Original Article

ANALYSIS OF LABOUR INSPECTORS' TEMPORARY INCAPACITY FOR WORK

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Summary

It is known that increased morbidity with temporary incapacity for work (MTIW) is related to stress level and psychosocial factors at work. Practices for stress management, conflict avoidance and optimization of working conditions are known to reduce MTIW level. The aim of the present study was to analyze MTIW and propose measures to optimize and reduce strain at work. The study covered MTIW in labour inspectors, a total of 334 people, men and women aged from 24 to 69. The evaluation was based on 11 of the generally accepted indices. MTIW structure was analyzed. MTIW was rated as high according to case frequency and as very high according to day frequency. The average duration of a TI case was 12.63, and the relative share of people who were frequently taken ill for a long period was 12.81. In the ITI structure, diseases of the respiratory system (42.0%) ranked first, followed by diseases of the nervous system (18.8%), the digestive system (9.9%), CVS (8.3%) and MSS (7.2%). These 5 groups of diseases covered 86.2% of all diagnoses. The remaining 7 groups of diseases covered less than 14% of the diagnoses. The group of people most frequently taken ill for long periods included 28 inspectors who had used 42.5% of the total number of days. Two inspectors with 140 days of absence from work were cases of TI resulting from severe stress and adaptation disorder. Measures were proposed regarding the reduction of strain at work and the risk of stress.

Key words: psychosocial factors; professional stress; labour inspectors, temporary incapacitation; morbidity structure

Introduction

As we know, the job of a labour inspector is among the occupations with the highest risk of occurrence of work-related stress, an effect of PSF.

An EU-OSHA report shows that the main psychosocial risks are related to the new forms of employment agreements, job insecurity, work process intensification, high emotional demands, workplace violence and poor work-life balance. Of all working days lost, 50-60% bear a relation to stress. Therefore, health and safety of individuals is endangered, as well as the health of organizations and national economies. These losses in EU-15 amount to about 20 billion Euro for 2002.

Numerous reports in literature confirm that the increased morbidity with temporary incapacity for work bears a relation to the level of work-related stress and the impact of psychosocial factors [1-5]. It is also known that implementation of practices to manage stress, avoid conflicts and optimize the working conditions reduces the level of morbidity with temporary incapacity for work [6, 7].

The goal of the present study was to analyse the morbidity with temporary incapacity for work, in relation to the working conditions, and to propose measures to optimize and reduce work tension as the main cause of work-related stress.

Materials and Methods

In view of the strategic goal of the planned survey on the PSF in control, identification and impact assessment, we studied the morbidity of staff with temporary incapacity for work.

The study covered the morbidity with temporary incapacity for work of labour inspectors in the General Labour Inspectorate – 334 individuals altogether (men and women aged 24 to 69). We analysed all documents for temporary incapacity for work, submitted in 2009. Evaluation was made according to 11 of the indicators accepted in common practice, such as incidence, frequency of days, mean duration, etc. Data was compared with that from the former year and with the available normative orientation groups after Batkis-Lekarev [8]. The structure of the morbidity with temporary incapacity for work was analysed in detail.

The results were statistically processed by nonparametric method of analysis using chi-square test.

Results

On the basis of values of the calculated parameters and in accordance with the criteria suggested by Batkis-Lekarev, we evaluated the morbidity with temporary incapacity for work by incidence, as high (102.10 compared to 13.58 for the preceding year). By frequency of days, we evaluated the morbidity with temporary incapacity for work as very high (1290.33 compared to 264.55 for the preceding year). The mean duration of a single instance of temporary incapacity for work was 12.63, and the relative share of the employees with frequent and long ill-health was 12.81.

In the same calendar year, 124 documents for temporary incapacity for work were issued, with altogether 181 diagnoses. Analysis of the distribution of the diagnoses from the said documents (Table 1) showed that the most frequent cause of morbidity with temporary incapacity for work were diseases of the respiratory system (42.0%), followed by diseases of the nervous system (18.8%), diseases of the digestive system (9.9%), diseases of the cardiovascular system (8.3%), and diseases of the musculoskeletal system (7.2%). Of all diagnoses,

Table 1. Frequency distribution of diagnoses in the documents for temporary incapacity for work

Groups of diseases	Number	% of all 181 diagnoses	% of all 124 documents issued for temporary incapacity for work
I. Diseases of the cardiovascular system	15	8.3%	12.1%
II. Diseases of the endocrine system	4	2.2%	3.2%
III. Diseases of the digestive system	18	9.9%	14.5%
IV. Diseases of the musculoskeletal system	13	7.2%	10.5%
V. Diseases of the nervous system	34	18.8%	27.4%
VI. Complications in existing cardiovascular	1	0.6%	0.8%
diseases			
VII. Injuries and fractures	8	4.4%	6.5%
VIII. Renal disorders	6	3.3%	4.8%
IX. Other diseases	3	1.7%	2.4%
X. Diseases of the respiratory system	76	42.0%	61.3%
XI. Eye diseases	2	1.1%	1.6%
XII. Viral and infectious diseases	1	0.6%	0.8%
Total	181	100.0%	146.0%

	Group of inspectors									
Group of diseases	Men (n=156)		Women (Women (n=185)		Individuals below 40 (n=86)		Individuals above 40 (n=255)		
	Number	%	Number	%	Number	%	Number	%		
Diseases of the respiratory system	29	18.6*	47	26.0*	24	27.9*	52	20.4*		
Diseases of the nervous system	17	10.9*	17	9.2*	9	10.5*	25	9.8*		
Diseases of the cardiovascular system	9	5.8*	6	3.2*	1	1.2*	14	5.5*		
Diseases of the digestive system	8	5.1*	10	5.4*	7	8.1*	11	4.3*		
Diseases of the musculoskeletal system	5	3.2*	8	4.3*	1	1.2*	12	4.7*		
Total	67	43.6*	87	48.6*	42	48.8*	114	44.7*		

Table 2. Distribution of the number of issued documents for temporary incapacity for work by gender and age

* - P<0.05

156 (86.2%) were in the above mentioned 5 groups of diseases. Diseases in the other 7 groups accounted for less than 14.0%.

Diseases of the respiratory system (76 cases with 459 days altogether) ranked first in the structure of the morbidity with temporary incapacity for work. Most of these (71 cases with altogether 299 days of temporary incapacity for work) were due to acute upper respiratory tract infections and other acute infections of the lower respiratory tract.

Ranking second were diseases of the organs of the nervous system: 34 cases with 375 days of temporary incapacity for work.

Diseases of the digestive system ranked third with 18 cases.

Circulatory system diseases were fourth on the list, with 15 cases and 337 days of temporary incapacity for work (hypertension – 65 days; ischemic heart disease – 80 days; diseases of the veins, arteries, arterioles, capillaries, etc. – 26 days; other diseases of the organs of the circulatory system – 166 days).

In both male and females inspectors, the sickness absence was mostly due to diseases of the respiratory and of the nervous system (Table 2). When the frequency of the documents for temporary incapacity for work, issued in the subgroups by gender and age was compared, to the total number of inspectors therein, we established a statistically significant difference both by groups of diseases and in terms of total number. When analysing the documents for temporary incapacity for work, either as primary or as extensions, be they issued for the same

person or not, it was found that, in general, women were absent from work more frequently because of ill-health, as compared to men. The frequency of the documents for temporary incapacity for work, issued to women with diagnoses related to the respiratory, the digestive and the musculoskeletal system, was higher than that for men. Men were more frequently absent because of diseases of the cardiovascular and of the nervous system.

It turned out that individuals below 40 were more frequently absent from work, mainly in relation to diseases of the respiratory and the digestive system.

Individuals above 40 were absent from work due to diseases of the cardiovascular system reliably more frequently than individuals below 40.

Individuals below 40 were on sickness leave because of diseases of the digestive system, and those above 40 – because of diseases of the musculoskeletal system.

Long and frequent sickness leave were registered in 28 employees. They used 1712 days of temporary incapacity for work altogether, i.e. 42.5% of the total number of days used (4024), of which:

• one employee (90 days out of 2430 – 3.7%) due to complications of pregnancy;

• seven employees (272 days out of 2430 – 11.2%) of temporary incapacity for work because of muscles and tendons trauma; fracture at the level of the hand and wrist; shoulder joint dislocation; fracture of ribs;

• 8 employees (332 days out of 2430 – 13.7%) of temporary incapacity for work in effect of diseases of the cardiovascular system and the cerebrum;

• 2 employees (140 days of temporary incapacity for work because of acute stress and adaptation disorder).

Discussion

The results from our study are in line with the data, known from the literature and from the practice of the Occupational Health Service: young workers, in this case those below 40, were more frequently absent from work because of a disease with temporary incapacity for work. Most often, this incapacity was related to inadequate adaptation of the relatively young organism to the conditions and factors of working environment. As regards the structure of the morbidity with temporary incapacity for work in employees in contact with PSF, the results we obtained about the frequency of the issued documents for temporary incapacity for work in the subgroups, by gender and age, confirmed the data of Hensing G., Alexanderson K. (2004)[9] and Latocca R. et al. (2009)[10].

The implementation of practices to manage stress, avoid conflicts and optimize the working conditions reduces the level of the morbidity with temporary incapacity for work [6, 7].

Conclusions

The data we obtained allow us to make an optimistic prognosis related to the possibility for the measures we propose to reduce work tension and the risk of stress. Such measures would also make it possible to reduce absenteeism due to illness, as regards the target systems (cardiovascular, musculoskeletal, endocrine, gastrointestinal) and mental disorders after three years.

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