

HEALTHCARE WORKERS AND PRESENTEEISM DURING COVID-19 IN THE EU27: A LOGISTIC REGRESSION APPROACH

Abstract

This article analyses the impact of occupational and individual factors on the likelihood of presenteeism among healthcare workers in the EU27 nations in 2021, within the context of COVID-19. The analysis utilizes data from the European Working Condition Survey (2021). A logistic regression analysis was performed. The sample consists of 1457 healthcare workers. The results indicate that time pressure, exhaustion, and incompatibility between professional and personal life elevate the probability of presenteeism, whereas workplace social capital reduces it. It is advisable to implement measures that reduce the probability of presenteeism to enhance employee well-being.

JEL classification: I12, I14, I31, J24, M12

Keywords: presenteeism, health care workers, COVID-19, EU27

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Introduction

The coronavirus pandemic affected all occupational groups globally. This discussion specifically centres on the group of essential workers who confronted challenges on the front line. It was specifically these vocational groups, designated as “essential workers”, whose dedication enabled society to operate despite the hard circumstances. This also encompassed individuals employed in the food supply and energy industries, in addition to those in the health care sector. Notably, the group of healthcare workers experienced the most detrimental job quality throughout the epidemic. In these occupations, the health and well-being of employees were particularly affected by the circumstances of the pandemic (Parent-Thirion et al., 2023). Studies worldwide have shown that people in the healthcare sector were particularly affected by anxiety, distress and depression during the pandemic (Chew et al., 2020; Zhang et al., 2020).

Presenteeism describes the phenomenon of going to work despite illness. This behaviour can be observed in various occupational groups. However, those occupational groups that are described as “helping professions” are particularly affected by this behaviour (Peter et al., 2023). This includes, among others, people who work in the healthcare sector (Aronsson et al., 2000). People working in the healthcare sector, in particular, often report strong loyalty to their patients and a high level of commitment (Krane et al., 2014).

In addition to the lack of a standardised definition of presenteeism and the absence of a theoretical model that can capture this phenomenon holistically, this topic is highly relevant as presenteeism may also affect future health status (K. Gustafsson & Marklund, 2011; Hansen & Andersen, 2009; Taloyan et al., 2012). Other studies have shown that presenteeism is associated with a greater likelihood of errors (Niven & Ciborowska, 2015) and can lead to a reduction in job satisfaction and work commitment (Karanika-Murray et al., 2015). To date, there has been a lack of far-reaching studies that have empirically analysed the topic of presenteeism among healthcare workers against the backdrop of the pandemic in Europe.

This paper examines which workplace-related and person-related factors influence the probability of presenteeism among healthcare workers. To this end, data from the European Working Condition Telephone Survey from 2021 are used and the results obtained are presented on the basis of a logistic regression analysis.

1. Literature Review

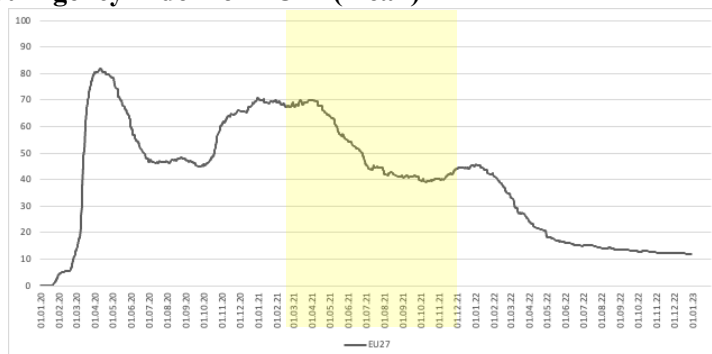
Essential workers have been recognised as playing a crucial role during the pandemic. They were the ones who kept important and critical areas of social life running while being exposed to possible infection by COVID-19 (Chowdhury et al., 2022). There is no specific definition at European level of which occupations are classified as “essential workers”. In principle, the group of essential workers includes a number of different professions, depending on the view held: for example, education workers, food system workers, manual workers, protective

service workers (Parent-Thirion et al., 2023). In addition, the group of healthcare workers is considered to be the prototype for essential workers due to their special position during the pandemic and their exposure to potential infection.

A review article demonstrated that the COVID-19 pandemic caused stress, especially among frontline workers, affecting their physical and emotional well-being, as well as their productivity and job satisfaction. On the one hand factors identified in various studies were the disrupted work-life balance due to irregular working hours, higher work demands and higher risk of contagion, and work-life conflict having a negative effect on well-being. The same applies to a lack of support in the workplace. On the other hand, studies show the emergence of emotional exhaustion and interpersonal conflicts that have a lasting negative impact on the well-being of employees (Woods et al., 2023). The above mentioned negative circumstances are exacerbated by chronic understaffing in the healthcare sector. In 2022, several EU countries reported shortages of medical doctors, nurses and midwives. This situation threatens to become even worse as a large proportion of the workforce is about to retire and will therefore leave the healthcare system in the foreseeable future (OECD/European Commission, 2024).

The COVID-19 pandemic has had a huge impact on almost all areas of our society. For the world of work in particular, the pandemic proved to be a factor that had a significant impact, especially during its peak phases. In addition to school and workplace closures, lockdowns and testing policies, the Stringency Index also measures the extent of information campaigns and thus provides a figure that summarises the strength of the measures taken by the respective countries. This index summarises all measures and reflects the respective strength based on the actions taken by policymakers to deal with the pandemic. The higher the index, the more comprehensive the measures taken (Hale et al., 2021). For the EU27 countries, the phase in which the 2021 European Working Condition Survey took place initially saw the second-highest increase and then decreased again over the summer months. At the beginning of the autumn and winter period, there was another increase in the measure set.

Graph 1: Stringency Index for EU27 (mean)



Source: own representation, Oxford COVID-19 Government Response Tracker (Hale et al., 2021)

Presenteeism, the behaviour of employees to go to work despite illness, received increased interest in the early 2000s. The factors that have been analysed for their explanatory value can generally be divided into three categories: Organisational aspects, work characteristics and person-related factors. Some authors also examine specific contextual factors, such as the labour market and labour law at national level (Lohaus & Habermann, 2018).

At the organisational level, job insecurity has been shown to promote presenteeism, as this encourages people to go to work while ill (Hansen & Andersen, 2008; Heponiemi et al., 2010; Preisendörfer, 2010). People who have experienced discrimination are also more prone to presenteeism (Cho et al., 2016).

At the level of work characteristics, it can be seen that working with people (e.g. helping professions) potentially increases the level of presenteeism. This is particularly true for people who work in education and the health sector (Aronsson et al., 2000). This can be seen, among other things, in the high proportion of emotional labour, for example in the area of care (Cho et al., 2016). Workplace social capital (e.g. good cooperation with colleagues) has a mitigating effect on presenteeism. Thus Caverley et al. (2007) show on the basis of Canadian employees that the support experienced from superiors and colleagues reduces the risk of presenteeism. Social capital in the work context has a mitigating effect on perceived stress and thus reduces presenteeism (Miraglia & Johns, 2016). Job control also has a mitigating effect: people who have autonomy in the work context show lower presenteeism levels, as they can use their flexibility to better organise their workload (Johansson et al., 2015). The meta-analysis by Miraglia & Johns (2016) showed that job control can both reduce the occurrence of presenteeism and increase the likelihood of presenteeism through increased motivation. Working hours have a wide range of influences on the occurrence of presenteeism: a study conducted on Finnish employees showed that people who work shifts and those who regularly work overtime tend to be more prone to presenteeism (Bockerman & Laukkanen, 2010). The same applies to people who report a particularly high workload and time pressure (Hansen & Andersen, 2008; McGregor et al., 2016; Merrill et al., 2012). It also shows that the compatibility of work and family has an important influence on presenteeism behaviour: If there is a discrepancy between the areas of private life and professional life, the probability of presenteeism increases (Johns, 2011; McGregor et al., 2016; Robertson et al., 2012).

At the level of personal factors, it can be seen that certain illnesses are associated with presenteeism. These include back pain, asthma and cardiovascular diseases (Burton et al., 2004). In general, poor health is associated with presenteeism (Aronsson & Gustafsson, 2005; Caverley et al., 2007) as well as experienced stress (Callen et al., 2013; McGregor et al., 2014). Another review article showed that stress is one of the main factors for presenteeism and why people go to work despite being ill (García-Iglesias et al., 2023). A strong attachment to the respective activity can also lead to an increased risk of presenteeism (Hansen & Andersen, 2008).

With the exception of nurses, there is currently a lack of studies that deal with the relationship between healthcare workers and presenteeism during COVID-19 (White-Means et al., 2022). Therefore, most of the studies mentioned here refer to nurses.

A review article by Gerlach et al. (2024) showed that presenteeism is a widespread phenomenon among nurses, with the range of presenteeism varying between 32% and 94%. In addition to workload, job demands, shift work, team culture and interpersonal conflicts were identified as influencing factors (Baek et al., 2022). It has also been shown that being aged 45 or over (Shan et al., 2021; Shdaifat, 2023) as well as having childcare obligations (Rainbow, 2019) have an impact. Another review article by Lui et al. (2018) examined studies that dealt primarily with presenteeism among nurses but were also able to analyse a few studies on physicians. On the job requirements side, it was found that the likelihood of working while sick increased with higher time pressure, musculoskeletal pain and a strong sense of responsibility as well as perceived stress (Dellve et al., 2011). In terms of available resources, social support has been shown to have a mitigating effect on the occurrence of presenteeism (Dellve et al., 2011; Thun et al., 2014) and work pace control (Thun et al., 2014).

A study by Demerouti et al. (2009) analysed the longitudinal relationship with presenteeism in a study of 258 nurses. Three surveys were conducted over a period of 1.5 years. The results of this study showed that job demands increase the likelihood of presenteeism. Demands were identified as working under time pressure, demands resulting from patient care and physical demands. It was also shown that there is a connection between emotional exhaustion and presenteeism, whereby this connection is reciprocal: Exhaustion leads to an increased likelihood of presenteeism, which in turn increases the likelihood of exhaustion.

Studies among midwives have shown that presenteeism is associated with high workload and traumatic stress, and that these factors favour presenteeism (Jiang et al., 2023). A further study of midwives and nurses showed that work overload leads to more presenteeism. Support from managers only had a limited mitigating effect if the workload was low. However, support from colleagues had no mitigating effect on the occurrence of presenteeism (Flatau-Harrison et al., 2022). A qualitative study demonstrated that nursing staff are more prone to presenteeism based on their perceived work ethic. Despite the high workload due to pressure and the resulting exhaustion, a culture of attendance driven by work ethic prevails here (Moore & Knutsen Glette, 2023). The connection between overcommitment and presenteeism has also been demonstrated in other professional contexts (Hansen & Andersen, 2008). One of the few studies on medical doctors showed that between 70% and 86% of medical doctors in the countries analysed (Italy, Sweden, Norway and Iceland) go to work sick. The most important factors here are competitive pressure, role conflict, self-diagnosis and self-treatment as well as a lack of support from the organisation. Health programmes that can reduce the incidence of presenteeism have had a mitigating effect (S. Gustafsson et al., 2013).

Theoretical embedding and derivation of the hypotheses

To theorise the relationship between work demands and work resources, the Job Demands-Resources (JD-R) model of Demerouti et al. (2001) will be referred to. This model was primarily developed to research burnout and describe that stress arises when the balance of demanding and favourable factors is disturbed. If there is an excess of demanding factors and a lack of coping strategies, this leads to negative effects. Job demands are described as “physical, social, or organisational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs” (Demerouti et al., 2001, p. 501). Job resources refer to “physical, psychological, social or organisational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands at the associated physiological and psychological costs; (c) stimulate personal growth and development” (Demerouti et al., 2001, p. 501).

With regard to presenteeism, on the one hand, studies have also shown that high job demands and low job resources are associated with presenteeism due to increased burnout. On the other hand, increased job resources can mitigate presenteeism through increased work engagement (McGregor et al., 2016).

Based on the results presented above, the hypotheses that are subsequently analysed in this article are derived as follows:

On the job demands side, a number of factors can be identified that increase the risk probability of presenteeism:

H1: Work-related workload (time pressure, working hours and night shift) has a statistically significant influence on the risk probability of presenteeism.

H2: Perceived exhaustion (emotional and physical) has a statistically significant influence on the risk probability of presenteeism.

H3: Problems in reconciling work and family life have a statistically significant influence on the risk probability of presenteeism.

The following hypotheses can be derived on the job resources side, which can potentially mitigate the risk of presenteeism:

H4: Job control has a statistically significant influence on the risk probability of presenteeism.

H5: Work engagement has a statistically significant influence on the risk probability of presenteeism.

H6: Workplace social capital has a statistically significant influence on the risk probability of presenteeism.

This model also analyses socio-demographic variables: gender, age and education.

2. Methods

The data from the European Working Condition Telephone Survey (EWCTS) from 2021 are used to analyse the hypotheses presented above (Eurofund, 2024). The EWCTS focuses on analysing the working conditions of employees in

European countries. This survey regularly takes place every 5 years. The last survey planned for 2020 had to be cancelled after seven weeks due to the COVID-19 pandemic and was finally carried out again in 2021. The survey took place between March and November 2021 and ensures representativeness through targeted sampling methods. Representativeness may be affected by the pandemic and resulting change in survey logic (e.g. lockdowns, changed working conditions). The sample comprises a total of 1457 people. The data were obtained free of charge from UK Data Service (prior registration required).

For the analysis, only persons from the EU27 countries who belong to the ISCO groups (2-digits) Life Science and Healthcare Professionals (No. 22; including pharmacists, doctors, midwives) and the group Life Science and Healthcare Assistants (No. 32; medical assistants, pharmaceutical assistants, nurses) were selected.

It should be noted that these groups also include people from the veterinary sector and biologists. Based on the data set, it was not possible to remove these occupational groups from the analysis, as a more precise distinction (3-digits) is not available in the data set. People who do not belong to these two groups (No. 22, No. 23) were not included in the analysis.

Dependent variable (presenteeism)

In order to analyse the presenteeism variable, participants were asked whether they had worked in the last 12 months, even when they were ill. This variable was dichotomised (0=no, 1=yes).

Independent variables

Usual working hours per week, night shifts and time pressure were used to analyse the influence of work-related workload. The number of usual working hours was measured by asking respondents how many hours they usually work per week (as opposed to the number of hours per week stipulated in their contract). For night shift, respondents were asked to indicate how regularly they also work at night (always/often, sometimes, rarely/never). To measure time pressure, an index was calculated from two variables (working at high speed and working under tight deadlines). High values indicate a high degree of time pressure. For the calculation of the index, this article is based on the work of Avgoustaki & Frankort (2019). The calculated Cronbach's alpha value is 0.620.

Two variables were used to introduce the degree of perceived exhaustion into the model. Firstly, the degree of physical exhaustion and secondly, the degree of emotional exhaustion. A joint index was deliberately not calculated for these two variables in order to take into account the quality of the respective variables. Respondents were asked to indicate how physically or emotionally exhausted they were. The answers were summarised into three categories for the calculation (always/often, sometimes, rarely/never).

As caring responsibilities were a key factor during the COVID-19 phase – not least against the backdrop of occasional homeschooling – an index was calculated from three variables that reflect potential conflicts between work and private or family life (worrying about work even in free time, lack of energy to do household jobs, difficulties to concentrate on job due to family responsibilities). High values indicate a high imbalance. The formation of the index was based on the study by Choi et al. (2021). The calculated Cronbach's alpha value is 0.527.

In order to analyse the influence of job-related autonomy/job control on presenteeism, three variables were combined to form an index (self-determination of work speed, choice of methods for coping with tasks, order in which tasks are completed). High values indicate a high level of job control. The composition of this measurement instrument was developed by Breaugh (1985) taken. The calculated Cronbach's alpha value is 0.701.

Work engagement was calculated as an index from three other variables. Work engagement is used to measure, among other things, the degree of dedication, immersion in work and endeavour despite difficulties. High values indicate a high level of work engagement. The development of this index is based on the study by Schaufeli et al. (2019). The calculated Cronbach's alpha value is 0.648.

To analyse workplace social capital, three variables were combined to form an index (management trusts employees, good cooperation between employees, employees trust management). These indices were used as a modified version from the study by Kizuki & Fujiwara (2020). The Cronbach's alpha value is 0.715. The response categories were reversed for easier interpretation (1=low workplace social capital, 5=high workplace social capital).

Socio-demographic variables were also included in the model: Gender, age and education. In the case of education, only secondary and tertiary education were analysed, as people with elementary education are not included in the sample.

Data Analysis

A logistic regression was used to calculate the risk probability of presenteeism. The variables used for this were recoded and prepared for the calculation. Before carrying out the logistic regression, a linear regression was calculated in order to check the requirements for collinearity and Mahalanobis. Outliers and missing variables were excluded from the analysis. After carrying out these calculations, 1457 people were included in the sample.

3. Results

Preliminary Analyses

The relationship between night shift, perceived exhaustion and sociodemographic variables is presented in Table 1. Significant correlations were found between night shift ($\chi^2_{(2)}=16.406$, $p<0.001$), physical exhaustion ($\chi^2_{(2)}=90.968$, $p<0.001$), and emotional exhaustion ($\chi^2_{(2)}=80.896$, $p<0.001$). No

correlation could be calculated for the socio-demographic variables (gender, age and education).

Table 1: Descriptive analysis of different variables and Chi-Square analysis of presenteeism (n=1457)

Variable	Group	n	%	Score (mean ± SD)	Test value	p
Night shift	(1) Never/rarely	958	65.8	1.5614 ± 0.82740	16.406	<0.001**
	(2) Sometimes	180	12.4			
	(3) Often/always	319	21.9			
Physical exhaustion	(1) Never/rarely	338	23.2	2.2011 ± 0.79060	90.968	<0.001**
	(2) Sometimes	488	33.5			
	(3) Often/always	631	43.3			
Emotional exhaustion	(1) Never/rarely	589	40.4	1.8476 ± 0.79584	80.896	<0.001**
	(2) Sometimes	501	34.4			
	(3) Often/always	367	25.2			
Gender	(1) Male	349	24.0	1.7605 ± 0.42695	0.463	0.496
	(2) Female	1108	76.0			
Education	(2) Secondary	383	26.3	2.7371 ± 0.44034	0.664	0.415
	(3) Tertiary	1074	73.7			
Age	Age in years	1457	100	41.7433 ± 12.47475	57.663	0.451

Note: Authors' own calculation based on EWCTS 2021,
 **statistically significant at 0.01 level (two-tailed)

Table 2 shows the descriptive statistics and correlations between presenteeism and usual working hours (per week), time pressure, work-private/family imbalances, work engagement, job control, and workplace social capital. Overall, more than 33% of the respondents worked sick in the last year (M=0.3301, SD=±0.47). The correlation analysis shows that presenteeism is significantly related to usual weekly working hours, time pressure, work-family imbalances, work engagement, and workplace social capital.

Table 2: Descriptive statistics of different variables and correlation analysis (n=1457)

Variable	Mean (± SD)	1	2	3	4	5	6	7
1 Presenteeism	0.3301 (± 0.47)	1						
2 Usual weekly hours (per week)	37.9863 (±10.42)	0.096**	1					
3 Time pressure	3.5364 (± 0.97)	0.217**	0.155**	1				
4 Work-private/family imbalances	2.5941 (± 0.77)	0.262**	0.145**	0.268**	1			
5 Work engagement	3.9960 (± 0.68)	-0.082**	-0.019	-0.008	-0.223**	1		
6 Job control	3.0840 (± 1.06)	-0.043	-0.004	-0.119**	-0.045	0.140**	1	
7 Workplace social	1.8806	-0.164**	-0.124**	-0.155**	-0.269**	0.279**	0.151**	1

capital	(± 0.79)						
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Note: Authors' own calculation based on EWCTS 2021,
 **statistically significant at 0.01 level (two-tailed)

Multivariate Analysis

A logistic regression was conducted to determine which independent variables (usual weekly working hours, night shift, time pressure, physical exhaustion, emotional exhaustion, work-private/family imbalances, work engagement, job control, workplace social capital, gender, age and education) are predictors of presenteeism for healthcare workers in the EU27 in 2021. Data screening led to the elimination of several outliers, as presented within the Methods chapter.

Regression results indicated that the overall model fit improved compared to the zero model (-2 Log likelihood = 1.665.798; zero model: -2 Log likelihood = 1848.266) and was statistically reliable in distinguishing between presenteeism [$\chi^2_{(15)}=182.468$, $p<0.001$]. The model correctly classified 69.7% of the cases. Regression coefficients are presented in Table 3.

Table 3: Logistic Regression (n=1457)

	B	Wald	df	p	Odds Ratio
Usual working hours (per week)	0.006	1.047	1	0.306	1.006
Night shift					
<i>Never/rarely</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
<i>Sometimes</i>	0.058	0.102	1	0.750	1.060
<i>Often/always</i>	0.128	0.712	1	0.399	1.136
Time pressure (Index)	0.279**	15.568	1	<0.001	1.321
Physical exhaustion					
<i>Never/rarely</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
<i>Sometimes</i>	0.305	2.704	1	0.100	1.356
<i>Often/always</i>	0.717**	14.719	1	<0.001	2.048
Emotional exhaustion					
<i>Never/rarely</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
<i>Sometimes</i>	0.046	0.090	1	0.746	1.047
<i>Often/always</i>	0.318	3.194	1	0.074	1.374
Work-private/family imbalances (Index)	0.417**	18.615	1	<0.001	1.517
Work engagement (Index)	-0.033	0.118	1	0.731	0.967
Job control (Index)	0.022	0.135	1	0.713	1.022
Workplace social capital (Index)	-0.191*	5.784	1	0.016	0.826
Gender					
<i>Male</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
<i>Female</i>	-0.026	0.033	1	0.857	0.974
Age (years)	0.001	0.091	1	0.763	1.001
Education					
<i>Secondary</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
<i>Tertiary</i>	0.023	0.270	1	0.868	1.024

Notes: Authors' own calculation based on EWCTS 2021; Dependent dichotomous variable: Presenteeism;

*statistically significant at 0.05 level (two-tailed);

**statistically significant at 0.01 level (two-tailed); Nagelkerke R²=0.164

Wald statistics indicated that time pressure, physical exhaustion, work-private/family imbalances and workplace social capital predict presenteeism for healthcare workers in the EU27 during 2021.

4. Discussion

Data from the 2021 EWCTS were utilized to analyse healthcare workers in the EU27 nations. The analysis of the logistic regression models indicated that job demands significantly affect the probability of presenteeism. Workplace social capital diminishes the possibility of presenteeism.

Working under time pressure has a positive influence on the probability of presenteeism. This means that employees who report time pressure at work are at a higher risk of presenteeism (OR=1.321, $p < 0.001$). This result has also been shown in previous studies (Baek et al., 2022; Dellve et al., 2011; Demerouti et al., 2009).

Studies have shown that the pandemic has increased the level of exhaustion among essential workers (Woods et al., 2023). Other studies have demonstrated the link between exhaustion and presenteeism (Demerouti et al., 2009; Moore & Knutsen Glette, 2023). This could be demonstrated in this calculation for the area of physical exhaustion for those healthcare workers who report frequent or constant exhaustion (OR=2.048, $p < 0.001$). No significant result could be calculated for perceived emotional exhaustion. The effect is above the limit of statistical significance (OR= 1.374, $p = 0.074$) for those people who always or frequently report emotional exhaustion. Here, it is possible to suggest that high levels of emotional exhaustion may increase the risk of presenteeism.

The compatibility of work and private/family life also has a significant influence on the probability of presenteeism. As the imbalance between work life on the one hand and private or family life on the other increases, the risk probability of presenteeism also rises (OR=1.517, $p < 0.001$). This result is in line with the studies by Rainbow (2019) in which caring responsibilities among nurses increased the risk of presenteeism.

These results show that job demands, represented by time pressure, perceived exhaustion and problems in reconciling work life with private and family life, also cause healthcare workers to work sick. Particularly against the backdrop of the pandemic prevailing at the time and the special position of people in this field, these influencing factors may have led to less attention being paid to their own health. This was demonstrated in the study by Moore & Knutsen Glette (2023).

Among the job resources included in this model, workplace social capital shows a mitigating effect on presenteeism. The calculations show that the probability of presenteeism decreases with increasing workplace social capital (OR=0.826, $p = 0.016$). This cushioning effect of social capital in the workplace has already been shown in other studies (Dellve et al., 2011; Thun et al., 2014).

Particularly in a high-risk role such as that of a healthcare worker, workplace social capital can mitigate the risk of presenteeism. The experience of support in the workplace can be used as an important resource.

For all other variables, no effect on the risk probability of presenteeism could be demonstrated for the group of healthcare workers. The variables usual working hours per week, night shift, work engagement, job control and the socio-demographic variables (gender, age and education) showed no effect on the probability of occurrence. As already mentioned above, only a tendency could be indicated for emotional exhaustion, as this result is slightly outside the significance level.

Conclusion

This study aimed to analyse the factors affecting the prevalence of presenteeism among healthcare personnel in the EU27. This occurred amid the ongoing COVID-19 pandemic.

The results of this study indicate that job demands significantly affect presenteeism among healthcare workers. Time pressure, perceived exhaustion, and difficulties in balancing professional responsibilities with family and personal life were identified as factors that elevate the probability of presenteeism. Among job resources, only workplace social capital can mitigate the likelihood of presenteeism.

This study examined the EWCTS dataset from 2021 to determine the risk variables for presenteeism among healthcare workers in the EU27 nations. The group of healthcare workers utilized for these calculations included several subgroups. Alongside physicians, nurses, and midwives, individuals from the pharmaceutical and veterinary sectors were also included within this sample. The absence of thorough separation prevents unambiguous categorization of these subgroups. Future research should examine more accurate distinctions among certain subgroups to facilitate the calculation of particular characteristics in this context. This study additionally examines the EU27 nations collectively. Consequently, the outcomes of these computations preclude the possibility of making assertions regarding individual countries or regions exclusively.

Since the analysis utilizes cross-sectional data from the EWCTS of 2021, no assertions regarding causal correlations can be made. Future research, devoid of the capacity to consider the pandemic circumstances, may analyse the long-term dynamics of the aforementioned components to explore their interactions in greater depth.

The results indicate that certain recommendations for enhancing working conditions can be formulated. The risk of presenteeism can be mitigated by modifying workloads. Presenteeism adversely affects both personnel well-being and patient welfare. Organisations, such as hospitals or other healthcare institutions, need to consequently structure the work environment to alleviate the experienced time pressure. Likewise, focused occupational health management can positively

impact the exhaustion experienced, enabling individuals to maintain a healthy appearance at work. A concentration on effectively balancing professional responsibilities with personal and family obligations positively impacts the likelihood of presenteeism. Conversely, workplace social capital from co-workers and supervisors may mitigate the incidence of presenteeism. Consequently, it is crucial that measures enhancing cooperation and trust can exert a substantial influence. Nonetheless, it is crucial to underscore that these solutions are inadequate if the fundamental structural issues are unchecked. The primary issues are the persistent understaffing of healthcare facilities and the forthcoming wave of retirements in the healthcare workforce. In the absence of focused long-term strategies for the recruitment, training and retention of skilled workers, short-term enhancements to workplace conditions may lack enduring durability. It is essential to address these systematic shortages to ensure enduring decreases of presenteeism and to protect both personnel health and patient care standards.

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ZDRAVSTVENI RADNICI I PREZENTIZAM TIJEKOM PANDEMIJE COVID-19 U ZEMLJAMA EU27: LOGISTIČKI REGRESIJSKI PRISTUP

Sažetak

Ovaj članak analizira utjecaj zanimanja i individualnih čimbenika na vjerojatnost prezentizma među zdravstvenim radnicima u državama članicama EU27 tijekom 2021. godine, a u kontekstu pandemije COVID-19. Analiza se temelji na podacima iz Europske ankete o radnim uvjetima (2021.). Provedena je logistička regresijska analiza. U uzorak je uključeno 1457 zdravstvenih radnika. Rezultati pokazuju da vremenski pritisak, iscrpljenost te nesklad između poslovnoga i privatnoga života povećavaju vjerojatnost prezentizma, dok je socijalni kapital na radnome mjestu smanjuje. Preporučuje se uvođenje mjera koje će smanjiti rizik prezentizma kako bi se povećala dobrobit zaposlenika.

JEL-klasifikacija: I12, I14, I31, J24, M12

Ključne riječi: prezentizam, zdravstveni radnici, COVID-19, EU27