

## Conference Paper

# Prevalence of Sickness Absence and Its Sociodemographic and Occupational Factors in a Public Service Organization

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## Abstract

Sickness absence in any particular organization has negative impacts mainly toward economic, morale and productivity. The purpose of this survey is to determine the prevalence of sickness absence among employees in a government office in a central region of Malaysia to get profiling of the employees taking medical leaves, to compare the frequency of sickness absence among the employees based on gender, age group and designation and to determine the perception of sickness absence among the employees in relation to their occupation. A cross-sectional study was carried out among 587 workers in the first half of 2017. Data was collected based on Sickness Absence Surveillance form, which was filled by any employee who took medical leave. Other variables such as demographic data, work characteristics and personal health were also included. Subsequently, data entry and analysis were done using SPSS Version 22.0. The overall prevalence rate was 63.0 percent (female = 42.6%, male 20.3%) that includes repeated medical certificate (MC)-taker. Reasons for sickness absence are varied like fever, URTI, pregnancy related, injury, diarrhea, clinic follow-up and many more. Results also showed that sickness absenteeism was higher among female, mainly middle managerial level, presently or previously married, aged from 30 to 39, employed in the organization for over 10 years with no background of chronic medical illness. Therefore, the prevalence of sickness absence among employees in a government office in a central region of Malaysia and factors associated with it are determined. It is recommended for continuation of surveillance simultaneously to have an intervention program in order to find the root cause of sickness absence and thus reducing sickness absence rate.

**Keywords:** sickness absenteeism, surveillance, sociodemographic factors, occupational factors

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## 1. Introduction

Sickness absence is defined as period of sickness absence due to any cause, might be also related to underlying health issue [1]. Sickness absence among the workforce is usually being monitored in private sectors and multinational companies. It is important to have a surveillance program as sick leaves may have cost and productivity implications to the organizations or companies.

Sickness absence can be divided into:

1. Short term sickness absence
  - (a) It is broadly defined as frequent, recurring period of sickness absence which do not relate to underlying health issue.
  - (b) It is more likely to be self-certified, but they can also be covered by a Doctor's Certificate
2. Long term sickness absence
  - (a) Depending on the management of an organization
  - (b) Usually the cut-off point is six weeks

People are going to be off sick from time to time. Most employees feel bad about letting down their colleagues and most employers are reasonably sympathetic about their staff's welfare. But absence because of sickness, or another unexpected reason, can put the organization in a tricky situation, particularly if there are no policies in place for dealing with it. An organization need to know why the employees are absent, when they will come back and how the management will deal with:

1. short-term sickness absence which lasts less than a week
2. repeated short-term sickness absences which may follow a pattern
3. long-term sickness absence lasting several weeks or more
4. unauthorized absence for other reasons

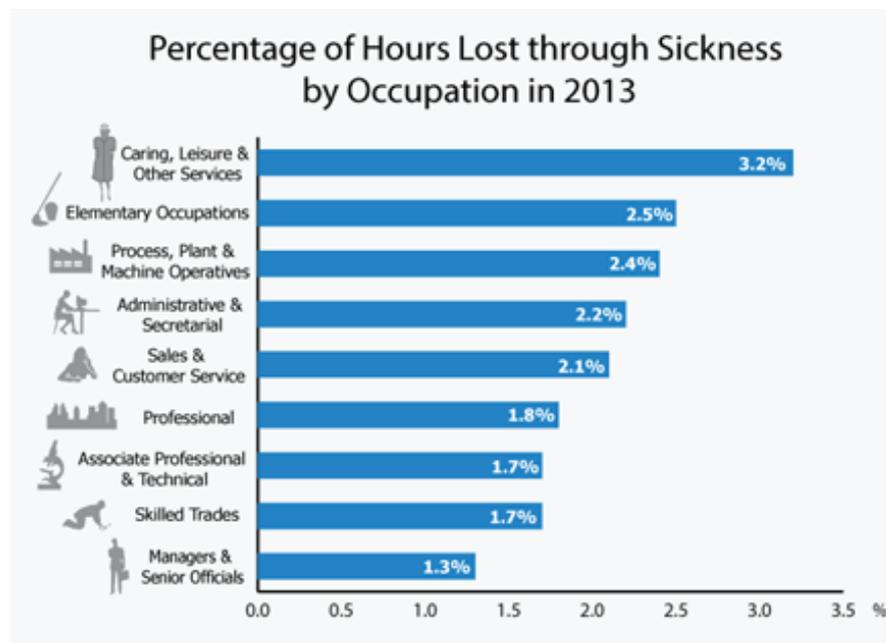
Sickness absence can be caused by a mixture of:

5. an employees' general physical condition
6. working conditions including health and safety standards, levels of stress, and harassment and bullying

7. family or emotional problems, or mental health issues other than stress [2]

Managers and employees often appreciate clarity and honesty about how such personal issues will be managed. There are some legal issues to take into account, but making this surveillance program is important as ensuring the staffs are well, happy and working effectively is largely a matter of doing the right thing and using common sense.

Level of absence and employee health has been a long standing issue in an organization. A survey was conducted by Pfizer in January and February 2013 involving many companies and organization both public and private, small to medium industry to the established companies. This survey stated that the average rate of absence in 2012 was 5.3 days per employee in 2012, down from 6.5 days in 2010 [2].



**Figure 1:** Percentage of hours lost due to sickness. Source: National Health Survey 2013, USA.

Sickness absence is one of the important problems in an organization as it may reflect underlying work related stress or problem. Sickness absenteeism, of any organization, is a problem of concern due to its negative economic and morale impacts. Various studies were done around the world to identify according to some demographic (sex, age) and occupational (occupational group) variables those groups of government employees who are at higher risk of sickness absenteeism [3, 4]. Sickness absence can be an indication for underlying issues for example work-related stress [5] or workplace bullying [6].

This public service organization has 587 employees, with females are more in numbers than male. The details of the distribution of the employees were as shown by Table 1. More than half of the staff was female. The highest percentage of employees was doctor, followed by admin assistants. The least percentage was from Information Technology officers and medical assistants.

TABLE 1: Staff profiling based on gender and designation (n = 587).

Post	Male	Female	Total	(%)
Doctors	72	142	214	(36.5)
Nurses	0	69	69	(11.8)
IT Officers	5	6	11	(1.9)
Medical Assistants	44	0	44	(7.5)
Admin assistants	30	112	145	(24.7)
Others	55	49	104	(17.7)
<b>Total</b>	<b>206 (35.1%)</b>	<b>378 (64.4%)</b>	<b>587</b>	<b>(100)</b>

The purpose of this study is to determine the prevalence of sickness absence among employees, to get profiling of the employees taking medical leaves, to compare the frequency of sickness absence among the employees based on gender, age group and designation and to determine the perception of sickness absence among the employees in relation to their occupation.

## 2. Methods

A cross-sectional study was carried out among 587 workers in first six months of 2017. Data was collected based on Sickness Absence Surveillance form, which was filled by any employee who took medical leave. Other variables such as demographic data, work characteristics and personal health were also included. Subsequently, data entry and analysis were done using SPSS Version 22.0.

## 3. Results

For Objective 1: to determine the prevalence of sickness absence among employees

$$\text{Formula of point prevalence: } \frac{\text{Number of medical certificates}}{\text{Total numbers of employees at that point}} \times 100 = 63.0\%$$

For Objective 2: to determine sociodemographic characteristics of employees taking medical leave

Half of the employees that took sick leave in first half of 2017 were in 30–39 years old age group; majority was female staffs and highest proportion among medical officers. The least number of days of sick leave was one day and the longest was 15 days. The mean number of days of sick leave taken was 1.46 (1.259) days. The highest percentage of sick leaves was taken during third week of the month and majority of the staff took only once sick leave in the month. In term of days of the sick leave, Monday was the highest percentage of sick leave (23.2%).

Table 2 shows the distribution of sick leaves taken by employees during first seven months in 2017. The commonest reason of sick leave among the employees was due other cause, while majority of sick leaves are not due to preexisting medical illness (69.3). Majority of the employees perceived that their sick leaves were not work-related as shown by Table 3.

TABLE 2: Number of sick leave taken from January to July 2017 among employees (n = 370).

Months	Frequency (n)	Percentage (%)
Jan	79	(21.3)
Feb	59	(15.9)
March	63	(17.0)
April	56	(15.1)
May	52	(14.0)
June	11	(3.0)
July	50	(13.5)

TABLE 3: Sociodemographic characteristics of the employees taking medical leaves from January to July 2017 (n = 370).

Variables	Frequency	(%)	Mean	(SD)
<b>Age</b>				
< 20	5	(1.3)		
20–29	41	(11.1)		
30–39	190	(51.2)		
40–49	83	(22.4)		
> 50	52	(14.0)		
<b>Gender</b>				
Male	119	(32.2)		
Female	251	(67.7)		
<b>Marital status</b>				
Single	39	(10.5)		
Married	329	(88.7)		
Divorcee	2	(0.5)		

<b>Posts</b>		
Doctor	179	(48.2)
Nursing staff	10	(2.7)
IT officer	9	(2.4)
Medical assistant	35	(9.4)
Admin assistants	103	(27.8)
Others	34	(9.5)
<b>No of sick leaves (days)</b>		1.46 (1.259)
<b>Week of the month</b>		
First week	84	(22.6)
Second week	83	(22.4)
Third week	99	(26.7)
Forth week	84	(22.6)
Fifth week	20	(5.4)
<b>Medical Certificate from</b>		
Government	152	(41.0)
Private	89	(39.2)
Not mentioned	65	(17.5)
<b>Day of sick leave</b>		
Monday	86	(23.2)
Tuesday	81	(21.8)
Wednesday	71	(19.1)
Thursday	78	(21.0)
Friday	50	(13.5)
<b>Causes of sick leave</b>		
Hypertension	19	(5.1)
Heart-related disease	3	(0.8)
Diabetes Mellitus	23	(6.2)
Musculoskeletal	11	(3.0)
Psychiatric illness	2	(0.5)
Others	44	(11.9)
None	257	(69.3)
<b>Perception of sickness to work-related illness</b>		
Yes	14	(3.1)
No	352	(96.9)

TABLE 4: Sickness absence among the employees based on gender (n = 370).

Gender	Frequency	(%)
Male	119	(33.2)
Female	251	(66.8)

## 4. Discussion

Sickness absenteeism in public service organization in first seven months in 2017 was mainly among females, aged between 30–39 years old, highest proportion among medical officers and majority of the sick leave taken was the first time of medical leave for that month. As the popular belief that Monday is the commonest day of the week for employees to take medical leave, the finding was found in our study.

The average of sick leaves in our study was 1.46 days which were lower than the finding in a survey in UK, which stated that the average rate of absence in 2012 was 5.3 days per employee in 2012, down from 6.5 days in 2010. Absenteeism remained high in manual workers as compared to the non-manual workers. Average level of sick leaves climb with the size of an organization, in which SMEs average days of sick leaves were five days per employee while larger employers nearly six days. This survey also found that sick absenteeism was higher in public sector as compared to the private sectors [2].

A study done among hospital staffs in Jerusalem comparing current data with the data of the study performed in the same hospital about 15 years ago showed a rise in the duration of absences with a simultaneous reduction in their incidence. The study also found that sickness absenteeism was higher among female, mainly unskilled workers, presently or previously married, aged from 45 to 60, and employed in the hospital for over ten years [4, 7]. This finding was also found in our study whereby it was higher in female staffs, married and staffs that were in their 40s.

When comparing all the sick leaves taken by the employees in this public service organization based on designation (Table 3), it was seen that the highest proportion was contributed by the professionals (48.5%) while the lowest proportion was seen among the non-professionals (3.4%). However, after considering the distribution of staff based on job category, this finding corresponds to sociodemographic distribution of workforce in this organization, that was made up of high number of professionals as compared to non-professionals. Opposite finding was seen in a study in UK in

which doctors/professionals have lower rates of sickness absence than other health-care workers [8]. The other important relation found in a study in Norway was employment status is a determinant in the multifactorial background of sickness absence [9]. Therefore, it is important for us to assess the employment status of the staff as well in the future, whether they are permanent or on contract basis. However, a study done on Finnish hospital physicians between 1997 and 1998 found that low response rate by the doctors [10], which can be a challenge in our study.

Majority of the reason for medical leave was due to other causes in our study. Other causes include variety of reasons; infective in nature, medical check-up, post-surgical procedure. However, an interesting finding was that a staff took medical leave due to stress and problems with his/her superior. This issue needs to be explored further as this reason was proven to be a predictive factor for sick leave among staff. A study done among the staff of primary care practice found that work-related stress predicted sick-leave [5]. In a study in Iran, it was found that sickness absenteeism was due infective cause which was due to Influenza endemic that happened at that time [11].

Majority of the employees that took sick leaves in in first seven months in 2017 perceived that their sick leaves were not related to their occupation or work. This finding can be explained by a study among nurses in a government hospital, which found that different variables were associated with the two forms of absenteeism, which suggests it's multiple and complex determination related to factors from different levels that cannot be exclusively explained by health problems [3].

In our study, few cases also reported workplace bullying. This issue needs to be explored further as other studies around the world had found association of this factor with sickness absenteeism. A study in Italy confirmed that workers exposed to a workplace bullying reported higher sickness absenteeism as compared with non-exposed subjects, also when a potentially highly stressful work environment is considered. This finding supported that workplace bullying may be viewed as an extreme stressful condition. Interventions to avoid workplace bullying not only favor workers' health, but also avoid the company costs associated with workers' sickness absenteeism [12]. Similar finding was also shared by another study [6] in which workplace mistreatment is associated with sickness absence in the United States.

Continuous social and medical surveillance of these employees is suggested as a promising way of reducing sickness absenteeism. This surveillance program will be continued and monitored in order to plan for an effective program to tackle this issue.

Interventional program is recommended in an organization to tackle the issues with sickness absence [13].

## 5. Conclusions

Sickness absence among employees in this public service organization within first seven months of 2017 was seen more among females, married, aged 40-49 years old, without any preexisting medical illness and caused by various causes. Most of the sick absenteeism perceived that it was not work related.

It is recommended to study the association between sick absenteeism and important factors such as marital status (demographic) and duration of employment and whether the staffs are skillful or not skillful (occupational factors) to see the associated factors. The information is important in order to plan for the management and intervention program in near future. Other recommendations include providing a channel for the staff to seek help if they are having problems with the superior, colleagues or unhealthy working environment.

## Conflict of Interest

Authors declare that there are no competing interests with regards to this study.

## References

- [1] Black, D. C. and Frost, D. (2011). In D. F. W. A. Pensions (ed.), 112. London: The Stationery Office (TSO).
- [2] Pfizer, C. S. A. (2014). London.
- [3] Ferreira, R. C., Griep, R. H., Fonseca Mde, J. et al. (2012). A multifactorial approach to sickness absenteeism among nursing staff. *Rev Saude Publica*, vol. 46, no. 2, pp. 259-268.
- [4] Pines, A., Skulkeo, K., Pollak, E., et al. (2014). Rates of sickness absenteeism among employees of a modern hospital: the role of demographic and occupational factors. *British Journal of Industrial Medicine*, vol. 42, no. 5, pp. 326-335.
- [5] Holmgren, K., Fjallstrom-Lundgren, M., and Hensing, G. (2014). Early identification of work-related stress predicted sickness absence in employed women with musculoskeletal or mental disorders: a prospective, longitudinal study in a primary health care setting. *Disability and Rehabilitation*, vol. 35, no. 5, pp. 418-426.

- [6] Asfaw, A. G., Chang, C. C., and Ray, T. K. (2013). Workplace mistreatment and sickness absenteeism from work: Results from the 2010 National Health Interview survey. *American Journal of Industrial Medicine*, vol. 57, no. 2, pp. 202-213.
- [7] Pines, A., Skulkeo, K., Pollak, E., et al. (1985). Rates of sickness absenteeism among employees of a modern hospital: The role of demographic and occupational factors. *British Journal of Industrial Medicine*, vol. 42, no. 5, pp. 326-335.
- [8] Murphy, I. J. (2014). Self-reported and employer-recorded sickness absence in doctors. *Occupational Medicine*, vol. 64, no. 6, pp. 417-420.
- [9] Rosta, J., Tellnes, G., and Aasland, O. G. (2014). Differences in sickness absence between self-employed and employed doctors: A cross-sectional study on national sample of Norwegian doctors in 2010. *BMC Health Services Research*, vol. 14, p. 199.
- [10] Murphy, I. J. (2002). Sickness absence in doctors. *Occupational and Environmental Medicine*, vol. 59, no. 3, p. 201.
- [11] Pourabbasi, A., Shirvani, M. E., and Khashayar, P. (2011). Sickness absenteeism rate in Iranian schools during the 2009 epidemic of type an influenza. *The Journal of School Nursing*, vol. 28, no. 1, pp. 64-69.
- [12] Campanini, P., Conway, P. M., Neri, L., et al. (2013). Workplace bullying and sickness absenteeism. *Epidemiologia E Prevenzione*, vol. 37, no. 1, pp. 8-16.
- [13] Kumar, J. (2014). Sickness absenteeism in the workplace: Sharing some personal experiences. *Indian Journal of Occupational and Environmental Medicine*, vol. 17, no. 2, pp. 39-40.