



## Impact of work and personal life conciliation problems on healthcare workers

Carla Fonte, Carla Barros, Pilar Baylina, Sónia Alves & Paulo Moreira

**To cite this article:** Carla Fonte, Carla Barros, Pilar Baylina, Sónia Alves & Paulo Moreira (2023) Impact of work and personal life conciliation problems on healthcare workers, *International Journal of Healthcare Management*, 16:3, 427-433, DOI: [10.1080/20479700.2022.2112441](https://doi.org/10.1080/20479700.2022.2112441)

**To link to this article:** <https://doi.org/10.1080/20479700.2022.2112441>



Published online: 31 Aug 2022.



Submit your article to this journal [↗](#)



Article views: 248



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 3 View citing articles [↗](#)



## Impact of work and personal life conciliation problems on healthcare workers

Carla Fonte <sup>a</sup>, Carla Barros <sup>a</sup>, Pilar Baylina <sup>b</sup>, Sónia Alves <sup>a</sup> and Paulo Moreira <sup>c</sup>

<sup>a</sup>Faculty of Human and Social Sciences, University Fernando Pessoa, Porto, Portugal; <sup>b</sup>Health School, Polytechnic Institute of Porto, Porto, Portugal; <sup>c</sup>International Healthcare Management Research and Development Centre, Shandong Province Qianfoshan Hospital, Shandong Medical University first Affiliated Hospital, Jinan, People's Republic of China

### ABSTRACT

Work life balance, a significant issue in the healthcare sector, recognizes that individuals are engaged in several tasks in their private and professional lives. Literature highlights the harmful consequences of conflicts between personal and professional life for organizations and workers. This study investigates the prevalence of work life balance problems and presence of psychosocial work factors and analyzes their impact on health complaints in the Portuguese healthcare sector. A cross-sectional study of 640 healthcare professionals was conducted using two data collection instruments: INSAT (*Inquérito Saúde e Trabalho*), a health and work survey to assess psychosocial work factors, and the Portuguese version of the Nottingham Health Profile that evaluates the subjective physical, emotional, and social aspects of health. The data show that healthcare professionals have a very high prevalence of work life balance problems and are exposed to several psychosocial risk factors including high demands and work intensity, working hours, emotional demands, and work characteristics. These experiences are related to professionals' health revealing a state of emotional vulnerability. Thus, Portuguese health organizations should formulate appropriate workplace policy to reduce work life conflict and enable employees to be more effective in their work and other roles.

### ARTICLE HISTORY

Received 28 December 2021  
Accepted 5 August 2022

### KEYWORDS

Work life balance; workers health; psychosocial risk factors; healthcare professionals; occupational health

## Introduction

On the job scene, work–family balance or the balance between work and private life has for decades been a frequent subject of debate. Historically, the theme of work–family balance focused on helping employees in their personal lives so that they could uphold their professional responsibilities [1]. The expression ‘work–family balance’ was first used in late 1970s to describe people’s balance between their work and personal lives [2]. However, more recently, work life balance (WLB) refers to the recognition that in addition to family, individuals are engaged in several roles in life to accomplish various goals [3]. Clark defined WLB as the degree to which humans are uniformly engaged in and similarly contented with their work and family domains [4]. Kashyap, Joseph, and Deshmukh [5] viewed WLB as a state of equilibrium in which the demands of both a person’s job and personal life are equal. Theoretically, it can be understood in terms of time balance, involvement balance, and satisfaction balance [5]. Time balance is about contributing equal time to work and family demands. Involvement balance refers to an equal level of involvement at work and in family, while the satisfaction derived from both work and life constitute satisfaction balance [6].

This topic is again on the emergent socio-economic and political agenda, because in this new era, workers –

both women and men – have a new relationship with their work.

They aim to flourish in several spheres of life such as in the family and leisure spheres, and no longer only focus on work.

However, in contemporary societies, technological advances such as in mobile communication mean there is increasing pressure to work more intensively and be permanently available. The increased information and communication technologies (ICTs) and in particular, the use of mobile devices, has amplified the number of hours employees spend on work-related tasks. These technologies allow employees to connect to the workplace from different locations and at different times. In this sense, devices have intensified the work–life balance issue, because the limits between work and private life seem to be dissolving [1,7]. In addition, today’s organizations struggle on a global basis and therefore, increasing performance pressure is being inflicted on workers. In this context, increasing requirements at the job level renders the balance between work and personal life difficult. The literature highlights the conflicts between personal and professional life and the undesirable consequences for both companies and workers. Many scholars link WLB to an individual’s psychological well-being, which is an indicator of equilibrium between one’s work and personal life [2].

According to a recent report from Eurofound [8], WLB has several benefits for global society including higher well-being, happiness and satisfaction with life and work, higher engagement, and more productive work. Several studies have observed these WLB effects [8]. For example, Amstad et al. [9] summarize three groups of effects in the literature. The first group of effects highlights that work–life conflict impacts organizational commitment, intention to quit the job, work-related performance, and organizational citizenship behavior. The second group point out that work–life conflict decreases satisfaction with life in general (work, family, marriage). The third relates work–life conflict to mental health problems such as burnout, exhaustion, absenteeism, stress, health in general, depression, anxiety, and substance abuse, as well as to physical health problems [9].

Balancing one's private and professional life is also important for healthcare professionals, and work interference in private life has been documented as a serious subject in this area. The reasons for this interference can be attributed to numerous aspects. Healthcare professionals experience high job demands, work irregular hours and night shifts, and are continuously involved in highly emotional and demanding relationships with care recipients [10,11]. Specifically, for this group of professionals, work-life conflict is a documented risk leading to work stress and burnout. For example, a study of a sample of Japanese psychiatrists found that poor WLB was related to burnout [12]. Burnout is also more frequent among physicians, specifically those working on the frontline, than among other workers in the US [13]. Shanafelt et al. [14] found that satisfaction with WLB among physicians in the US decreased from 2011 to 2014, with a high percentage of them experiencing professional burnout and dissatisfaction with work-life integration. They did, however, experience a high degree of satisfaction with their career choice. Another study on early career pediatricians found evidence that they experienced burnout and conflict between WLB [15]. In a recent study with practice providers, nurses, physicians, pharmacists, and social workers, Neuman et al. [16] associated burnout, moral distress, and inadequate WLB. Although the study presented in this paper refers to data before COVID-19, the pandemic has significantly affected the working population – especially healthcare professionals – via increased demands in their work environment [17]. For instance, a recent scoping review by [18] shows that psychosocial risks are a continuing concern for healthcare workers during the COVID-19 pandemic, suggesting a continuous emphasis on the prevention and mitigation of these risks as an important element of sustainable health systems.

Based on these and other arguments, WLB is a key issue that impacts an individual's health and well-

being and consequently, also influences their performance and commitment to the organization. As such, WLB is important for workers, employers, and the broader society. Thus, it remains relevant to analyze the factors influencing this problem. Therefore, the current study was developed to enhance understanding of the factors associated with health professionals' perception of WLB in Portugal. The aims of the study are as follows:

1. To estimate the prevalence of WLB problems and evaluate the health complaints of healthcare professionals;
2. to characterize the workplace and psychosocial work factors according to the presence of WLB; and
3. to analyze the association between poor WLB and health dimensions and identify the work risk factors for health complaints when WLB problems are present.

## Materials and methods

### Study design and ethical approval

A cross-sectional design was used in this study on Portuguese healthcare professionals from several hospitals (in northern and central Portugal). The researchers contacted the administration of hospitals in Portugal, asking them to participate voluntarily in this study. Each hospital administration unit informed their healthcare professionals by email. Participants were informed that participation was voluntary and that all responses would remain confidential and anonymous and received an INSAT (*Inquérito Saúde e Trabalho*) survey questionnaire [19, 20, 21] and guidelines on how to complete it. The instruments were distributed with a return envelope. Ethical approval was obtained.

### Sample

In total, 640 healthcare professionals from hospitals in the north and central Portugal voluntarily participated in the study. Of the sample, 13.4% are physicians, 56.9% nurses, 8.0% health assistants, 5.0% physical therapists, 12.2% psychologists, and 4.5 other professionals (e.g. pharmacists, nutritionists, diagnostic and therapeutic technicians). The majority of participants are female (78,0%). Participants' age ranged from 21 to 69 years ( $M = 37.70$ ;  $SD = 10.10$ ). The years of experience of the participating healthcare professionals ranged significantly from 1 year to 43 years ( $M = 11.37$ ;  $SD = 9.09$ ). Furthermore, 80.4% were employed under a permanent contract, with a rotative work schedule (46.7%), and weekend work schedule (51.1%).

## Variables and measurements

This study was developed using the INSAT [19–21], a self-reported survey organized in different dimensions, to measure working characteristics and health and well-being components. Aligned to the objectives of this study, only the psychosocial risk factors and Nottingham Health Profile (NHP) scale were used (Portuguese version). The psychosocial risk factors were the following: work intensity, autonomy, work relations, employment relations, emotional demands, ethical conflicts, and work characteristics. A Likert scale ranging from 0 (not being exposed) to 6 (being exposed with high discomfort) was used. INSAT has good internal consistency according to a Rasch PCM analysis, with a reliability coefficient of  $> 0.8$  [21]. The Portuguese version of the NHP, include in the INSAT, was also used to measure healthcare professionals' perceptions of health status in terms of subjective physical, emotional, and social aspects. It includes 38 questions in 6 health dimensions: sleep, physical mobility, social isolation, emotional reactions, pain, and energy. A dichotomous scale was used to measure each health dimension [22].

## Statistical analysis

A descriptive analysis was performed for the socio-demographic characteristics, NHP dimensions, and psychosocial risk factors (with previous data treatment). The scale for psychosocial risk factors (obtained from INSAT) was converted to a dichotomous scale by codifying 0 for a 'no' answer and 1 for a 'yes' answer. (The main goal of the study was to

understand if participants were exposed to psychosocial risk factors, regardless of the level of discomfort.) The health dimensions in the NHP were also codified as 0 for 'no' and 1 for 'yes.' A Chi square test ( $\chi^2$ ) of independence was conducted to analyze the relation between the risk factors and six dimensions of the NHP. A logistic regression was performed to analyze the association between the risk factor 'work and personal life conciliation' and six NHP dimensions. The level of significance was set as  $P \leq 0.05$ . The statistical tool employed was IBM SPSS for Windows, version 25.0.

## Results

### Socio-demographic characteristics

Information on socio-demographic characteristics was collected to better understand the sample of the study. The data for gender, education, age, and professional category are presented in Table 1.

### Descriptive analysis

Problems pertaining to WLB among healthcare professionals are an important issue, as 61.1% of these professionals refer to having issues conciliating their work and life domains. This effort has a serious impact on health and well-being, and to better understand it, a descriptive analysis of the NHP responses was performed. Table 2 presents the results of the frequency by dimension ('yes' answers).

The most complaints were for the emotional reaction dimension, which includes emotional stress, depression, or anxiety, and indicates a state of emotional susceptibility and perceived weak mental health.

Considering the problems pertaining to WLB, workplace factors that significantly impact professionals' health are shown in Table 3, and psychosocial work factors are presented in Table 4.

The data collected from healthcare professionals indicate high demands and work intensity, working hours, emotional demands, and work characteristics.

### Independence analysis between work life balance and health dimensions

An inferential analysis using a Chi square test of independence ( $\chi^2$ ) was performed to analyze the

**Table 1.** Characteristics of the sample.

Sample characteristics	Total sample (%) (n = 640)	Work and personal life conciliation problems	
		Yes (%) (n = 391)	No (%) (n = 249)
<i>Gender</i>			
Men	22.0	22.0	22.1
Women	78.0	78.0	77.9
<i>Education</i>			
Primary School	0.2	0.0	0.4
Preparatory School	0.3	0.3	0.4
Lower Secondary School	1.9	2.8	1.3
Upper Secondary School	4.8	5.2	4.3
Bachelor's Degree	0.6	0.8	0.4
University Degree	69.1	71.4	27.1
Post-graduate Degree	21.9	25.7	18.9
PhD Degree	1.3	1.3	1.2
<i>Age</i>			
20–29 years	21.9	20.6	24.1
30–39 years	43.3	50.2	32.6
40–49 years	20.6	20.7	20.0
>50 years	14.1	8.5	23.23
<i>Socio-professional category</i>			
Physicians	13.4	10.5	18.1
Nurses	56.9	68.3	30.0
Health assistants	8.0	6.4	10.4
Physical therapists	5.0	4.1	6.4
Psychologists	12.2	8.4	18.1
Other professionals	4.5	2.4	8.0

**Table 2.** Frequencies of NHP health dimensions.

NHP health dimension	Work life balance problems	
	% Yes (n = 391)	% No (n = 249)
Pain	38.4	22.5
Energy level	37.1	12.9
Sleep	41.4	19.3
Emotional reaction	54.7	26.9
Social isolation	13.6	8.0
Physical mobility	28.6	14.5

**Table 3.** Characterization of workplace factors.

Workplace factors	Work life balance problems	
	% Yes (n = 391)	% No (n = 249)
Workplace environment factors and toxicological factors		
Noise	36.5	15.7
Biological agents	51.9	25.5
<i>Physical factors</i>		
Repetitive gestures	39.3	19.2
Precise and fine gestures	49.2	24.2
Awkward postures	53.7	26.6
Heavy physical efforts	47.4	16.9
Standing in the same position for a long period	43.8	17.0
Standing for a long period with displacement	44.7	17.4
Work with monitor or display	48.6	27.5

association between poor WLB and the dimensions of the NHP (see Table 5).

The statistical associations between WLB and the NHP dimensions of pain, energy, sleep, emotional

**Table 4.** Characterization of psychosocial work factors.

Characterization of psychosocial work factors	Work life balance problems	
	% Yes (n = 391)	% No (n = 249)
High demands and work intensity		
Intense work pace	56.3	30.5
Dependent on colleagues to do my work	40.1	13.0
Dependent on direct clients' requests	48.5	24.9
Have to follow production norms or meet strict deadlines	42.3	16.5
Have to adapt permanently to changes in methods or instruments	45.8	20.8
Have to deal with contradictory instructions	41.3	15.4
Exposed to frequent disruptive interruptions	47.0	22.0
Exposed to highly demanding situations	51.7	22.7
<i>Working hours</i>		
Have to continue working beyond my assigned timetable	51.9	28.9
Have to sleep at unusual hours because of work	47.5	11.9
Have to 'skip' or shorten a meal or not have a break	52.2	23.0
Have to maintain permanent availability at any time of the day	39.4	16.0
<i>Employment relations with the organization</i>		
Career progress is almost impossible	49.9	21.4
Remuneration does not allow me to have a satisfactory standard of living	47.2	19.6
Lack the means to carry out my work	38.8	13.3
In general, I feel exploited	38.5	10.6
Be afraid of suffering an injury because of work	45.0	12.3
<i>Emotional demands</i>		
Have to endure the demands of the public	59.6	37.7
Have to deal with situations of tension in relations with the public	58.1	32.1
Exposed to the risk of verbal aggression from the public	53.8	25.4
Being exposed to the suffering of others	58.7	37.3
Have to simulate good mood and/or empathy	52.2	29.7
Have to hide my emotions	53.8	28.6
<i>Ethical and values conflicts</i>		
Have to do things I disapprove of	38.5	12.7
Lack the means to do a job well	39.6	12.8
<i>Work characteristics</i>		
Varied work	53.9	33.6
Unpredictable work	54.3	30.2
Complex work	55.8	31.8
Stimulating work	52.1	33.8
Permanent learning work	56.4	35.1

**Table 5.** Chi square test between work life balance and the NHP dimensions.

	Chi square test
NHP Dimensions	$\chi^2$
Pain	$\chi^2(1) = [9.803, 5] < .05$
Energy	$\chi^2(1) = [9.772, 5] < .05$
Sleep	$\chi^2(1) = [7.432, 5] < .05$
Emotional Reaction	$\chi^2(1) = [24.301, 5] < .001$
Physical Mobility	$\chi^2(1) = [5.305, 5] < .05$

reaction, and physical mobility ( $p < .05$ ) were determined. This means that problems regarding WLB are not independent from the NHP dimensions. The NHP dimension with the highest value is emotional reaction, followed by energy and pain, which have similar values.

### Association between NHP dimensions and risk factors

After the analysis of the association between WLB and health dimensions, the association between NHP dimensions and risk factors was analyzed for professionals who answered 'yes' when asked if they have 'problems with work life balance' ( $n = 391$ ). A logistic regression (backward conditional method) was performed to identify the predictors that better explain the existing associations between risk factors and each NHP dimension. Table 6 presents the results for all significant associations ( $P < .05$ ).

As Table 6 shows, 16 risk factors were considered predictors of the logistic regression model. Pain and sleep are the NHP dimensions with more predictors [6], followed by physical mobility [4] and energy, and emotional reaction and social isolation [3]. Some risk factors were considered key factors in increasing the perception of health problems: 'Awkward postures' increased the perception of problems related to emotional reaction by more than three times (3.253; CI 95% 1.339–7.900), and the perception of physical mobility problems by more than four times (4.608; CI 95% 1.175–18.077). 'Unpredictable work' increased the perception of energy problems by more than three times (3.296; CI 95% 1.136–9.563) and the perception of sleep problems by more than four times (4.917; CI 95% 1.569–15.413). Other risk factors also revealed important associations: 'Exposed to highly demanding situations' increased by three times the perception of energy (2.795, CI 95% 1.176–6.643), emotional reaction (3.191; CI 95% (1.452–7.012)), and physical mobility (3.046; CI 95% 1.107–8.381).

All risk factors with OR Adjusted (95% C.I.)  $< 1$  emerged as protectors of health problems. 'Stimulating work' decreased the perception of energy problems (0.493; CI 95% 0.246–0.985), emotional reaction problems (0.358; CI 95% 0.161–0.795), and social

**Table 6.** Association between risk factors and each NHP dimension.

Risk factors	NHP Dimensions					
	Energy OR Adjust (95% C.I.)	Pain OR Adjust (95% C.I.)	Emotional reaction OR Adjust (95% C.I.)	Sleep OR Adjust (95% C.I.)	Social isolation OR Adjust (95% C.I.)	Physical mobility OR Adjust (95% C.I.)
Repetitive gestures		3.219 (1.788–5.796)**		2.568 (1.421–4.641)*		
Precise and fine gestures				0.319 (0.147–0.696)*		
Awkward postures			3.253 (1.339–7.900)*			4.608 (1.175–18.077)*
Heavy physical efforts		3.199 (1.303–7.851)*				
Standing in the same position for a long period				0.448 (0.238–0.842)*		
Standing for a long period with displacement		0.333 (0.151–0.736)*			0.402 (0.187–0.864)*	
Have to follow production norms or meet strict deadlines		2.426 (1.338–4.398)*				2.385 (1.214–4.688)*
Exposed to highly demanding situations	2.795 (1.176–6.643)*		3.191 (1.452–7.012)*			3.046 (1.107–8.381)*
Have to continue working beyond my assigned schedule		3.195 (1.337–7.633)*				
Have to 'skip' or shorten a meal or not have a break		0.297 (0.118–0.745)*				
Be afraid of suffering an injury because of work						2.602 (1.178–5.749)*
Have to hide my emotions				4.724 (1.785–12.498)*		
Have to do things I disapprove of					2.840 (1.183–6.820)*	
Varied work				0.226 (0.078–0.658)*		
Unpredictable work	3.296 (1.136–9.563)*			4.917 (1.569–15.413)*		
Stimulating work	0.493 (0.246–0.985)*		0.358 (0.161–0.795)*		0.312 (0.130–0.746)*	

OR Adjust – Odds Ratio Adjusted; \* $P < 0.05$ ; \*\* $P < 0.001$ .

isolation problems (0.312; CI 95% 0.130–0.746). Similarly, 'varied work' (0.226, CI 95% 0.078–0.658) and 'standing in the same position for a long period' (0.448; CI 95% 0.238–0.842) were related to sleep problems and 'standing for a long period with displacement' for pain problems (0.333; CI 95% 0.151–0.736) and social isolation problems (0.402; CI 95% 0.187–0.864).

## Discussion

The present study aimed to investigate the prevalence of WLB problems and presence of psychosocial work factors to analyze their impact on health complaints among healthcare professionals. It was assumed that combining work and personal life is a fundamental issue. Furthermore, finding an optimal WLB remains an open issue that policymakers, social partners, businesses, and individuals are looking to address – before, during, and after the COVID-19 pandemic. Moreover, previous research showed that some workplace dimensions may have a negative impact on workers' health and well-being, and that both women and men are experiencing increasing time pressure in their daily life demands in terms of paid work, family work, and leisure time [23]. Globally, the results show that healthcare professionals have a very high score for the prevalence of WLB problems

in terms of conciliating their work and life domains. This has a serious impact on health [9]. Specifically, emotional stress, depression, or anxiety are the dimensions with the most health complaints. Furthermore, the findings of this study demonstrated that healthcare professionals are unprotected from the vast quantity of psychosocial risk factors; for example, high demands and work intensity, working hours, emotional demands, and work characteristics all impact mental and physical health. The data also indicated that working beyond regulated working hours, work intensity, and emotional demands increase stress and sleeping difficulties, and decrease energy, which can lead to significant health problems [24].

Another result showed significant statistical associations between WLB and several health dimensions: pain, energy, sleep, emotional reaction, and physical mobility. This means that WLB problems are not independent from the NHP dimensions. Emotional reaction is the NHP dimension with the highest value, followed by energy and pain, which have similar values. A further important result as the association found between poor WLB and the health dimensions, and the work risk factors for health complaints when WLB problems are present. Pain and sleep are the NHP dimensions with more predictors, followed by physical mobility and energy, emotional reaction, and social isolation. These results highlight the

importance of WLB, given its wide-ranging consequences. Being able to maintain an equilibrium between work and personal life is vital for accessing and being more engaged and productive in work, but also for living a healthy and happy life [8]. Furthermore, new factors are converting the interface between work and life: an ageing population, technological change, higher employment rates, and fewer weekly working hours. As such, how to achieve better WLB is a fundamental question. It seems that when life encroaches on work, work encroaches on life [3]. We believe that in the social scheme of daily life, certain activities co-exist with others (paid work and family work, and leisure and personal time), and their co-occurrence leads to stressful experiences because these dual responsibilities – at home and work – may lead to burnout symptoms. The results highlight that while the impact of the psychosocial risks manifests at the individual mental and physical health level, the majority of preventative measures go beyond the individual healthcare worker and should be further developed and strengthened. Specifically, measures that address the factors that impact work organization are discussed next.

### **Management implications**

The results of this study provide practical guidelines and preventive measures that can help to reduce exposure to the impact of WLB problems on health professionals. Organizational measures should be created to improve working conditions to reduce work demands. For instance, it should be ensured that there are sufficient staff to cover all needs of the health institutions. For this, it would be necessary to plan the assignment of tasks so that the work fits the daily schedule and allocate more resources when tasks exceed the time stipulated. Regarding emotional demands, it is advised that exposure time be reduced and protection measures developed that focus on the individual. As such, institutions can promote intervention programs that can be implemented by work psychologists. These interventions aim to improve coping, and focus on the acquisition of knowledge, strategies, and skills for health professionals, allowing to protect themselves from stresses and their adverse consequences for their physical and mental health. The findings also highlighted the need for increased social support so that relationships can be fostered through teamwork.

### **Limitations and future research**

This study is subject to some limitations (e.g. sample size, sample composition). Therefore, it is important to generalize these findings with caution. The study is a survey-based empirical study. Thus, a successive plan should be used in future studies based on the

analysis of the data here. It is suggested that a qualitative approach be followed to extend the knowledge here and contextualize the perceptions and feelings of healthcare professionals regarding their WLB difficulties and opportunities. Another limitation is that a single item was used to measure the WLB problems, so in future studies WLB measurements can be include.

Nevertheless, this study also has several important strengths. It addresses the factors that result in the impact of WLB problems on healthcare workers' health. The high prevalence rates found in this study suggest that future high-quality research is needed in this field. Risk factors at work seem to allow the prediction of a worse subjective health status among health professionals who report having difficulty in reconciling life and work. As such, it is important that health organizations pay attention to the occupational health of their workers, as it has a direct impact on the health of professionals, especially those who present themselves as the most vulnerable (difficulty in reconciling life and work). Qualitative research is needed to explore in depth the processes with which these factors are associated. Studies are also needed that quantify emotional work, which the pandemic has aggravated.

### **Conclusion**

The results of this study suggest that healthcare professionals appear to be at increased risk for mental health challenges, considering the impact of WLB difficulties. In addition, given that previous studies during other pandemics have shown the lasting impacts of service during this time, including reduced workforce participation and increased traumatic symptomatology, this is a critical issue to address. Globally, our data showed that healthcare professionals present a very high prevalence of WLB problems and are exposed to several psychosocial risk factors such as high demands and work intensity, working hours, emotional demands, and work characteristics. The results also indicated that these experiences impact professionals' health in terms of complaints emotional vulnerability. These results suggest that Portuguese health organizations should formulate appropriate policy for workplaces to effectively deal with the issue to reduce work–life conflict and enable employees to be more effective in their work and other roles.

### **Disclosure statement**

No potential conflict of interest was reported by the author(s).

### **Funding**

The author(s) reported there is no funding associated with the work featured in this article.

## Notes on contributors

**Carla Fonte** Associate Professor at Faculty of Human and Social Sciences /University Fernando Pessoa. Has a PhD in Psychology at the University of Minho, Master in Psychology in University of Porto and degree in Psychology also in University of Minho. Specialist Psychologist in Clinical and Health Psychology and Psychotherapy acknowledged by the Order of Portuguese Psychologists.

**Carla Barros** is an Associate Professor at Fernando Pessoa University, and lecturer at the undergraduate/master degree in Psychology. PhD in Psychology at the University of Porto were also completed the Master in Work and Organizational Psychology and the degree in Psychology. She holds the title of Specialist Psychologist in Occupational Health Psychology, acknowledged by the Order of Portuguese Psychologists.

**Pilar Baylina** has an Environmental Engineering Master degree, a Chemical Engineering Bachelor degree from Engineering Faculty of Porto University, and a PhD in Public Health – Policies, Management and Health Administration from the New University of Lisbon. She has been Professor at the Health School – Polytechnic Institute of Porto.

**Sónia Pimentel Alves** is a clinical psychologist. She completed his master's degree in Clinical Psychology (Cognitive–Behavioral and Systemic) in University of Coimbra, his post-graduation in Cognitive–Narrative Psychotherapy and his degree in Psychology (Health Psychology) in University of Porto. She is Assistant at Fernando Pessoa University. Director of the Pedagogical Clinic of Psychology at Fernando Pessoa University.

## ORCID

Carla Fonte  <http://orcid.org/0000-0002-7280-2083>  
 Carla Barros  <http://orcid.org/0000-0003-2236-4553>  
 Pilar Baylina  <http://orcid.org/0000-0002-3740-862X>  
 Sónia Alves  <http://orcid.org/0000-0001-5386-8725>  
 Paulo Moreira  <http://orcid.org/0000-0002-3644-1022>

## References

- [1] Vendramin P, Parent-Thirion A. Redefining working conditions in Europe. *Intern Develop Policy | Revue Internationale de Politique de Développement*. 2019;11:273–294.
- [2] Pradhan RK, Jena LK, Kumari IG. Effect of work–life balance on organizational citizenship behaviour: role of organizational commitment. *Glob Business Rev*. 2016;17:15S–29S.
- [3] Ross JP, Intindola ML, Boje DM. It was the best of times; it was the worst of times: The expiration of work–life balance. *J Manage Inq*. 2017;26(2):202–215.
- [4] Clark SC. Work/family border theory: A new theory of work/family balance. *Hum Relat*. 2000;53(6):747–770.
- [5] Kashyap S, Joseph S, Deshmukh G. Employee well-being, life satisfaction and the need for work-life balance. *J Ravishankar Univ*. 2016;22:11–23.
- [6] Greenhaus J, Collins K, Shaw J. The relation between work–family balance and quality of life. *J Vocat Behav*. 2003;63:510–531.
- [7] Nagy B, Király G, Géring Z. Work-life balance and the gender regime after the economic transition. *Intersect East Eur J Soc Polit*. 2016;2(3):5–20.
- [8] Eurofound. Striking a balance: reconciling work and life in the EU. Luxembourg: Publications Office of the European Union; 2018.
- [9] Amstad FT, Laurenz LM, Fasel U, et al. A meta-analysis of work–family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *J Occup Health Psychol*. 2011;16(2):151–169.
- [10] Anderson SP, Oakman J. Allied health professionals and work-related musculoskeletal disorders: A systematic review. *Saf Health Work*. 2016;7(4):259–267.
- [11] Viotti S, Converso D. Buffering effect of job resources in the relationship between job demands and work-to-private-life interference: A study among health-care workers. *Saf Health Work*. 2016;7(4):354–362.
- [12] Umene-Nakano W, Kato TA, Kikuchi S, et al. Nationwide survey of work environment, work-life balance and burnout among psychiatrists in Japan. *PLOS ONE*. 2013;8(2):e55189.
- [13] Shanafelt TD, Boone S, Tan L, et al. Burnout and satisfaction With work-life balance Among US physicians relative to the general US population. *Arch Intern Med*. 2012;172(18):1377–1385.
- [14] Shanafelt TD, Hasan O, Dyrbye LN, Sinsky C, Satele D, Sloan J, et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clinic Proceedings*. (1942-5546 (Electronic)); 2015.
- [15] Starmer AJ, Frintner MP, Freed GL. Work–life balance, burnout, and satisfaction of early career pediatricians. *Pediatrics*. 2016;137(4):e20153183.
- [16] Neumann JL, Mau LW, Virani S, et al. Burnout, moral distress, work-life balance, and career satisfaction among hematopoietic cell transplantation professionals. *Biol Blood Marrow Transplant*. 2018;24:849–860 (1523-6536 (Electronic)).
- [17] Franklin P, Gkiouleka A. A scoping review of psychosocial risks to health workers during the COVID-19 pandemic. *Int J Environ Res Public Health*. 2021;18:2453, doi:10.3390/ijerph18052453.
- [18] Pearman A, Hughes ML, Smith EL, et al. Mental health challenges of United States healthcare professionals during COVID-19. *Front Psychol*. 2020;11:2065, doi:10.3389/fpsyg.2020.02065.
- [19] Barros-Duarte C, Cunha L, Lacomblez M. INSAT: uma proposta metodológica para análise dos efeitos das condições de trabalho sobre a saúde. *Laboreal*. 2007;3(2):54–62.
- [20] Barros-Duarte C, Cunha L. INSAT2010 – inquérito saúde e trabalho: outras questões, novas relações. *Laboreal*. 2010;6(2):19–26. Available from: <http://laboreal.up.pt/revista/artigo.php?id=48u56oTV6582234;5252:5:52>.
- [21] Barros C, Cunha L, Oliveira A, et al. Development and validation of a health and work survey based on the Rasch model among Portuguese workers. *J Med Syst*. 2017;41(79):1–9.
- [22] Ferreira PL, Santa P. Percepção de saúde e qualidade de vida: validação intercultural do perfil e saúde de Nottingham. *Nursing*. 1999;135:23–29.
- [23] Barros C, Fonte C, Alves S, et al. Can psychosocial work factors influence psychologists' positive mental health? *Occup Med (Lond)*. 2019;69(3):204–210.
- [24] Arlinghaus A, Nachreiner F. Health effects of supplemental work from home in the European Union. *Chronobiol Int*. 2014;31(10):1100–1107.