) declared enjoying harmony between personal and working time.

Regarding variables linked to *professional use of time*, in most cases (56.5%), working time met the nurse's expectations. Moreover, the majority of the nurses interviewed declared having a single paid job (92.4%), working between 1 and 5 days a week (84.1%), and sometimes working Saturdays (76.7%) and Sundays (71.3%). Additionally, 50.6% of the sample affirmed working night shifts, while 65.2% acknowledged alternating rotating shifts (day or night).

Experiencing a heavy

Table 1.  
Main Variables and their Relationship with the Risk Self-Perception in Nurses

Variables	Health or Safety Risk Perception?		Variables	Health or Safety Risk Perception?		
	No (%)	Yes (%)		No (%)	Yes (%)	
<b>Personal Characteristics</b>						
Gender			Age	Mean (43.3 years)	SD (11.45)	
Male (9.9%)						—
Female (90.1%)	9.0	11.0				—
Couple			Children <15 at Home			
Living with couple (65.8%)	91.0	89.0	No (65.3%)			
Without couple (34.2%)			Yes (34.7%)			65.5 65.0
Children ≥15 at Home			Education*			
No (76.3%)	66.0	65.5	Bachelor's degree (32.6%)			34.5 35.0
Yes (23.7%)	34.0	34.5	Undergraduate (67.4%)			
<b>Working Conditions</b>						
Employment Contract			Sector			
Unlimited (87.7%)			Public (76.6%)			29.7 36.3
Temporary (12.3%)	75.8	76.9	Private (23.4%)			70.3 63.7
Satisfaction about Salary***			Change on Salary or Income***			
Satisfied or neutral (59.2%)	24.2	23.1	No change/increase (87.6%)			
Dissatisfied (40.8%)			Decrease (12.4%)			74.8 79.0
Main Salary at Home?			Absent Days for Health Reasons	Mean	SD	25.2 21.0
No (41.3%)	88.1	87.1		(8.7 days)	(23.4)	— —
Yes (58.7%)	11.9	12.9				
<b>Personal Use of Time</b>						
Voluntary-Charitable Activities			Political/Trade Union Activities*			
Yes (39.8%)	69.5	45.6	Yes (13.5%)			90.8 83.4
No (60.2%)	30.5	54.4	No (86.5%)			9.2 16.6
Training/Education Courses*			Sporting, Cultural, or Leisure Activity			
Yes (53.5%)			Yes (78.4%)			
No (46.5%)	40.9	41.7	No (21.6%)			
Cooking and Housework			Caring-Educating Children*			
Yes (97.9%)	59.1	58.3	Yes (71.7%)			11.5 16.2
No (2.1%)			No (28.3%)			88.5 83.8
Caring for Elderly/Disabled Relatives*						
Yes (43.1%)	41.6	37.5				77.5 79.6
No (56.9%)	58.4	62.5				22.5 20.4



Table 1. (continued)  
Main Variables and their Relationship with the Risk Self-Perception in Nurses

Variables	Health or Safety Risk Perception?		Variables	Health or Safety Risk Perception?	
	No (%)	Yes (%)		No (%)	Yes (%)
<b>Professional Use of Time</b>					
Working Time			Work Days per Week		
Fulfill expectations (56.5%)	58.5	53.8	1-5 days (84.1%)		85.5 82.3
Not fulfill expectations (43.5%)	41.5	46.2	6-7 days/week (15.9%)		14.5 17.7
Second Paid Job			Minutes to Commute	Mean	SD
No (92.4%)	93.0	91.7		(42.8)	(33.4)
Yes (7.6%)	7.0	8.3		—	—
Night Shift?***			Work on Saturday?***		
Never (49.4%)	54.3	43.0	Never (23.3%)		30.1 14.5
Yes (50.6%)	45.7	57.0	Yes (76.7%)		69.9 85.5
Work on Sunday?***			Work Day >10 Hours?***		
Never (28.7%)	36.3	18.9	Never (58.6%)		64.2 51.3
Yes (71.3%)	63.7	81.1	Yes (41.4%)		35.8 48.7
Same Work Hours Every Day?*			Same Work Days Every Week?*		
Yes (55.1%)	57.8	51.5	Yes (47.9%)		51.0 43.7
No (44.9%)	42.2	48.5	No (52.1%)		49.0 56.3
Same Work Hours every Week?***			Fixed Starting and Finishing Times?		
Yes (51.9%)	56.5	46.0	Yes (69.4%)		69.6 69.3
No (48.1%)	43.5	54.0	No (30.6%)		30.4 30.7
Rotating Shift Work?***			Working Time Arrangements		
No (34.8%)	39.0	29.4	Flexible (29.4%)		28.9 30.0
Yes (65.2%)	61.0	70.6	Inflexible (70.6%)		71.1 70.0
Harmony Personal-Labor Time***			Work Demands in Free Time (last 12 months)		
Yes (75.6%)	82.4	66.8	Less often/never (83.9%)		84.5 83.0
No (24.4%)	17.6	33.2	Often (16.1%)		15.5 17.0
Difficulty of Taking Hours Off**			Interruptions Due to Unforeseen Tasks***		
Not or not too difficult (39.9%)	44.2	34.2	Occasionally/Never (48.3%)		58.3 35.3
Somewhat of very difficult (60.1%)	55.8	65.8	Very/Fairly often (51.7%)		41.7 64.7
Able to Choose or Change Tasks Order			Able to Choose Methods		
Yes (65.7%)	64.7	67.0	Yes (63.6%)		64.7 62.3
No (34.3%)	35.3	33.0	No (36.4%)		35.3 37.7
Take a Break When You Wish***			Enough Time to Get the Job Done***		
Always or in most cases (22.4%)	26.6	16.9	Always/most of the time (64.0%)		71.9 53.7
Sometimes/rarely or never (77.6%)	73.4	83.1	Sometimes/rarely/never (36.0%)		28.1 46.3

SD = standard deviation

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

**Table 2.**  
Variables Involved in the Health Risk Self-Perception of Nurses

Variables in the Model	Estimate	Std. Error	Wald	Sig.	Odds Ratios 95% Confidence Interval		
					Odds Ratio	Lower Bound	Upper Bound
Satisfaction about salary (0: Satisfied; 1: Dissatisfied)	0.866	0.152	32.479	0.000	2.377	1.765	3.202
Change on salary or income (0: No change/increase; 1: Decrease)	0.546	0.219	6.217	0.013	1.726	1.124	2.650
Caring-educating children (0: Never; 1: Yes)	0.403	0.164	6.051	0.014	1.496	1.085	2.063
Work on Sunday? (0: Never; 1: Yes)	0.695	0.174	15.890	0.000	2.003	1.424	2.819
Harmony personal-labor time (0: Yes; 1: No)	0.390	0.177	4.872	0.027	1.477	1.045	2.088
Interruptions due to unforeseen tasks (0: No; 1: Yes)	0.546	0.153	12.650	0.000	1.726	1.278	2.331
To have enough time to get the job done (0: Yes; 1: No)	0.489	0.157	9.737	0.002	1.631	1.199	2.217
Constant	-1.923	0.187	106.18	0.000	0.146		

Overall estimate = 73.3% (no health risk = 75.9%; health risk = 71.2%)  
Chi-square test = 82.179

workload was common among nursing personnel; nearly 41.4% worked more than 10 hours a day and 36% did not have enough time to finish their tasks with increasing frequency. Furthermore, some conditions appear to affect the possibility of organizing working time among nurses seriously. According to the results, 51.7% work with constant interruptions caused by unforeseen tasks, catching up on the backlog of work at the expense of personal time. In this sense, roughly half of the subjects affirmed they spent a different number of daily (44.9%) or weekly (48.1%) hours at the workplace, while 52.1% stated working irregular number of days per week (52.1%). In

fact, 30.6% of the nurses did not know when their workdays would start or finish, even managing work demands from home during their free time (16.1 %).

In this context, flexibility emerged as an important issue for this collective. For most nurses (70.6%), working time arrangements were perceived as inflexible. They considered themselves unable to choose the order to perform their daily working tasks (34.3%) or change the method to do so (36.4%). Moreover, 60.1% found it challenging to take hours off or take breaks when needed (77.6%). Despite these figures, three-quarters of the subjects (75.6%) affirmed perceiving a

balanced harmony between personal and working time.

Application of the Pearson contrast to a significance level of 0.05 leads to the exclusion of certain initially considered variables from the analysis (see Table 1). The logistic regression estimates are displayed in Table 2. Additionally, the contrast statistic utilized to assess the validity of the model (Hosmer-Lemeshow analysis; chi-square test: 82.179; sig. 0.000) statistically confirms this condition. The logistic regression model, as a binary statistical tool, suitably classifies 73.3% of the total variation in the sample, which is the overall estimate of the probability that a given subject may belong to one of

the two categories: nurses who do not perceive health risk (75.9%) and nurses who do perceive it (71.2%). This finding reveals, in statistical terms, a well-balanced recognition of the two classes in the sample.

As stated in the table of coefficients (see Table 2), likelihood of perceiving health risk because of *working conditions* is higher among those nurses who reported being dissatisfied with their salaries. A nurse who was *not satisfied with his/her salary* was 2.38 times more likely to experience health risk self-perception. In the case of *having experienced salary cuts*, this likelihood was 1.73 times higher, while the odds for those nurses who *care for and/or nurture children at home during family time* raised to 1.49 times, compared to those who did not perform these personal activities.

In terms of *working time*, the likelihood of perceiving health risk increased among nurses who worked on Sundays; the impact of this variable on health risk self-perception is the largest within that category, doubling the chances of relating this particular risk to a subject (OR=2.00). According to these coefficients, nurses perceiving health risk at work coped with high levels of difficulty in *keeping up with working tasks and managing personal activities* simultaneously (OR=1.477). Moreover, health risk perception is significant when nurses work with *constant interruptions due to unforeseen tasks* (OR=1.726) or go to work with a permanent feeling of *not*

*having enough time to finish work tasks* (OR=1.631).

Finally, the variables of *age*, *type of sector*, *caring for elderly/disabled relatives*, *the possibility of taking time off*; and *working night shifts*, *the same number of working hours* or *days every day* or *every week* were statistically irrelevant and excluded from Table 2 (values of sig.  $\geq 0.05$  for all of them).

## Discussion

### Professional Time Management

This research reveals European nurses experience a higher health risk self-perception when they observe insufficient control over their professional time management, particularly when working on Sundays, working with constant interruptions due to unforeseen tasks, not having enough time to finish work tasks, lacking harmony in work-family time, and not having satisfaction with salary. Among healthcare workers, including nurses, there is a clear link between the characteristic of work shifts and some health conditions, namely depression, anxiety, sleeping problems, and coronary heart diseases (Rodríguez-Jareño et al., 2014; Van Bogaert et al., 2013).

This negative health perception among nurses, when associated with excessive workload (Vargas et al., 2014), potentially reduces the quality of care provided to patients. New scientific contributions on this association are needed (Øyane et al., 2013). The present

research sheds light on this connection, disclosing that when health risk self-perception is correlated to specific workplace stressors (e.g., not having enough time to finish working tasks, working with unforeseen interruptions, etc.), nurses ultimately become aware of a series of impediments that may not allow them to perform working tasks adequately.

Kaddourah and coauthors (2013) stated nurses might develop a greater awareness of health deterioration when dissatisfied with their work shifts, arguing this situation is caused by adverse working conditions, including heavy workloads. According to the present work, this condition among European nurses is linked to a feeling of work overload and the perception of insufficient autonomy due to the difficulty of managing professional time during workdays. Moreover, consistent with its findings, the impossibility of taking short breaks and having a few hours off, either for personal or family reasons, is associated with detrimental health risk self-perception in European nurses. Finally, Arne and Moreno (2014) argue that further research is needed to understand the particular effects rotating shift systems may have on the well-being of nurses. The results obtained from the logistic regression model here validate this statement.

Given these findings, it seems essential to reevaluate the way hospitals and clinics manage working time and





Managing time efficiently should imply balancing work and family lives to achieve the goals of each of these realms in a healthy manner.

organizational culture in their settings to enhance health risk self-perception among nurses. Medical institutions must grant both greater autonomy in making decisions and opportunities to progress at work to higher levels of responsibility, while efficiently controlling working time and encouraging work commitment. These actions could lead healthcare institutions to reduce psychosocial risk factors, prevent physical and psychological illnesses from surfacing, and increase productivity and quality in care.

When working in haste, nurses may potentially perceive the organizational environment as stressful, with the ensuing undesirable effect on job satisfaction and health risk self-perception. Supporting nursing personnel with assistance of experienced nursing supervisors may positively influence the subjective well-being of the former, moving them to cope with less physical symptoms, anxiety, and the latent perception of not being in control of their working tasks (Bé gat et al., 2005).

In light of the subjective nature of health risk perception, which may explain psychological stress reactions and the implication of neglecting to manage reports of poor health self-assessment, the

present research concurs with Winwood and Lushington's view (2006) that it is both reasonable and beneficial to train nursing staff to deal with occupational stress. Similarly, it is fundamental to learn how to achieve this competency from the first levels of nursing programs, reinforcing its relevance to academic syllabuses by offering tailored mentorship and adequate training in stress management and relaxation techniques during the early years of professional practice in hospitals and clinics.

### Personal Time Management

According to the present study, personal time management in European nurses has little effect on health risk self-perception at work. The regression model only linked two variables to this subjective assessment: *caring for/educating children* and *difficulty to harmonize working hours and personal matters*. However, these variables exemplify the complications involved in reconciling both work and family time.

As observed by Ingre and colleagues (2012), the present research demonstrates the difficulties nurses experience when coping with both shiftwork and work-family time simultaneously. The ability to balance these working and personal conditions potentially

increase job satisfaction and reduce health risk self-perception. In other words, there is an inverse relationship between job satisfaction and health risk perception among nurses. Takeuchi and Yamazaki's (2010) study among Japanese nurses illustrated how experiencing job dissatisfaction amplifies health risk self-perception. According to their findings, this happens because of a lack of ability to adapt to work schedules, which subsequently leads to work-family conflicts that affect mental and physical health and, finally, negatively influences the general self-perception of health condition.

Based on this study's results, two broad measures to break this vicious circle are proposed: training nurses to face stress better and implementing organizational policies to encourage and facilitate the pursuit of work-family time balance. Some scientific evidence suggests single subjects are more likely to experience a lack of ability to perform work tasks (Hakola et al., 2007), particularly when considering themselves under stress or perceiving poor job satisfaction. This study's findings do not identify this correlation. On the other hand, other studies seem to corroborate that men are not taking care of children, the elderly, or dependent people at home at the same pace as women are currently joining the workforce (Artazcoz et al., 2001). This situation can potentially prompt health risk self-perception in women.

Although this study suggests certain variables (e.g., caring for elderly/disabled relatives or caring for/educating children at home) are closely related to health risk self-perception, no significant differences were associated with nurse gender, most likely due to the low number of men in the sample.

### Study Limitations

One limitation of this study is the variability of formal educational levels in nurses and the diverse nomenclatures for naming each subgroup, which may occasionally cause incorrect categorizations with very different academic and socioeconomic characteristics. Another limitation is the studied sample is primarily composed of women; thus, extrapolating the results to all nursing professionals is not recommended.

Additionally, further studies considering parity between men and women in the sample could report different results. For instance, having few male nurses in the analysis makes it impossible to detect latent correlations with gender, as shown in similar studies from other service sectors with a predominant presence of women. Finally, occupational health risk self-perception is primarily measured by a single variable, providing responses that must be regarded as subjective. Additional research on different approaches for measuring quality of life and risk perception are recommended.

### Conclusion

The research revealed health risk self-perception is linked to efficiently managing professional time. It implies that the ability of those responsible (nurse managers, supervisors, and directors) to fairly coordinate *rotating shifts, working on holidays, organizing time within workdays, and salary levels* (dissatisfaction with salary), among others, is a crucial professional competence when tackling poor self-assessment of health and thus improves the sense of well-being in nurses. Also, findings highlight the importance of time management in work shifts. This evidence must be considered in the design and implementation of internal policies intended to ensure harmonious work environments. Managing time efficiently should imply balancing work and family lives to achieve the goals of each of these realms in a healthy manner.

The variables that link personal time management to health risk self-perception are of minor significance in the results, except for the variable *caring for/educating children*, which noticeably increases the negative perception in question. Further research in alternative and singular organizational contexts is recommended. \$

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