

O R I G I N A L P A P E R S

FEMALE SICKNESS ABSENTEEISM IN POLAND*

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Abstract: It is observed that the working activity period has recently been decreasing in Poland; this applies to both the male and female populations. Since women constitute 48% of all workers employed in the national economy, this tendency may pose an important problem for the community and public health.

The main information source for the absenteeism analysis are medical certificates which in Poland obligatorily document every instance of a sick-leave from work, irrespective of the length of sickness. A 15% random sample of all sickness certificates constitutes a database for the monitoring system of sickness absence. The lost time rate is the main parameter analysed by the system. In 1994 the rate of female sickness absence in Poland amounted to 25.1 days per one employee. In Poland the main causes of female sickness absence are: respiratory diseases – 18% of all sickness absence (in the 16-19 age group – 49%), and disorders of female genital tract and complications of pregnancy, childbirth and puerperium (17% of all sickness absence and 48% in the 20-29 age group). The most important chronic diseases that substantially contribute to the level of sickness absence include: musculoskeletal diseases (15%), diseases of the circulatory system (15%) and of the nervous system and sense organs (11%). Over the period of 1990-1994 the highest rate of the female sickness absence related to gynecological diseases and pregnancy complications (mean annual increase – 22%); and the musculoskeletal diseases (mean annual increase – 10%).

INTRODUCTION

Recently, in Poland the duration of the working activity period has been found to be on the decrease. The number of economically active people tends to diminish and it is much lower for the female than for the male population. Considering the fact that women constitute 48% of all workers employed in the national economy, one cannot fail to notice that this tendency poses a significant problem for the community and public health.

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The analysis of the sickness absence, its medical causes and time-related trends allows to identify major health problems of the working population, to define the dynamic of changes and to predict the effects in terms of work disability (2,6). The aim of the present study was to recognize the main causes of female sickness absence and to investigate the trends in its size and structure over the last five years.

MATERIALS AND METHODS

The main information source for the analysis of sickness absence are the statistical files of medical certificates documenting sick-leave instances which are issued by health care units and authorised medical practitioners operating on a private basis. In Poland these certificates concern any case of sick-leave regardless of its duration.

The data under study cover the period of 1990–1994 and derive from the all-Polish database on sickness absence which comprises a 15% random sample of the statistical files (4). The system makes it possible to examine the incapacity for work generally, at the national level, as well as in particular country regions and branches of the national economy.

The sickness absence is expressed in terms of the number of days of incapacity for work per 100 employees or by the following ratio:

$$\text{lost time rate} = \frac{\text{number of days of incapacity for work}}{\text{average number of employees} \cdot 365} \cdot 100\%$$

For the data on the number of employees one refers to the Central Statistical Office.

RESULTS

In 1994 the number of days of the certified incapacity for work due to medical reasons per 1 female worker amounted to 25.1 days, which stands for 6.89 of the lost time rate (Table 1). Since 1990 the sickness absence has been growing rapidly and the

Table 1. Sickness absence in Poland, 1985–1994

Sex	Lost time rate in:									
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Male	3.52	3.72	4.03	3.77	3.65	3.40	4.62	4.72	5.62	6.50
Female	5.40	5.08	5.37	5.63	6.36	6.28	6.75	6.20	6.59	6.89
Total	4.35	4.32	4.63	4.62	4.89	4.74	5.63	5.43	6.09	6.69

mean annual increase of 10% has been recorded – 2% for female and 25% for male workers, respectively. One can notice that the differences between male and female sickness absence have decreased considerably over the last five years – from 85% in 1990 to 6% in 1994. The highest rate of the female sickness absence applied to female genital tract diseases and pregnancy complications (mean annual increase – 22%) and the musculoskeletal diseases (mean annual increase – 10%) (Fig. 1). The significant increase in the absenteeism related to these two categories of diseases has



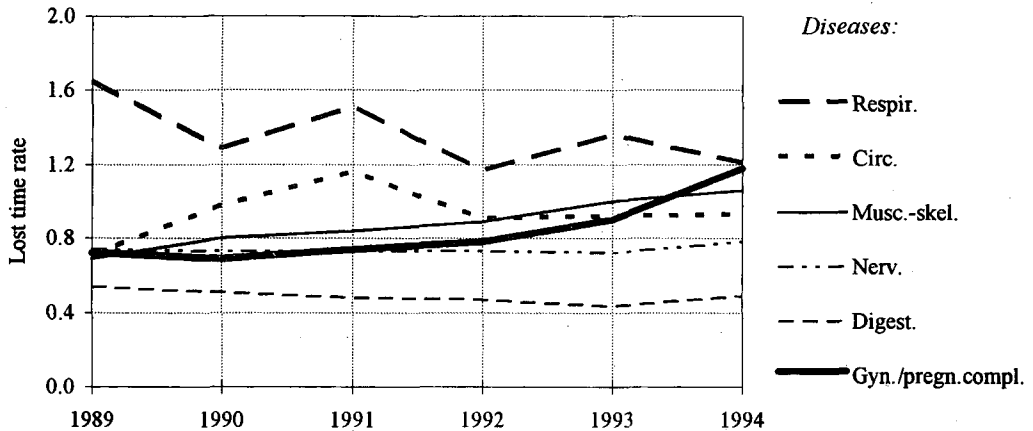


Fig. 1. Female sickness absence by main causes, 1989-1994.

Table 2. Main causes of female sickness absence, 1990-1994

No	1990	1992	1994
1	respiratory system diseases (20.5)*	respiratory system diseases (18.9)	respiratory system diseases (17.6)
2	circulatory system diseases (15.2)	circulatory system diseases (14.7)	gynecological diseases, complications of pregnancy, childbirth and puerperium (17.1)
3	musculoskeletal system diseases (12.7)	musculoskeletal system diseases (14.4)	musculoskeletal system diseases (15.4)
4	nervous system and sense organs diseases (11.6)	gynecological diseases, complications of pregnancy, childbirth and puerperium (12.6)	circulatory system diseases (13.5)
5	gynecological diseases, complications of pregnancy, childbirth and puerperium (11.0)	nervous system and sense organs diseases (11.8)	nervous system and sense organs diseases (11.3)
6	digestive system diseases (8.1)	digestives system diseases (7.6)	digestive system diseases (7.1)

* percentage of total sickness absen.

brought about a considerable change in the structure of the female sickness absence. The diseases of the female genital tract and pregnancy complications, with the lost time rate of 1.18, took the second place on the list of the causes of incapacity for work and their proportion contribution to the female absenteeism increased to 17.1%. The musculoskeletal diseases, although ranked third among the causes, become also more frequent during this five-year period (Table 2).



An analysis of sickness absence by age groups indicated that in young women (under 29 years of age) its decrease was noted during 1990–1993, followed by a considerable increase in 1994. In females aged 30–39, the rate of sickness absence has remained almost the same during all the five years under study. In the 40–49 age group, a rapid increase in the sickness absence was observed. In older women, at age ranging from 50 to 60 and more years, the reverse tendencies were found: a decrease in 1991 was followed by a considerable increase in the 50–59 age group and then again by a decrease in 1994. In the females above 60 years of age a slight yearly variations of the absenteeism ratio were found.

The study on the structure of the sickness absence, taking into account particular age groups, revealed that the genital tract diseases and complications of pregnancy, delivery and puerperium constituted a significant health problem among young women. They appeared to be the primary cause of the incapacity for work in 20–29 year-old females, thus covering 48% of the total sickness absence in this age

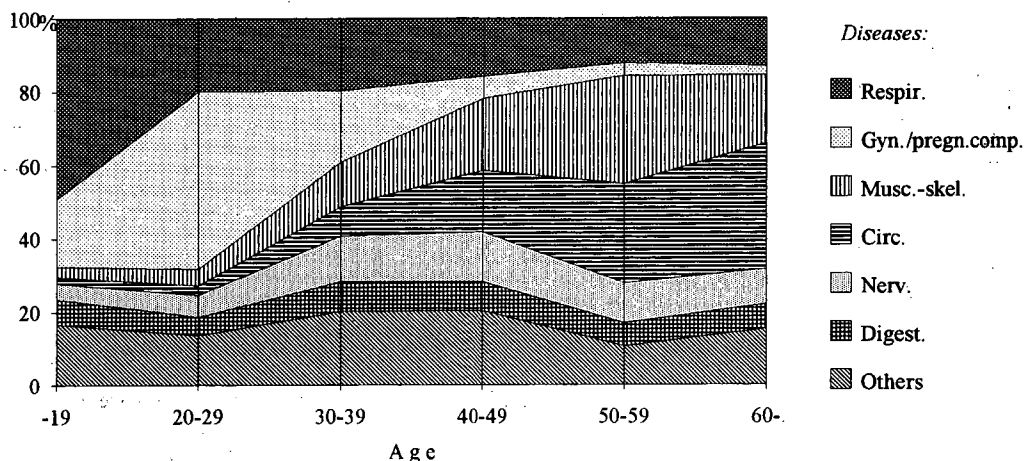


Fig. 2. Structure of female sickness absence by causes, 1994.

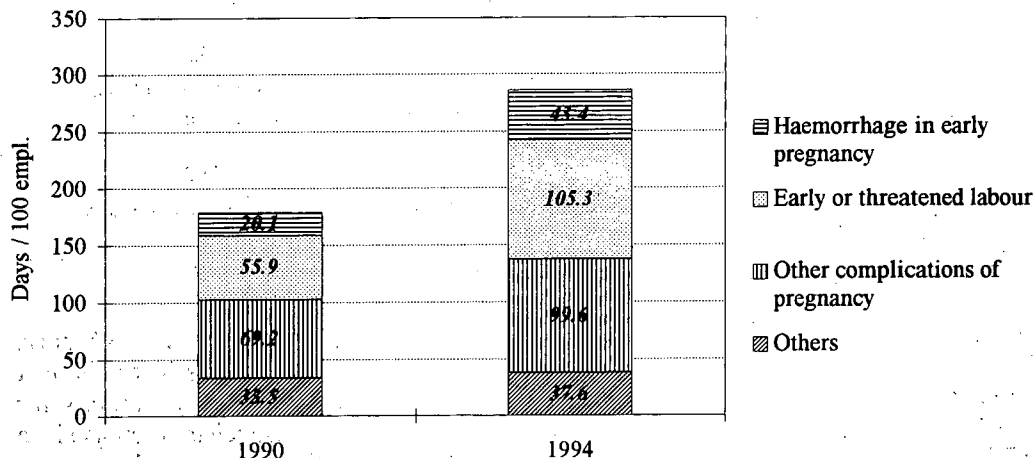


Fig. 3. Sickness absence from pregnancy complications.



group, and the second-rank cause in females under 19 years of age (Fig. 2). In this group of diseases the highest percentage (about 70%) was related with pregnancy complications. The incapacity for work related to pregnancy complications has increased by 60% as compared to the 1990 data. The pathologies of early labour and haemorrhage in early pregnancy became a twice more frequent cause of incapacity for work during the period under study (Fig. 3).

In the group of females above 40, sickness absence was mostly due to musculoskeletal and cardiovascular diseases. The former constituted 19% of absenteeism rate in the 40–49 age group, 29% in the 50–59 age group and they proved to be the primary cause of absenteeism in both age groups.

Cardiovascular diseases are ranked second among the causes in these groups, 17% and 27%, respectively. However, they are the main cause of sickness absenteeism in females above 60 years of age, covering as much as 34% of the total absenteeism (Fig. 2, Table 3).

Table 3. Females sickness absence by age, 1994

Groups of diseases	Lost time rate by age groups:						Total
	– 19	20–29	30–39	40–49	50–59	60–	
Respiratory system	1.88	1.00	1.03	1.75	1.08	0.68	1.21
Musculoskeletal system	0.11	0.23	0.64	2.15	2.18	0.96	0.93
Circulatory system	0.06	0.13	0.42	1.87	2.38	1.78	0.93
Nervous system and sense organs	0.17	0.31	0.66	1.49	0.95	0.50	0.78
Digestive system	0.26	0.25	0.42	0.87	0.56	0.35	0.49
Gynecological diseases, complications of pregnancy, childbirth and puerperium	0.71	2.44	1.01	0.68	0.30	0.13	1.18
All diseases	3.83	5.05	5.23	11.07	8.77	5.20	6.89

In females the incapacity for work from musculoskeletal diseases includes such pathologies as intervertebral disc disorders (discopathies) – 0.27 (lost time rate), spondylosis – 0.22, osteoarthritis – 0.18, which altogether account for 64% of absenteeism. They were also responsible for a 32% increase in the absenteeism rate during the last five years (34% for osteoarthritis, 42% for spondylosis and 39% for intervertebral disc disorders).

The absenteeism from cardiovascular diseases has increased by only 5%. It is worth noting, however, that chronic hypertensive disease contributed to 43% of female sickness absence (increase by 25%), and essential hypertension to 32%. Moreover, cardiac dysrhythmias led to a 46% increase in the absenteeism rate, phlebitis to 25% and varicose veins of lower extremities to 69%.

Diseases of the nervous system and sense organs are the fourth cause of sickness absence in females above 40 (Table 3). The most common in this group were nerve root and plexus disorders (60%), responsible for a 25% increase in sickness absence.

The digestive system diseases made about 7% of the absenteeism rate, and related incapacity for work did not vary during the period under study. However, a 27% increase in absenteeism due to diseases of liver, gallbladder and pancreas was observed with a 31% absenteeism rate in the 40–49 age group.



Among other pathologies of lower significance in female sickness absenteeism one should notice a higher absence caused by neoplasms (increase by 55% compared to 1990 data), namely uterine leiomyoma – 36%, malignant and benign neoplasm of breast – 14% and 6%, respectively, and malignant neoplasm of cervix uteri – 6%. The neoplasms cover about 4% of sickness absence in females above 50 years of age.

CONCLUSIONS

The long-term macro-scale analysis of female sickness absence during the period of economical transition revealed that one of the major determinants were the economical factors as well as those concerning the social insurance system. Apart from the direct, disease-related causes of absenteeism, these factors affected the level of absenteeism through either an increased or decreased incidence and morbidity rates in the population. The trends in female sickness absenteeism observed over the period of 1990-1994 may be associated with the transformation of the national economy, resulting *inter alia* in increased unemployment (Fig. 4). The slower increase

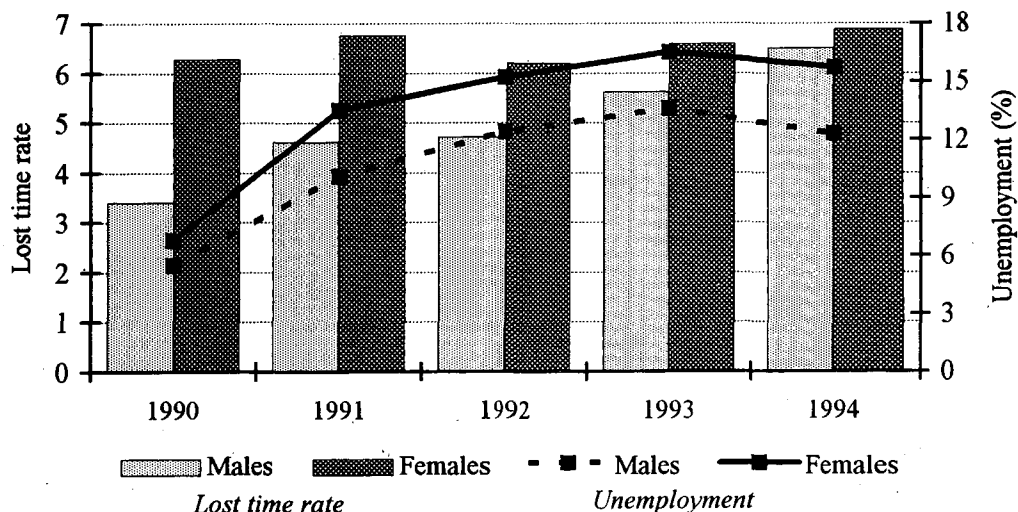


Fig. 4. Male and female sickness absence and unemployment rates.

in female absenteeism compared with that in males may be attributed to the high rate of job loss and retirement, particularly in 1991. An increase observed in absenteeism from the complications of pregnancy, childbirth and puerperium, may be associated with the fact that the sick leave during pregnancy legally protects female workers from dismissal. The analysis of the rate of unemployment by age indicates that it applies mostly to young women and those above 40 years of age and may affect the level of absenteeism in these age groups.

The difference between the structure of absenteeism in Poland and that in the countries of Western Europe, particularly the high rate of respiratory diseases which are the main cause of sickness absenteeism in Poland, results from the different legal regulations concerning certification of incapacity for work (3). According to the Polish system any instance of a sick leave, regardless of its duration, must be registered.



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First and foremost, health care reform must lead to better health for people (contd)

The issues in the expert report will be taken up when ministerial-level delegations from the 50 Member States of the WHO European Region meet in Ljubljana Slovenia, from 17 to 20 June 1996 at the **WHO Conference on European Health Care Reforms**. Ministers will exchange experience, analyse actions to date and adopt a charter that articulates a common set of principles and strategies.

"Health care systems throughout Europe are bustling with change", notes Dr Bozidar Voljc, Minister of Health of the Republic of Slovenia. "It is important to communicate and exchange experiences so that common problems can be tackled uniformly, since no country has yet found an ideal solution."

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