Explanations for gender differences in sickness absence: evidence from middle-aged municipal employees from Finland

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ABSTRACT

Objectives: To examine gender differences in sickness absence spells of various lengths and to explain these differences by health status, working conditions and family-related factors.

Methods: The study included 5470 female and 1464 male employees of the City of Helsinki surveyed at baseline in 2000–2. These survey data were linked to the employer's sickness absence records until the end of 2005, providing a mean follow-up time of 3.9 years. Explanations for gender differences in self-certified (1–3 days) and medically confirmed absence spells of various lengths (4 days or more, more than 2 weeks, and more than 60 days) were examined using Poisson regression.

Results: Women had 46% higher risk for self-certified sickness absence than men. In medically confirmed spells there was 34% female excess which gradually weakened with lengthening absence, and no differences were observed in spells longer than 60 days. Adjusting for physical functioning and self-reported diagnosed diseases clearly attenuated gender differences in sickness absence spells shorter than two weeks and fully explained them in longer absence spells. Physical work demands explained female excess in medically confirmed absence spells of all lengths, as did work fatigue in spells longer than two weeks. Psychosocial working conditions and family-related factors did not affect the gender differences. Physical health problems, physical work demands and work fatigue were somewhat more prevalent in women than in men, but their impact on sickness absence was similar in both genders.

Conclusions: The overall gender differences in sickness absence are due to relatively short absence spells being more common among women. In longer sickness absence spells the female excess is mainly explained by heavier burden of ill-health and to a lesser extent by higher physical work demands among women. The authors found no support for greater vulnerability to health- and work-related problems among women as reasons for sickness absence.

Most previous studies have shown that women have more sickness absence than men.[1 2] Female excess in sickness absence has been observed in countries with differences in the overall levels of sickness absence, the social insurance system and the level of female labour force participation, although there are also exceptions to this general finding.[3] While the studies typically show a larger number of spells and longer cumulative duration of sickness absence in women than in men, with respect to the length of absence the findings tend to vary. A French study showed about twofold risk for women in medically confirmed sickness absence spells of all lengths.[4] A Norwegian study showed the largest female excess in sickness absence spells of medium duration.[5] British studies based on the Whitehall II data have shown larger gender differences in self-certified than in medically confirmed sickness absence.[6 7] It is therefore not clear how spells of different lengths contribute to the overall gender differences in sickness absence.

The female excess in sickness absence might be explained by a number of factors. In the first place, sickness absence can be considered as an indicator of health problems. Sickness absence is, by definition, absence from work as a result of illness, and medically confirmed sickness absence has been shown to predict future disability pension[8] and mortality.[7 9] Several indicators, such as self-reported symptoms and visits to physician, suggest that women may have more health problems than men,[10–12] although the findings on women's greater morbidity are not entirely consistent.[12 13] Women may also be better than men at recognising signs of illness and be more active about seeking medical help.[10 11] As subjective assessment of one's health plays a role in sickness absence behaviour, different levels of health problems as well as responsiveness to such problems may contribute to gender differences in sickness absence.

Differences in working conditions may provide alternative explanations for the gender differences in sickness absence. Various kinds of working conditions have shown associations with sickness absence[14 15] and the associations may be different in women and men.[16 17] If women are more exposed to physical and psychosocial job strain or poorer workplace climate this could contribute to their excess absence. Furthermore, various factors relating to home and private life have been suggested to explain female excess in sickness absence. Women often bear the main responsibility of household tasks which increases their total work load and may cause difficulties in combining work and family life, and even contribute to mental and physical health problems.[18 19] However, previous results on the associations of domestic obligations,[20 21] the ''double burden'',[16 22] and work-home conflict,[16 23 24] with sickness absence have been inconsistent. Stressful episodes in private life, such as economic difficulties, divorce or serious illness in the family, have been more strongly associated with sickness absence in women than in men.[25 26]

This study examined gender differences in sickness absence and potential explanations for these differences. We identify health status,

Table 1 Descriptive information of the sample and the number of sickness absence spells of various lengths per 100 person-years by gender and age

				Number of sickness absence spells/100 person-years			
				Self-certified	Medically confirmed		
	n	Person-years	Total number of absence days/person-year		4 days or more	Over two weeks	Over 60 days
Women by age (years)							
40	1115	4407	15.0	190.1	85.8	17.1	2.5
45	1180	4829	15.2	171.3	79.5	18.4	3.0
50	1186	4916	20.8	156.9	95.9	27.0	5.6
55	1351	5522	21.1	130.4	85.1	26.3	6.4
60	638	1606	19.8	105.8	75.5	26.7	6.2
All ages*	5470	21279	18.3	156.4	85.7	22.8	4.7
Men by age (years)							
40	252	1009	14.1	130.1	75.9	17.3	2.7
45	279	1138	13.6	100.5	54.5	16.0	4.4
50	305	1248	13.6	109.8	63.2	17.9	3.8
55	407	1585	14.2	76.7	50.5	18.0	5.2
60	221	644	15.9	56.8	53.7	22.8	6.2
All ages*	1464	5625	14.1	96.1	59.0	18.0	4.4

*Number of sickness absences spells adjusted for age.

working conditions and family-related factors as the main candidates in explaining gender differences in sickness absence, although previous evidence on gender differences in these factors and their associations with sickness absence has been inconsistent. Because the determinants of shorter and longer sickness absence spells may differ, we separately analysed absence spells of various lengths. Attention was paid to the prevalence of the possible explanatory factors as well as their potentially differential impact in women and men. A large prospective dataset was used, with register-based sickness absence records on middle-aged women and men employed by the City of Helsinki.

The specific aims of the study were to examine: (1) gender differences in sickness absence of various lengths; (2) whether differences in health status, working conditions and family-related factors explain gender differences in sickness absence; and (3) whether gender differences in sickness absence are due to differential exposure or responsiveness to these factors.

METHODS

Data

The baseline data were collected by independent cross-sectional surveys in 2000, 2001 and 2002 among middle-aged employees of the City of Helsinki.[27] The City of Helsinki is the largest employer in Finland, with nearly 40 000 employees. The personnel register was used to identify employees who in these consecutive years reached the age of 40, 45, 50, 55 or 60, and a self-administered questionnaire was mailed to them (n = 13 346). The overall response rate was 67%. The data are generally representative of the target population although men, younger people and manual workers were slightly under-represented among the respondents.[28 29]

The questionnaire data were prospectively combined with sickness absence records derived from the City of Helsinki registers using the unique personal identification number assigned to each Finnish citizen. However, the linkage was only possible for those respondents who had given written permission for it when returning the questionnaire (78% of the respondents). Background characteristics of the study sample (age, occupational class, income, type of employment contract, occupational sector) were similarly associated with sickness absence among those who gave and did not give permission for the linkage. Sickness absence data could not be sought for 16 respondents because they had removed the code number from the questionnaire. Thus, the study includes 5470 women and 1464 men, reflecting the gender distribution among the employees of the City of Helsinki.

Measurement of sickness absence

The number of sickness absence spells during the follow-up period was used as the outcome variable. This outcome effectively uses the information when one individual has several sickness absence spells and is not dominated by only a few prolonged absence spells. We examined separately self-certified (1–3 days) and medically confirmed absence spells of various lengths (4 days or more, more than 2 weeks, and more than 60 days). The absence spells of various lengths do not seriously overlap, for example, a vast majority of over two-week spells are shorter than 60 days (table 1). The follow-up time was started from the day the respondent returned the questionnaire and continued until the end of 2005 or until the work contract had terminated. Absence due to children's sickness was not included and all interruptions in working due to reasons other than own illness were subtracted from the follow-up time. The overall number of person-years in the analyses was 26 904 with a mean follow-up time of 3.9 years.

Potential explanatory factors

Health status was assessed using five indicators. Physical and mental functioning were measured by the component summaries of the Short-Form (SF-36) health questionnaire.[30] For the purposes of this study the continuous scores were divided into deciles. Limiting longstanding illness was elicited by asking whether the respondent had any longstanding illness, disability or infirmity, and a follow-up question asking whether this illness/disability restricted work or limited daily activities. Furthermore, the participants were asked to rate their health on a five-point scale with the response alternatives ranging from ''excellent'' to ''poor''. A sum of 28 self-reported diseases diagnosed by a doctor were calculated and the sum was truncated at four points.

Table 2 Rate ratios (95% CI) for the excess risk of sickness absence among women as compared to men (RR 1.00) (n = 6275): the effect of adjusting for health status, working conditions and family-related factors

	Self-certified	Medically confirmed		
		4 days or more	Over two weeks	Over 60 days
Base model*	1.46 (1.34 to 1.59)	1.34 (1.22 to 1.47)	1.25 (1.08 to 1.45)	1.06 (0.79 to 1.44)
Health status				
Physical functioning	1.39 (1.28 to 1.51)	1.22 (1.12 to 1.33)	1.11 (0.97 to 1.27)	0.91 (0.69 to 1.20)
Mental functioning	1.46 (1.35 to 1.59)	1.35 (1.23 to 1.48)	1.25 (1.09 to 1.45)	1.04 (0.78 to 1.39)
Limiting longstanding illness	1.46 (1.34 to 1.58)	1.34 (1.23 to 1.46)	1.24 (1.08 to 1.42)	1.05 (0.81 to 1.37)
Self-rated health	1.47 (1.36 to 1.60)	1.35 (1.24 to 1.48)	1.27 (1.11 to 1.45)	1.07 (0.82 to 1.38)
Diagnosed diseases	1.34 (1.23 to 1.45)	1.17 (1.07 to 1.28)	1.08 (0.94 to 1.24)	0.86 (0.65 to 1.14)
All health status measures	1.35 (1.25 to 1.46)	1.16 (1.07 to 1.27)	1.09 (0.96 to 1.24)	0.87 (0.67 to 1.13)
Working conditions				
Physical demands	1.43 (1.31 to 1.56)	1.24 (1.13 to 1.36)	1.13 (0.97 to 1.31)	0.95 (0.70 to 1.29)
Mental demands	1.46 (1.34 to 1.59)	1.34 (1.22 to 1.48)	1.25 (1.08 to 1.45)	1.06 (0.79 to 1.43)
Job strain (Karasek)	1.46 (1.34 to 1.58)	1.32 (1.21 to 1.45)	1.24 (1.07 to 1.44)	1.06 (0.79 to 1.43)
Work fatigue	1.44 (1.32 to 1.56)	1.31 (1.19 to 1.43)	1.19 (1.04 to 1.38)	1.00 (0.76 to 1.31)
Job satisfaction	1.48 (1.37 to 1.61)	1.37 (1.25 to 1.51)	1.30 (1.12 to 1.50)	1.10 (0.83 to 1.47)
Bullying at workplace	1.45 (1.33 to 1.57)	1.33 (1.21 to 1.46)	1.24 (1.07 to 1.43)	1.04 (0.78 to 1.40)
Being bullied	1.46 (1.34 to 1.58)	1.34 (1.22 to 1.47)	1.25 (1.08 to 1.44)	1.05 (0.79 to 1.41)
All working conditions	1.44 (1.32 to 1.57)	1.23 (1.12 to 1.35)	1.13 (0.98 to 1.31)	0.94 (0.71 to 1.26)
Family-related factors				
Marital status	1.43 (1.32 to 1.55)	1.32 (1.20 to 1.45)	1.23 (1.06 to 1.42)	1.05 (0.77 to 1.42)
Having children in the family	1.46 (1.35 to 1.59)	1.34 (1.22 to 1.47)	1.25 (1.08 to 1.45)	1.06 (0.79 to 1.43)
Work/home conflict	1.48 (1.36 to 1.61)	1.35 (1.23 to 1.49)	1.27 (1.10 to 1.48)	1.09 (0.81 to 1.47)
Social networks	1.46 (1.35 to 1.59)	1.34 (1.22 to 1.47)	1.25 (1.08 to 1.45)	1.07 (0.79 to 1.44)
Social support	1.47 (1.36 to 1.60)	1.36 (1.24 to 1.49)	1.27 (1.10 to 1.48)	1.08 (0.80 to 1.46)
Negative events in the family	1.45 (1.33 to 1.58)	1.33 (1.21 to 1.46)	1.24 (1.07 to 1.44)	1.04 (0.77 to 1.41)
All family-related factors	1.44 (1.33 to 1.56)	1.35 (1.23 to 1.48)	1.27 (1.09 to 1.46)	1.04 (0.77 to 1.41)
All adjustments	1.34 (1.23 to 1.45)	1.12 (1.02 to 1.20)	1.02 (0.89 to 1.16)	0.82 (0.62 to 1.07)

*All models adjusted for age and occupational class.

Working conditions included a question asking physical demands of work on a four-point scale. A similar question was used for mental work demands. Job demands and job control were measured by the Framingham version of the Karasek questionnaire.[31] Job strain was defined as the ratio between job demands and job control and divided into deciles. Work fatigue was measured using a scale of six questions constructed at the Finnish Institute of Occupational Health on the basis of the emotional exhaustion subscale of the Maslach Burnout Inventory.[32] Job satisfaction was measured using a single-item question with seven response alternatives derived from an inventory asking satisfaction with different areas of life. Bullying at work was measured using two questions. The first one concerned whether bullying existed in the workplace; the second whether the respondent was currently being subjected to bullying.

Six indicators relating to family and private life were included. Marital status was divided into three categories: married or cohabiting, single, and previously married (divorced, separated or widow/widower). The number of children (aged less than 18 years) was categorised as 0, 1 and 2 or more. Work/home conflict was measured with an item asking how satisfied the respondent is with combining paid work and family life. Social networks were measured by asking how often the respondents met friends or relatives outside the nuclear family. The categories were almost daily, about once a week, about once a month, less often, and never. Social support was measured by the Sarason inventory[33] and divided into deciles. Negative events in the family included death of spouse or child, death of another close person, serious illness of a family member, divorce or separation, rupture of long-lasting relationship, and increased conflicts with spouse. A sum of events during the last 12 months was calculated and truncated at two.

Confounders

Age and occupational class were included in the analyses as potential confounders. Age was analysed using the five age groups of the questionnaire. Occupational class was categorised into managers and professionals, semi-professionals, routine non-manuals, and manual workers.[27]

Statistical methods

Sickness absence rates for spells of different lengths were first calculated in five-year age-groups among men and women. The rates are reported per 100 person-years.

The effects of health status, working conditions and family-related factors on gender differences in sickness absence were examined using Poisson regression taking differences in the individual follow-up times into account. We first fitted a base model showing the rate ratio with 95% confidence intervals for women compared with men, adjusted for age and occupational class. We then examined how adjusting for health status, working conditions and family-related factors affected this association. In the Poisson models there was moderate over-dispersion that was corrected by scaling. This does not affect the point estimates but increases standard errors and thus inflates the confidence intervals.[34] For variables that were found to explain gender differences in sickness absence, interactions were fitted to examine whether their effects were different in women and men. In these analyses the explanatory factors were used as continuous. The rate ratios for the interactions therefore describe gender differences in the effects per one unit change in

Table 3 Differences in the level of factors explaining gender differences in sickness absence and rate ratios (95% CI) for interactions describing different effects of the explanatory factors among women and men on absences of different lengths (n = 6275)

	Mean (SD)			RR (95% CI) for gender interactions*			
Explanatory factor (range)	Men	Women	p Value for difference	Self-certified	4 days or more	Over two weeks	Over 60 days
Physical functioning (1–4)	1.40 (1.08)	1.58 (1.12)	<0.001	1.00 (0.93 to 1.07)	0.97 (0.90 to 1.05)	0.91 (0.81 to 1.03)	0.82 (0.63 to 1.07)
Diagnosed diseases (0–4)	1.66 (1.33)	2.12 (1.41)	<0.001	1.01 (0.95 to 1.07)	1.03 (0.96 to 1.09)	1.04 (0.94 to 1.14)	1.03 (0.84 to 1.26)
Physical demands (1–4)	1.92 (0.71)	2.28 (0.80)	<0.001	1.05 (0.93 to 1.18)	0.96 (0.84 to 1.09)	0.92 (0.76 to 1.12)	1.00 (0.66 to 1.51)
Work fatigue (0–6)	1.10 (1.65)	1.36 (1.78)	0.003	0.98 (0.94 to 1.03)	1.00 (0.95 to 1.05)	1.01 (0.94 to 1.09)	1.05 (0.91 to 1.22)

*RR above 1.00 describes stronger effect of the explanatory factor among women, RR below 1.00 describes stronger effect of the explanatory factor among men. The RRs are adjusted for age and occupational class.

the explanatory factor. All analyses were conducted using SAS version 8.02 for Windows (SAS Institute Inc, Cary, NC).

RESULTS

Table 1 presents basic characteristics of the study population and the number of sickness absence spells of different lengths stratified by gender and age-group. Women had higher average number of sickness absence days than men in all age-groups, but gender differences strengthened by age. When all age groups were combined, women clearly had more self-certified sickness absence spells and any medically confirmed sickness absence spells than men, but in spells longer than two weeks the differences were smaller and no differences were found in spells longer than 60 days. In self-certified absence spells and any medically confirmed absence spells the female excess was evident in all age groups. In contrast, in spells longer than two weeks and longer than 60 days gender differences within age groups were small. Self-certified absence spells and any medically confirmed absence spells were more common in younger age groups, whereas spells of over two weeks and over 60 days were more common in the older age groups.

After adjusting for age and occupational class, women had 46% higher risk for self-certified sickness absence than men (table 2). In medically confirmed spells there was 34% female excess which gradually weakened with lengthening absence, and in spells longer than 60 days no statistically significant gender differences were found.

Adjusting for physical functioning slightly attenuated the female excess in self-certified sickness absence spells and more strongly in medically confirmed spells. Diagnosed diseases had even stronger effect, explaining about one third of female excess in self-certified absence spells and about half in medically confirmed spells. The effects of both of these health status measures were gradually stronger for lengthening sickness absence. Among working conditions, adjusting for physical work demands clearly attenuated gender differences in medically confirmed spells of all lengths. Work fatigue attenuated the gender differences in absence spells longer than two weeks. Other working conditions had no effects on the gender differences in sickness absence. The effects of family-related factors on gender differences in sickness absence were minimal. When all health status measures, working conditions and family-related factors were simultaneously adjusted for, the female excess in self-certified sickness absence was attenuated by a third and that in any medically confirmed sickness absence by two thirds. There were no longer statistically significant gender differences in spells longer than two weeks and the differences in spells longer than 60 days were rather turned into a male excess, although this did not reach statistical significance.

Table 3 shows differences in the prevalence of the four factors that most clearly explained gender differences in sickness absence and whether these factors were similarly associated with sickness absence in women and men. On average, women had poorer physical functioning and more diagnosed diseases than men. Women also reported higher exposure to physical work demands and work fatigue than men. Instead, there was little evidence that the effects of these variables on sickness absence would be different in women and men. None of the rate ratios describing gender differences in the effects of these explanatory factors on sickness absence spells of different lengths was statistically significant at the 0.05 level.

DISCUSSION

The main findings of this study can be summarised as follows: among middle-aged municipal employees, women had more self-certified sickness absence spells than men, but for lengthening medically confirmed absence spells the gender differences gradually weakened and no differences were observed in spells longer than 60 days. Physical functioning, self-reported diagnosed diseases, physical work demands and work fatigue explained the differences, especially in longer spells. This was because problems in these areas were more common among women, but there were no gender differences in responsiveness to these problems.

Our finding that women have more sickness absence than men agrees with several previous studies from Finland[35–37] and elsewhere.[1 2] Yet, in our study the female excess was limited to shorter sickness absence spells. In previous studies gender differences have been found in both self-certified and medically confirmed sickness absence spells but with regard to the length of the absence their results have been inconsistent. The reasons for these discrepancies are unclear. In contrast to our finding of no gender differences in sickness absence spells longer than 60 days, Swedish studies using the same cut-off point have reported considerably more sickness absence among women.[38 39] Our finding of weaker gender differences for longer absence spells is consistent with studies showing that gender differences tend to be smaller in more serious and longstanding health problems.[10 27]

Physical functioning and self-reported diagnosed diseases explained gender differences in sickness absence spells of all lengths. These were the only factors that explained some of the gender differences also in self-certified absence spells, but their effects were stronger in medically confirmed absence spells. This is plausible as longer sickness absence spells are likely to better indicate chronic morbidity, while shorter absence spells are likely to reflect minor transient morbidity and causes other than health.[40]

Among the work-related factors, physical work demands and work fatigue explained gender differences in medically

confirmed sickness absence spells. In contrast, other working conditions did not explain any of the female excess in sickness absence. In Finland systematic nationwide records are kept only for sickness absence spells longer than two weeks.[36] Such sickness absence spells have increased over the last decade and this has to a great extent been because of mental reasons. The increase has been larger among women, for whom mental diagnoses are more important causes for sickness absence than for men. Job strain and other psychosocial working conditions might be assumed to have contributed to this increase as well as to the prevailing gender differences in sickness absence. However, our study did not find any support for such factors in explaining the female excess in sickness absence. Women report their work to be mentally strenuous slightly more often than men, but there have been no marked changes over time.[41]

Various factors relating to family and private life have been hypothesised to contribute to the female excess in sickness absence. This has been a persistent assumption even if the evidence about the associations of these factors with sickness is inconsistent. In our study none of the family-related factors explained gender differences in sickness absence. However, our study included only 40–60-year-old employees. In younger age groups with more demanding family responsibilities the effects of family-related factors might be stronger. Previous studies have also shown that in younger age-groups a large amount of women's sickness absence is caused by pregnancy-related problems,[42 43] but this is unlikely to have much influence in the age groups studied here.

Poor physical functioning, diagnosed diseases, physical work demands and work fatigue explained gender differences in sickness absence because they were more common among women, but not because women were more responsive to these problems. Women have been found to report more health problems and work fatigue than men, but the finding of more physically demanding work among women is against the commonly held belief of men working in physically heavier jobs. This finding may be because our study was restricted to municipal employees. In a nationwide study from Finland men and women reported similar levels of physical work demands.[41] In particular, in shorter sickness absence spells, where the gender differences were larger, subjective assessment and responsiveness to signs of illness could be assumed to contribute to gender differences. However, when we specifically tested whether the four factors had different effects on sickness absence in women and men we found no gender differences.

Methodological considerations

The strengths of this study include a relatively large sample, register-based data on sickness absence, and a prospective study design. However, information on the health status measures, working conditions and family-related factors were based on self-reports, and if they were inadequately reported this would reduce their explanatory power. Some of the explanatory factors were measured by single-item questions which may have reduced their measurement validity. Self-reports of working conditions could also be affected by one's health status. Our study included a large number of potential explanatory factors for gender differences in sickness absence. However, we did not have measures of minor transient morbidity and symptoms which could relate especially to shorter absence spells.

We examined interactions between gender and the potential explanatory factors only for those four factors that were found to explain gender differences in sickness absence. We did not want to test all possible interactions because a large number of tests would increase the risk of chance findings. Theoretically, if one explanatory factor had a positive effect in one gender and a negative one in the other, the interactions could be important even if the main effects are not. We checked the associations of all explanatory factors with sickness absence separately in women and men. All associations except negative family-related life events in absence spells over 60 days were in the same direction for men and women. However, the number of men and women with two or more negative life events was very small and the interaction with gender was not statistically significant ($p = 0.65$). These analyses provide further support for the finding that gender differences in sickness absence are not explained by different effects of these factors in women and men.

In Finland and elsewhere the labour market is strongly segregated into male and female occupations. Because of this segregation work tasks and working conditions between men and women may differ substantially, making it complicated to firmly establish the role of working conditions in the explanation of gender differences in sickness absence. Previous studies have approached this question indirectly, and found that men working in specific female-dominated occupations have even more sickness absence than women, which would suggest that the nature of work rather than gender is the reason for sickness absence.[44 45] However, a more recent study examining a broad range of occupations did not verify these previous findings.[46] In another study, eliminating the effects of occupation and workplace strengthened gender differences in sickness absence, also suggesting that directly work-related factors do not explain the gender differences in sickness absence.[5] We examined the explanations for gender differences in sickness absence directly by adjusting for a large number of general indicators of working conditions. However, it is possible that there are occupation-specific exposures that are not fully grasped by these general indicators.

Main messages

- Women had more self-certified sickness absence spells than men, but in lengthening medically confirmed spells gender differences were smaller or non-existent.
- Poor physical functioning, diagnosed diseases, physical work demands and work fatigue explained the female excess in sickness absence, whereas psychosocial working conditions and family-related factors had no effects.
- These factors explained gender differences in sickness absence because they were more common among women, not because women were more responsive to these problems.

Policy implications

- Gender differences were smaller in longer sickness absence spells. Such sickness absence spells are likely to better reflect chronic morbidity whereas for shorter absence spells the explanations are likely to be more varied.
- Reasons for shorter sickness absence spells should be better understood as they account for a major part of all absence days.

CONCLUSION

Women had more sickness absence than men but the differences were gradually weaker for longer absence spells. The overall gender differences in sickness absence are therefore due to relatively short absence spells being more common among women. The examined health status measures, working conditions and family-related factors explained more of the gender differences in longer than in shorter sickness absence spells. Gender differences in longer sickness absence spells are mainly due to heavier burden of ill-health and to a lesser extent higher physical work demands among women. We found no support for greater vulnerability to health- and work-related problems among women as reasons for sickness absence. Part of the gender differences in short sickness absence spells remained unexplained by the factors studied here. Further explanatory factors for short sickness absence spells, such as the prevalence of minor symptoms and differences in illness behaviour, need to be considered in future studies.

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