

BMJ Open Prevalence of mental disorders and high rates of absenteeism from work among healthcare professionals in Slovenia: a retrospective study

Darja Korošec ,¹ Dominika Vrbnjak ,¹ Gregor Štiglic^{1,2,3}

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¹Faculty of Health Sciences, University of Maribor, Maribor, Slovenia

²Faculty of Electrical Engineering and Computer Science, University of Maribor, Maribor, Slovenia

³University of Edinburgh, Usher Institute, Edinburgh, UK

Correspondence to

Darja Korošec;
darja.korossec@student.um.si

ABSTRACT

Objectives To investigate the prevalence of mental disorders and the higher rates of absenteeism from work among healthcare workers employed in Slovenia by analysing the prevalence of sick leave and medication prescriptions for treatment of mental health and behavioural disorders from 2015 to 2020.

Design Retrospective analysis of nationwide data on absenteeism and prescription of medications for treatment of mental health and behavioural disorders (anxiolytics, antipsychotics, antidepressants).

Setting National databases of the National Institute of Public Health in Slovenia.

Participants All employed healthcare workers (35 008 in December 2020): dentists, midwives, nurses, nursing assistants, pharmacists and physicians in Slovenia from 2015 to 2020.

Results The most time spent on sick leave by male healthcare workers aged >50 was for 'neoplasms' (71.50 days on average), followed by 'mental health and behavioural disorders' (62.08 days on average). Female healthcare workers under 40 years old spent the most time on sick leave for 'pregnancy, childbirth, and the postpartum period (puerperium)', causing an average of 58.38 days of sick leave. From 2015 to 2020, the highest increase in prescribed medications for treatment of mental health and behavioural disorders was among nursing assistants (an increase of 38.42%), pharmacists (an increase of 29.36%) and nurses (an increase of 26.61%); since the COVID-19 pandemic, an increase of 12.36% was found among dentists, an increase of 11.51% among pharmacists and an increase of 11.36% among nurses.

Conclusion The prescription of medications for treatment of mental health and behavioural disorders was on the rise from 2015 to 2020. The importance of employee health to individuals and society necessitates the systematisation of effective prevention programmes as well as programmes to assist those in need, especially health workers, whose work contributes significantly to maintaining public health.

INTRODUCTION

Frequent sick leave is an important consideration for any organisation, especially for healthcare institutions.¹ Healthcare workers are a driving force in achieving universal health coverage and global health security.²

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study analyses the prevalence of mental disorders and the high rates of absenteeism from work among healthcare workers employed in Slovenia.
- ⇒ National databases of the National Institute of Public Health in Slovenia contain samples that are sufficiently large.
- ⇒ The study compares working absenteeism and prescription of medications for treatment of mental disorders in the prepandemic time and during the COVID-19 pandemic.
- ⇒ Availability of data (data were available only until December 2020) represented an important limitation, especially in terms of capturing the complete COVID-19 and post-COVID-19 period.

The rates of sick leave in healthcare have been rising for the last few years. Data from the UK show that the rate of sickness absence has climbed from 4.21% in 2018/2019 to 4.41% in 2019/2020. In 2020 and 2021, the rate of sick leave rose to 4.66%.³ Many factors increase the prevalence and duration of sick leave, and the two important factors are older age⁴ and mental disorders, which have been rising among healthcare workers in recent years.⁵ Healthcare workers have an increased risk of sick leave due to mental disorders.⁶ The most common mental disorders among healthcare workers are affective and anxiety disorders. They worsen healthcare workers' well-being and also risk safety in their practice.⁷

Mental disorders are usually associated with use of medications to treat mental disorders.⁸ According to the international classification, medications with an effect on the nervous system can be classified into the following groups: psychoanaesthetics (antidepressants) and psycholeptics (antipsychotics and anxiolytics).⁹ Prescription of medications for treatment of mental disorders, including self-medications, is common among

healthcare workers, and COVID-19 may have increased such behaviours.¹⁰ Healthcare workers are more inclined to use medications for treatment of mental disorders due to excessive stress, overload and dissatisfaction at work or in the family.¹¹ In a survey conducted in Northern Ireland, out of 109 627 healthcare workers, 16 639 (15.18%) used medications for treatment of mental disorders.¹² A cross-sectional study in China showed that, among 3474 nurses, 38% had symptoms of depression.¹³ A study conducted in Jordan found that, among 282 nurses, 17% used anxiolytics, 16% used medications for insomnia and 15% used antidepressants.¹⁴ Another study conducted in Brazil found that 37.4% of 123 healthcare workers used anxiolytics while working, 63.04% had a prescription for anxiolytics and 65.21% had used anxiolytics for less than a year.¹⁵ With the high proportions of prescribed medicines for treatment of mental disorders in other countries, this study could add valuable knowledge on the importance of assessing the health status of healthcare workers for their own good and for the society.

A significant increase in the prevalence of mental disorders among healthcare workers was triggered by the COVID-19 pandemic.¹⁶ Healthcare workers may be frequently exposed to occupational factors that put them at risk of disease, injury and death.¹⁷ In a meta-review, researchers examined 40 systematic reviews which included 3 245 768 healthcare workers and found that anxiety occurs in 16%–41%, depression in 14%–37%, and stress and post-traumatic stress syndrome in 18%–56.5%.¹⁸

Healthcare workers are exposed to working conditions related to their mental and physical health. Previous studies have examined the health of healthcare workers based on self-assessment. The objective of our study was to investigate the prevalence of mental disorders and the higher rates of absenteeism from work among healthcare workers employed in Slovenia by analysing the prevalence of sick leave and medication prescriptions for treatment of mental health and behavioural disorders from 2015 to 2020. Our study includes descriptive epidemiological analysis based on objective data, which can contribute to the assessment of health status of healthcare workers in Slovenia.

METHODS

Data for this retrospective observational analysis were obtained from the national databases of the National Institute of Public Health in Slovenia.

As part of the data collection for prescribed medications, we gathered information on the week, month and year of the issuance of medications for treatment of mental health and behavioural disorders to all healthcare workers, broken down by gender, year of birth and region of employment from 2015 to 2020. Medications were classified according to the Anatomical Therapeutic Chemical (ATC) classification level 3 (therapeutic-pharmacological subgroup): antipsychotics N05A, anxiolytics N05B and antidepressants N06A.

As part of the database record of temporary/permanent absence from work due to illness, injuries, care and other causes, we obtained data on the year of occurrence of the sick leave, the duration of the sick leave in terms of full and reduced working hours in days, the reason for the sick leave and the main diagnosis according to the International Classification of Diseases (ICD-10) for all health workers employed in Slovenia, according to gender, year of birth and region of employment from 2015 to 2020.

The two databases were then combined in the IBM SPSS V.28.0 program with the Registry of Healthcare Providers and Healthcare Workers database, which contains data on all healthcare professionals and their work locations.

Sample

The sample consists of all health workers employed in Slovenia from the beginning of 2015 to the end of 2020. At the end of 2020, more than 35 000 health workers were employed in Slovenia. More precisely, there were 7781 physicians with 6 years of second-cycle Bologna higher education and 4–6 years of specialisation (medical doctors and medical doctor specialists), 1698 dentists with 6 years of second-cycle Bologna higher education, 9819 nurses who had 3 years of first-cycle Bologna higher education or 2 years of second-cycle Bologna higher education (nurses with master's degree), 12812 other members of nursing team with 4-year secondary education (nursing assistants and midwives with secondary vocational education), 372 midwives with 3 years of first-cycle Bologna higher education, and 2526 pharmacists who had 4-year secondary education or 5 years of second-cycle Bologna higher education.

Data analysis

Data were analysed using IBM SPSS V.28.0 and Microsoft Excel software. We used descriptive statistics with the following variables: gender of the healthcare worker; year of birth of the healthcare worker; region of employment of the healthcare worker; year, month and week of prescription for medication for treatment of mental health and behavioural disorders; ATC code of the medication; reason for sick leave; week, month and year of occurrence and the duration of sick leave of the healthcare worker; and profession of the healthcare worker. We calculated the CI for the duration of sick leave. Data on the number of employees in individual groups of health workers were also obtained at the monthly level to normalise the data on the number of employees by month. The trend line in figures 1 and 2 represents the 2-month moving average for prescribed medications. Data analysis and anonymisation were conducted in the secure room of the National Institute of Public Health of the Republic of Slovenia in June 2022.

Patient and public involvement

Patients were not directly involved in the study. We obtained data from the national databases of the National Institute of Public Health in Slovenia.

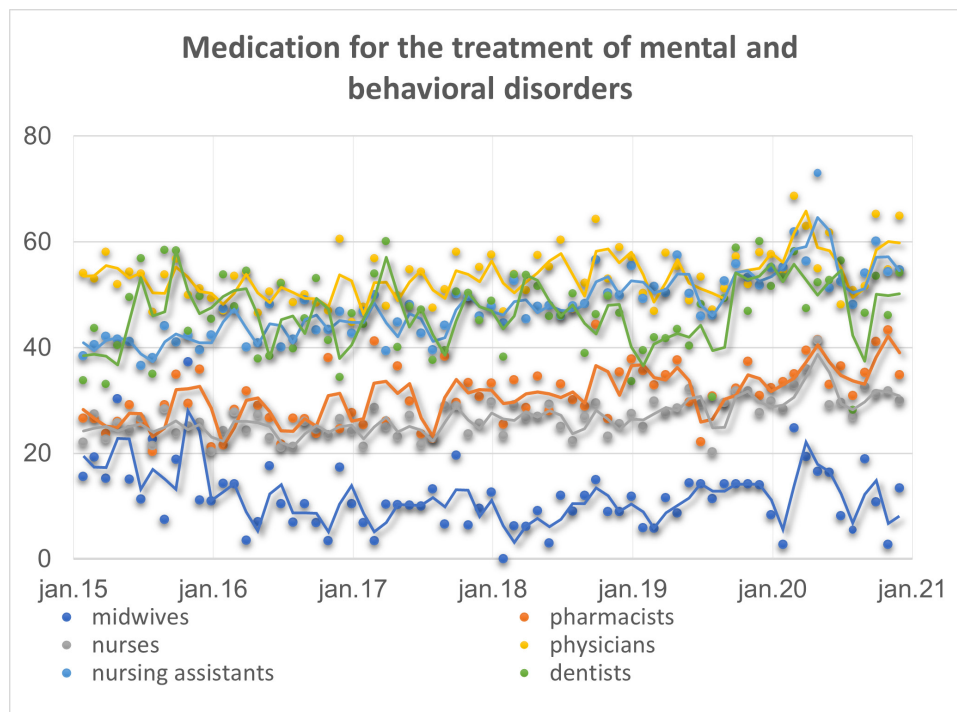


Figure 1 Normalised data for prescribed medications for treatment of mental health and behavioural disorders for midwives (dark blue line), pharmacists (orange line), nurses (grey line), physicians (yellow line), nursing assistants (light blue line) and dentists (green line) between 2015 and 2020. The line represents the 2-month moving average of prescribed medications.

RESULTS

Prevalence of sick leave among healthcare workers

Table 1 presents the days of sickness absence among healthcare workers by reason of sick leave and by age group. In the observed period, healthcare workers were on sick leave due to ‘illness’ for 367 240 days, followed by ‘care’ for 118 886 days, ‘entourage’ for 64 325 days and ‘injury outside of work’ for 18 596 days. The total number of observations in the observed time period was 596 242. From 2015 to 2020, the total number of observations rose by 37% and from the beginning of the COVID-19 pandemic by 5%.

Table 2 presents the six most frequent reasons for absenteeism from 2015 to 2020 among healthcare workers classified using the ICD-10 and by age group. Healthcare workers younger than 40 years old were most frequently absent from work due to ‘factors influencing health status and contact with the health service’ in 31.71% and to ‘infectious and parasitic diseases’ in 26.76%. These same two reasons were the most frequent reasons for absenteeism in 33.31% and 16.04% of healthcare workers in the 41–50 age group. In the age group over 50, 28.14% of cases of absenteeism were due to ‘factors influencing health status and contact with the health service’, followed by diseases of the ‘musculoskeletal system and connective tissue’. The biggest increase from 2019 to 2020 was for ‘infectious and parasitic diseases’, where 116.21% increase in sick leave was found in all age groups combined.

Male healthcare workers aged more than 50 years old were on average 71.50 days on sick leave due to

‘neoplasms’. The duration of sick leave decreases with younger age. Those younger than 40 years old were on average 34.76 days on sick leave due to ‘mental and behavioural disorders’. Female healthcare workers under 40 years old were on sick leave due to ‘pregnancy, childbirth and postpartum period (puerperium)’ for an average of 58.38 days. The duration of sick leave decreases with older age. Those older than 50 years old were on sick leave for an average of 61.29 days due to ‘mental and behavioural disorders’. The results are presented in table 3.

Prescription of medications to treat mental health and behavioural disorders

Figure 1 represents normalised data for prescribed medications for treatment of mental health and behavioural disorders for midwives (dark blue line), pharmacists (orange line), nurses (grey line), physicians (yellow line), nursing assistants (light blue line) and dentists (green line) between 2015 and 2020. The line represents the 2-month moving average of prescribed medications. Most medications for treatment of mental health and behavioural disorders were prescribed to physicians (53 prescriptions on average per month per 1000 physicians), dentists (47 prescriptions on average per month per 1000 dentists) and nursing assistants (47 prescriptions on average per month per 1000 nursing assistants). In the observed period, prescription of medications for mental health and behavioural disorders increased the most among nursing assistants (an increase of 38.42%), pharmacists (an increase of 29.36%) and nurses (an increase

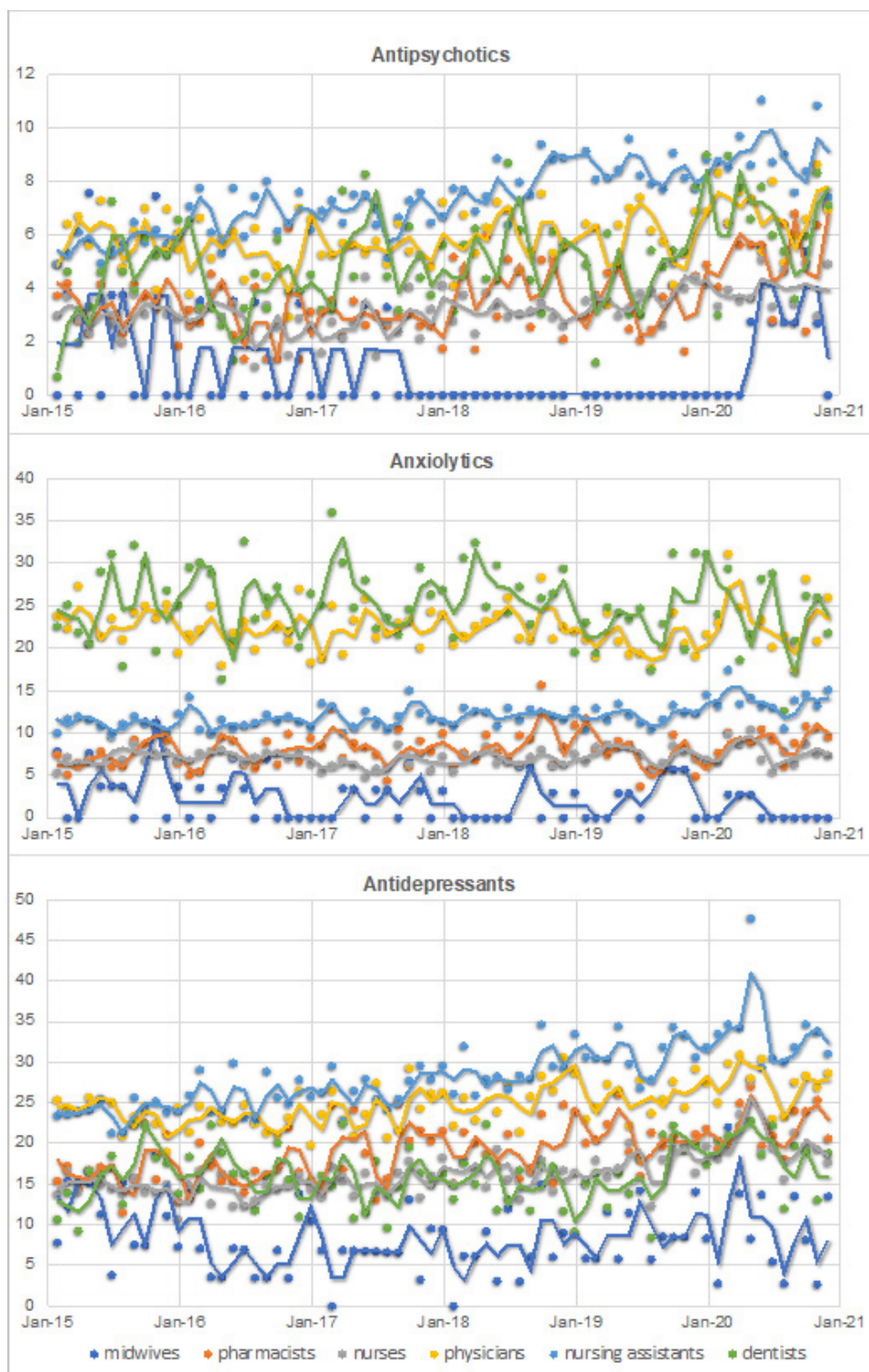


Figure 2 Normalised data for prescribed antipsychotics, anxiolytics and antidepressants for midwives (dark blue line), pharmacists (orange line), nurses (grey line), physicians (yellow line), nursing assistants (light blue line) and dentists (green line) between 2015 and 2020. The line represents the 2-month moving average of prescribed medications.

of 26.61%). Since the onset of the COVID-19 pandemic, dentists have seen the highest increase in medication prescriptions for these disorders, with an increase of 12.36%, followed by pharmacists (an increase of 11.51%) and nurses (an increase of 11.36%).

Figure 2 presents a more detailed overview of normalised data for prescribed antipsychotics, anxiolytics and antidepressants for midwives, pharmacists, nurses, physicians, nursing assistants and dentists between 2015 and 2020. Most antipsychotics were prescribed to nursing

Table 1 Reasons for sick leave among healthcare workers by age group in 2015–2020

Age groups	<40	41–50	>50
Reasons for sick leave			
Disease, n	127 355	90 910	148 975
%	56.21	49.27	80.45
Injury outside of work, n	5514	4300	8782
%	2.43	2.33	4.74
Injury at work, n	2863	1977	3363
%	1.26	1.07	1.82
Care*, n	63 827	47 670	7389
%	28.17	25.84	3.99
Isolation, n	3468	1934	2731
%	1.53	1.05	1.47
Entourage†, n	22 727	28 270	13 328
%	10.03	15.32	7.20

*Care of a close family member (child up to 18 years of age and marital or extramarital partner).
 †Accompanying the child to medical examinations, hospitalisation, etc of a child 15 years of age or older in case of a mentally and physically disabled child up to the age of 18.
 n, frequency.

Table 2 Top six reasons for sick leave among healthcare workers according to ICD-10 and by age groups in 2015–2020

Age group	<40	41–50	>50
ICD-10			
Factors influencing health status and contact with the health service (Z00–Z99), n	40 500	42 543	35 943
%	31.71	33.31	28.14
Diseases of the musculoskeletal system and connective tissue (M00–M99), n	7956	10 998	31 437
%	6.23	8.61	24.61
Infectious and parasitic diseases (A00–B99), n	34 186	20 491	24 967
%	26.76	16.04	19.55
Respiratory diseases (J00–J99), n	24 280	16 043	22 377
%	19.01	12.56	17.52
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified (R00–R99), n	10 243	6527	9719
%	8.02	5.11	7.61
Gastrointestinal diseases (K00–K93), n	10 259	6557	9322
%	8.03	5.13	7.30

ICD-10, International Classification of Diseases; n, frequency.

assistants, physicians and dentists. In the observed period, the prescription of antipsychotics increased the most among dentists (an increase of 59.35%), nursing assistants (an increase of 57.13%) and pharmacists (an increase of 47.34%). Between 2019 and 2020, the prescription increased the most among pharmacists (an increase of 52.51%) and dentists (an increase of 27.48%). Prescribing anxiolytics was most common among dentists and physicians, followed by nursing assistants. In the observed period, the prescription of anxiolytics increased among nursing assistants (an increase of 24.00%) and pharmacists (an increase of 21.54%). For other professional groups, the trend was declining. Between 2019 and 2020, the largest increase in anxiolytics prescriptions was observed among physicians (an increase of 21.91%) and nursing assistants (an increase of 15.01%). Prescribing antidepressants was highest among nursing assistants, physicians and pharmacists. In the observed period, the prescription of antidepressants increased the most among nursing assistants (an increase of 40.70%) and nurses (an increase of 35.11%). Since the onset of the COVID-19 pandemic, the prescription of antidepressants has increased the most among dentists (an increase of 18.45%), followed by nurses (an increase of 16.99%).

DISCUSSION

This study aimed to investigate the prevalence of mental disorders and the high rates of absenteeism from work in healthcare workers by verifying the prevalence and duration of sick leave and prescription of medications for treatment of mental health and behavioural disorders (anxiolytics, antipsychotics and antidepressants) among all healthcare workers employed in Slovenia in the 2015–2020 period and by analysing data from the National Institute of Public Health databases.

Reasons for sick leave in healthcare workers

Our findings show that ‘illness’ was the most common reason for sick leave among healthcare workers in all age groups from 2015 to 2020. According to ICD-10, healthcare workers were most often absent from work due to ‘factors influencing health status and contact with the health service (Z00–Z99)’. In categories, Z00–Z99 are classified occasions when circumstances other than a disease, injury or external cause, which are classifiable into categories A00–Y89, are recorded as ‘diagnoses’ or ‘problems’. The category includes the following two cases: (a) when a person who may or may not be sick encounters the health service for a specific purpose, such as to receive limited care or service for a current condition, to donate an organ or tissue, to receive prophylactic vaccination (immunisation), or to discuss a problem which is in itself not an injury or disease; and (b) cases where a problem or circumstance is present and influences the person’s health status but is not a current injury or illness. Similarly, a survey carried out in Norway, where nurses were asked about their sick leave in the last 6 months, showed

**Table 3** Duration of sick leave among healthcare workers in 2015–2020 by age, gender and ICD-10

Age groups	Male			Female		
	<40	41–50	>50	<40	41–50	>50
ICD-10						
Diseases of the musculoskeletal system and connective tissue (M00–M99) (days)	18.72	23.98	36.64	21.77	28.31	38.52
CI	15.65 to 21.79	20.03 to 27.90	32.54 to 40.74	20.37 to 23.18	26.36 to 30.27	37.23 to 39.81
Diseases of the circulatory system (I00–I99) (days)	14.51	19.86	63.89	17.78	16.84	30.94
CI	9.38 to 19.64	12.00 to 27.72	48.89 to 78.89	14.22 to 21.35	14.46 to 19.22	28.08 to 33.81
Injuries, poisoning and some other consequences of external causes at work (S00–T98) (days)	33.46	41.60	42.72	24.50	43.08	52.62
CI	27.41 to 39.50	32.48 to 50.72	33.47 to 51.97	21.65 to 27.34	35.30 to 50.85	46.33 to 58.91
Injuries, poisoning and some other consequences of external causes outside of work (S00–T98) (days)	29.10	32.84	48.28	23.48	34.92	48.62
CI	25.52 to 32.69	29.20 to 36.48	42.92 to 53.64	22.07 to 24.88	32.36 to 37.48	46.57 to 50.66
Mental and behavioural disorders (F00–F99) (days)	34.76	41.10	62.08	30.47	43.08	61.29
CI	28.09 to 41.43	31.17 to 51.04	50.24 to 73.91	27.24 to 33.71	39.07 to 47.09	57.77 to 64.81
Neoplasms (C00–D48) (days)	29.85	31.50	71.50	19.27	39.40	76.66
CI	14.87 to 44.82	16.27 to 46.73	53.91 to 89.08	13.59 to 24.95	32.76 to 46.04	69.69 to 83.64
Pregnancy, childbirth and postpartum period (puerperium) (O00–O99) (days)	–	–	–	58.38	53.25	41.88
CI				57.06 to 59.70	50.16 to 56.34	24.12 to 59.64

'Days' means days of sick leave on average.
ICD-10, International Classification of Diseases.

that in 65.9% of cases the reason for sick leave was their state of health or illness.¹⁹ In Ethiopia, they found that the most common reason for sick leave among healthcare workers was 'musculoskeletal diseases' in 29.4%.²⁰ Musculoskeletal diseases were found to be the reason for sick leave among 24.61% of healthcare workers aged over 50 in Slovenia, while the prevalence was lower at 8.61% and 6.23% for those under 50 years old. The prevalence of musculoskeletal conditions increases with age,^{21 22} which are also the most common problems of older people. Previous studies have shown that knowledge about ergonomics, prevention strategies and workplace modifications can contribute to better occupational health.²³ Often healthcare workers are absent from work due to 'infectious and parasitic diseases'. We note that 26.76% of healthcare workers under the age of 40 were absent from work due to 'infectious and parasitic diseases', which can be related to the fact that healthcare workers are exposed to an increased risk of infection.^{24 25} The most common occupational infections in healthcare workers are tuberculosis, hepatitis B and C, HIV/AIDS and infections (coronaviruses, influenza).²⁶ Since the COVID-19 pandemic, sick leave for 'infectious and parasitic diseases'

has increased by 116.21%, which can be attributed to the large number of COVID-19 infections worldwide.¹⁶

Duration of sick leave in healthcare workers

Male healthcare workers over 50 years have the longest average days of absence (71.50 days) from work due to 'neoplasms'. The duration of sick leave decreases with age, with an average days of absence of 41.10 days for the 41–50 age group and 34.76 days for those under 40 years. A survey conducted in the Netherlands showed that 3701 (73%) of 5074 employees with cancer returned to work after a sick leave of 290 days. The duration of sick leave increased over the years regardless of gender.²⁷ The second longest-lasting reason for sick leave regardless of gender among those over 50s is 'mental and behavioural disorders', causing male healthcare workers to be absent from work for an average of 62.08 days and female workers for an average of 61.29 days. Similar findings were reported in Scotland, where healthcare workers were absent on average 53.9 days per year owing to 'mental and behavioural disorders'.²⁸ In England, sick leave due to 'mental and behavioural disorders' has increased by 20% in the last 2 years.²⁹ Health professions

are among the most stressful professions and have a much higher likelihood of sick leave.³⁰ Serious mental and physical health problems may be caused by occupational stress, to which healthcare workers are particularly exposed.³¹ Many different factors contribute to increased stress among healthcare workers, including heavy workloads, long shifts, lack of physical or psychological safety, continuity of care, moral conflicts, job security and lack of social support.³² Also, reasons given for work-related sick leave include sleep problems, catching viral or bacterial infections from patients or colleagues, and low staffing.¹⁹ Findings from previous studies suggest positive effects of resilience training to healthcare workers, showing that resilience training may result in higher levels of resilience among healthcare workers.³³ Among female healthcare workers younger than 40, the longest-lasting reason for sick leave was 'pregnancy, childbirth, and the postpartum period (puerperium)', causing an average of 58.38 days of sick leave. 'Pregnancy, childbirth, and the postpartum period (puerperium)' includes pregnancy and complications of pregnancy, childbirth and complications of childbirth, other maternal diseases related to pregnancy, and other obstetric conditions not classified elsewhere. A similar result was found in a Danish study, where it was stated that sick leave was more common in late pregnancy than in early pregnancy among those employed in hospitals. On average, pregnant women were absent from work 6.1 days per month.³⁴

Prescription of medication for treating mental health and behavioural disorders in healthcare workers

Medications for treatment of mental health and behavioural disorders between 2015 and 2020 were mostly prescribed to physicians, dentists and nursing assistants. The prevalence rates for depression among physicians in Germany vary between 6% and 13% and for burnout between 4% and 20%.³⁵ Also, physicians, mostly female, are at an increased risk of suicide.³⁶ An important role in the development of mental health and behavioural disorders among physicians is associated with work-related stress factors.³⁵ Dentists are in second place after the most frequently prescribed medication for mental health and behavioural disorders among Slovenian healthcare workers. In a Lithuanian survey, it was found that 80.7% of dentists were satisfied with their job; however, it was also found that working more hours increases the possibility of burnout, anxiety and loneliness.³⁷ The weekly working time of dentists in Slovenia is 40 hours; however, they can also work over time in their parent institutions or private institutions.³⁸ After the reform in the early 1990s, physicians and dentists can work in independent practice, which is performed as a private practice on the basis of out-of-pocket payment, through a contract with the National Health Insurance or a combination of both,³⁹ which can lead to working more hours and could be related to the high prescriptions of medications for treatment of mental health and behavioural disorders.

Antidepressants were the most commonly prescribed medications for treatment of mental health and behavioural disorders. We found that the trend in prescribing antidepressants from 2015 to 2020 increased most among nursing assistants and nurses, with the number of prescriptions increasing by 40.70% and 35.11% during the mentioned period. This may be related to the high level of work stress that researchers found among nurses and nursing assistants, which is associated with the occurrence of depression.⁴⁰ Depression is a disease of modern society that often affects health workers, who often encounter the suffering of their fellow human beings.⁴¹ Between 2019 and 2020, from the start of the COVID-19 pandemic, the increase in the prescription of antidepressants was highest among dentists at 18.45% and nurses at 16.99%. In Slovenia, a study determined the consumption of medications for treatment of mental health and behavioural disorders in the general population between 2018 and 2019 and compared it with data up to May 2020. It was found that the prescription of these medications increased sharply in May 2020; during this time, the number of people who received prescriptions for antipsychotics increased by 29%, anxiolytics by 12% and antidepressants by 39%.⁹ An increase in medication use was also found by Giardino *et al*⁴² in a study carried out in Argentina, where they found that during the time of social isolation, 361 (34%) of 1059 healthcare workers used sleep medications, while only 100 (9%) used the mentioned medications before the social isolation. In a systematic review with meta-analysis which included 33 062 healthcare workers, the prevalence of depression was noted at 22.8%, anxiety at 23.2% and insomnia at 38.9%.⁴³ A mixed-methods survey conducted in the UK of 897 healthcare workers found that 333 (43%) healthcare workers perceived that the pandemic had a negative impact on their mental health,⁴⁴ which may explain the increase in prescribed medications from 2019 to 2020.

Strengths and weaknesses of the study

The strength of the study is the large research sample as we included all healthcare workers in Slovenia. The small sample of midwives (372 midwives employed in Slovenia in December 2020) represents a limitation of this study, which means that the number of prescribed medications in this group is extremely low and can result in a high variance in the results. We included all 372 midwives in the study analysis. Another limitation of the study is the availability of data (data were available only until December 2020), especially in terms of capturing the complete COVID-19 and post-COVID-19 period.

CONCLUSIONS

Due to the nature of their work, such as shift work and working with sick people, healthcare workers are particularly exposed to stress and risk factors for increased work absenteeism and prevalence of mental disorders. Strategies to improve employee health in the workplace

should be regulated at the policy level. It is also important for employees to have access to preventive programmes that help improve occupational health and to provide an adequate support network for all those facing health problems. There was an increasing trend in prescribing medications for treatment of mental health and behavioural disorders from 2015 to 2020, so it is important to systematise accessible and effective preventive programmes in mental health as well as programmes to provide help to people who need it. Preventive programmes and activities at the workplace should include the following elements: a promotion plan at the workplace, open discussion among employees about problems and the search for solutions, training employees on effective coping with stress and training management staff to recognise early signs of stress in employees. Also, additional qualitative research could explain the reasons for the increase in prescriptions for mental health and behavioural disorders among health professionals.

Twitter Dominika Vrbnjak @nikajaki

Contributors All authors contributed to the design of the research, and drafted, reviewed and edited the paper. DK led the writing of the article (Introduction, Methods, Results and Discussion sections). DV led the conception of the Introduction and Discussion sections and contributed to the interpretation in the Discussion section. GŠ helped with data collection and led the data analyses and methods and contributed to the drafting of the paper and figures. DK is responsible for the overall content as the guarantor. The authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Competing interests None declared.

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Patient consent for publication Not required.

Ethics approval We obtained consent from the Commission of the Republic of Slovenia for Medical Ethics (no: 0120-389/2022/3), as well as consent from the Ethics Committee of the University of Maribor, Faculty of Health Sciences (no: 038/2022/5006-6/902).

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. We analysed data from national databases. Data sets are available upon request from the National Institute of Public Health of Slovenia.

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ORCID iDs

Darja Korošec <http://orcid.org/0000-0002-2513-2582>

Dominika Vrbnjak <http://orcid.org/0000-0003-4952-078X>

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