Original Research Article

Sick Leave Availing Pattern, Reasons and their Association of Socio-Demographic Factors among Private University Staff in Kedah State, Malaysia

ABSTRACT

Aim: This study intends to investigate the sick leave (SL) availing pattern and the reasons for availing sick leave, and to evaluate the association of sick leave with socio-demographic factors among a private University staff.

Study Design: A retrospective descriptive study

Place and Duration of Study: The study was conducted in a private university, Kedah state, Malaysia among the university employed academic, administrative and ancillary staff, in the university clinic between September, 2018 and May, 2019.

Methodology: The data was obtained from the university clinic, staff medical records using a standardized, pre-validated data collection form consisting of socio-demographic data, SL data and reasons for SL. All permanent, temporary and contract staff under the employment during the study period (September 2017 to August 2018) were included in the study.

Results: A total of 78% (274/350) met the inclusion criteria and 22% excluded for not completing service for the academic year of the study. The average age of the study population were 36 to 45 years, 80% were of Indian ethnicity, academic and ancillary staff comprised of 52% and 39% respectively. About 31% (85/274) of the study population did not avail any SL, whereas, 69% (189/274) were involved in at-least one SL during the study period. The study observed significant association ($P< .001$) between SL availed (31%) and SL not availed (69%) categories. The maximum sick leave availed during the study period was 74% (63/85) among 36 to 45 years. There was no significant association among SL availing pattern and socio-demographic factors. However, there were significant association between profession and country of origin under sick leave categories and socio-demographic factors ($P <.05$). Among the sick leave availed population, 36% (68/189) availed sick leave due to cough, fever, flu, sore throat or oral ulcer, 26% (49/189) due to abnormal uterine bleeding, pelvic pain or dysmenorrhea and 18% (34/189) due to diarrhoea and vomiting respectively.

Conclusion: Further investigation on sick leave utilization should be continued at the structural, organizational and individual levels. The increase of sick leave among young employees were considerable high and should be studied further. The increase in sick leave utilization among women are still unexplained as no research or data available to explain it. Motivated, satisfied and fulfilled employees are far less likely to be sick and tired of work.

Keywords: Sick leave, Availing pattern, Reasons

INTRODUCTION

Sick leave (SL) can be explained at different theoretical levels: the structural level, the organizational level, and the individual level. SL absence is a complex phenomenon affecting both quality of life and economical burden at different structural levels at the of individual, family, company and the society (1 - 3). Difficulties arise in a contractual relationship between an employer, when an employee is frequently on SL application. The effect of an employee absence may be lessened in a large organization by other employees assistance and support but, the effect may be quite contrary in small organizations. SL is attributed to either genuine physical illness or due to stress at work place. A study by Bhui *et. al.*, reported adverse working conditions and management practices as common causes of work stress. Stress-inducing management practices included unrealistic demands, lack of support, unfair treatment, lack of appreciation, conflicting roles, poor communication, lack of transparency and effort–reward imbalance (4).

SL abuse has become a growing challenge in Malaysia. According to a report in the news media, Malaysian employees in the private sector took an average of 4.2 days of medical leave, which is higher than the average in other countries (5). According to the Malaysian Employers Federation, the then Executive Director indicated that SL was being abused. However, it is difficult to identify whether an employee has submitted the fake SL (6). Whitaker stated that the decision to resume work after SL is related to real and perceived job conditions like a person's SL behaviour, health beliefs, motivation to resume work and job satisfaction (7).

There are several ways of measuring sickness absence, but there are a lack of standardized methods for doing so (8). National definitions vary in the forms of SL considered, the criteria for inclusion and exclusion, differences in the populations being compared, and the accuracy of sickness absence data collected (9). The concept of disease, as it is understood in connection with sickness absence, differs substantially between health professionals and employees. Solli discussed capability based health and disease concepts based on 'value neutral and scientific concept', which was often used by professionals, whereas, 'value laden and relational concept', was often referred to by employees (10). These concepts contribute to a better understanding of how disease justifies sickness absence at the individual and the organizational level.

In a study concerning employees about common health problems and work in the public sector, Buck (2011) found that perception was important in influencing sickness absence and sickness presenteeism. The employees acknowledged that health problems would impact on work in a variety of ways, including performance, colleagues work and inter personal relationship in the workplace (11).

Outcome Measures

This study intends to investigate the sick leave availing pattern and the reasons for availing sick leave, and to evaluate the association of sick leave with socio-demographic factors among a private University staff.

2. MATERIAL AND METHODS
Study design

A retrospective descriptive study.

2.1 Study area, population & setting

The study was conducted in a private university, Kedah state, Malaysia among the university employed academic, administrative and ancillary staff, in the university clinic.

2.2 Modality of obtaining response

The data was obtained from the university clinic staff medical records using a standardized, pre-validated data collection form consisting of socio-demographic data, SL data and reasons for SL.

2.3 Inclusion criteria

All permanent, temporary and contract staff under the employment during the study period (September 2017 to August 2018) by the university were included in the study.

2.4 Sample size

From the total University staff population, the sample size was calculated using an automated Raosoft sample size calculator (12) which used Cohen statistical power analysis method (13). The estimated sample size was calculated at 95% CI, 5% margin of error with 50% response distribution and the required sample size was 227 rounded off to 225.

2.5 Categorization of sick leave

In this study, the sick leave was categorized into three groups: < 6 days of SL, 6 to 8 days SL and > 8 days SL.

2.6 Ethical considerations

The research proposal was submitted to the AIMST University Human Ethical Committee and the ethical clearance was obtained (AUHEC/FOP/2019/03 dated 28 Feb 2019) and permission from the head of AIMST clinic was obtained before data collection was initiated.

2.7 Statistical analyses

The analysis was performed using IBM SPSS Statistics for Windows (Version 23). Descriptive statistics using frequency and percentage distribution was used for summarizing the data. Chi-square test was used for detecting the significance levels, $P < .05$ was considered significant. All percentage displayed in the text or in parentheses are with no decimal places as per APA reporting guideline recommendation (14).

3. RESULTS AND DISCUSSION

A total of 78% (274/350) of patient medical records reviewed which met the inclusion criteria were considered for data collection in this study. The 22% exclusion were mainly due to exclusion criteria of not in service for the complete academic calender year of the study.

3.1 Socio-demographic data of the study population

The average age (31%) of the study population was 36 to 45 years, followed by 23% and 22% among 26-35 years and 46-55 years respectively. There was no significant difference in gender distribution, however 80% of the study population were of Indian ethnicity. Regarding the profession, academic and ancillary staff comprised of 52% and 39% respectively. About 65% were of Malaysian origin followed by 31%, Indian origin (Table 1).

Table 1: Socio-demographic Characteristics of the Study Population

Variables (N=274)	N (%)
Age	
≤25	5 (2)
26-35	64 (23)
36-45	84 (31)
46-55	61 (22)
56-65	41 (15)
>65	19 (7)
Gender	
Male	138 (51)
Female	135 (49)
Race	
Malay	34 (12)
Chinese	7 (3)
Indian	219 (80)
#Others	13 (5)
Profession	

Academic Staff	141 (52)	
Administrative Staff	25 (9)	
Ancillary Staff	107 (39)	
Country of origin		
Malaysia	178 (65)	
India	84 (31)	
#Others	11 (4)	

#Bangladeshi, Burmese and/or Myanmar, Frequency and percentages distribution of the study participants.

3.2 Comparison of Sick Leave availing pattern among socio-demographic factors

About 31% (85/274) of the study population did not avail any SL whereas, 69% (189/274) were involved in at-least one SL during the study period (academic year). The study observed significant difference [$X2$ (1, N = 274) = 39.47, p < .001] between SL availed (31%) and SL not availed (69%), study population. The maximum sick leave availed during the study period was 74% (63/85) among 36 to 45 years. There was no significant difference among either genders (68% and 70%) availing SL, however, 70% (155/220) of the Indian ethnicity did. Regarding the profession of the study population, 52% academic and 39% ancillary staff, availed SL respectively. About 65% of Malaysian origin and 31% of Indian origin availed SL. There were no significant differences in sick leave availing pattern among the socio-demographic factors (P >.05), (Table 2).

Table 2: Sick leave availing pattern among socio-demographic factors

Variables	SL Not Taken (N=85) N(%)	SL Taken (N=189) N(%)	*P value
Age			
≤25	1(20)	4(80)	
26-35	21(33)	43(67)	
36-45	22(26)	63(74)	.71
46-55	23(38)	38(62)	
56-65	12(30)	28(70)	
>65	6(32)	13(68)	
Gender			
Male	45(32)	94(68)	.63
Female	40(30)	95(70)	
Race			

Malay	9(26)	25(74)	
Chinese	3(43)	4(57)	.28
Indian	65(30)	155(70)	
#Others	8(62)	5(38)	
Profession			
Academic Staff	51(36)	91(64)	
Administrative Staff	4(16)	21(84)	.16
Ancillary Staff	30(28)	77(72)	
Country of origin			
Malaysia	52(29)	127(71)	
India	27(32)	57(68)	.15
#Others	6(55)	5(45)	

*Chi square test; #Bangladeshi, Burmese and/or Myanmar

3.3 Comparison of sick leave categories with socio-demographic factors

In this study, the sick leave was categorized as: < 6 SL days, 6 to 8 SL days and > 8 SL days. This study observed a significant difference in the SL availing pattern among the study population [$X2$ (3, N = 274) = 301.83, P < .001]. The number of participants who took '**NO**' SL were 85/274 for the whole academic year; SL of < 6 days was the highest (182/274). The number of participants who took 6 to 8 SL days and >8 SL days were 4/182 per academic session (one year) respectively. There was a significant association (P <.05) among the profession and country of origin among the SL category and socio-demographic factors (Table 3).

Table 3: Comparison of sick leave categories with socio-demographic factors

Variables	Sick Leave taken/academic session (one year)				*P value
	Zero (N=85)	< 6 days (N=181)	6-8 days (N=4)	>8 days (N=4)	
Age					
≤ 25	1(20)	4(80)	0(0)	0(0)	
26-35	21(33)	41(64)	1(2)	1(2)	
36-45	22(26)	59(69)	3(4)	1(1)	.48
46-55	23(38)	37(61)	0(0)	1(2)	
56-65	12(30)	27(68)	0(0)	1(3)	
> 65	6(32)	13(68)	0(0)	0(0)	
Gender					
Male	45(32)	90(65)	2(1)	2(1)	.27
Female	40(30)	91(67)	2(1)	2(1)	
Race					
Malay	9(26)	24(71)	0(0)	1(3)	
Chinese	3(43)	3(43)	0(0)	1(14)	.15
Indian	65(30)	149(68)	4(2)	2(1)	
#Others	8(62)	5(38)	0(0)	0(0)	
Profession					
Academic Staff	51(36)	88(62)	1(1)	2(1)	<.001*
Administrative Staff	4(16)	19(76)	0(0)	2(8)	

Ancillary Staff	30(28)	74(69)	3(3)	0(0)	

Country of origin

Malaysia	52(29)	121(68)	3(2)	3(2)	
India	27(32)	55(65)	1(1)	1(1)	.04*
#Others	6(55)	5(45)	0(0)	0(0)	

*Chi square test, $P < .05$ is significant ; #Bangladeshi, Burmese and/or Myanmar

3.4 Reasons for Sick Leave

In this study, 69% (189/274) availed any sick leave during the entire academic session of 2017/18. Among the sick leave availed population, 36% (68/189) availed sick leave due to cough, fever, flu, sore throat or oral ulcer, followed by 26% (49/189), availed sick leave due to abnormal uterine bleeding, pelvic pain or dysmenorrhea and 18% (34/189) due to diarrhoea and vomiting respectively (Table 4).

Table 4: Reasons for sick leave (N = 189)

Reasons	Reasons for SL Taken N(%)
Cough, fever, flu, sore throat or oral ulcer	68(36)
Diarrhoea, vomiting	34(18)
Injury & skeletal muscle pain	18(10)
Giddiness, headache, chest pain, dyspnoea	8(4)
Infection	6(3)
Extended leave	6(3)
Abnormal uterine bleeding, pelvic pain or dysmenorrhea	49(26)

3.5 Overall Sick Leave Availing Pattern among the study population

The monthly SL availing pattern from September, 2017 to August, 2018 (per academic year) among the study population is illustrated in Figure 1.
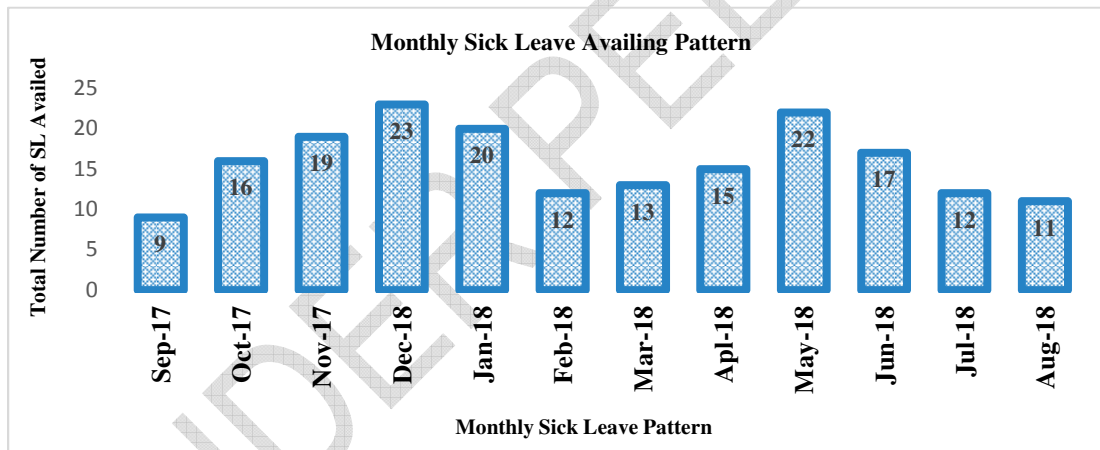

Fig. 1: Monthly sick leave availing pattern per academic year

4.0 DISCUSSION

This study did not take into account the long term maternal leave or leave due to hospitalization.

4.1 Age

In this study, the average age, 36 to 45 years recorded the highest number of sick leave taken (37/107). This might due to the number of participants in this particular age range were the highest (85/274). Theoretically, sick leave pattern should increase as the age increases (15). However, averages can cover some important variations: older employees are more

likely to attend work, although if they have sickness absence, it tends to be for a relatively longer time. A study in Belgium revealed, the youngest employees have the greatest frequency of sickness absence, while older employees on average were absent for a longer duration (15). One probable explanation could be the younger employees may use short absences as a form of escape from the work demands, while older employees become accustomed to these demands and go absent for mostly health reasons. Rhodes found consistent age related differences among work attitudes and behaviors, but could not identify any causal factors (16).

4.2 Gender

The sick leave taken among female (57/107) were higher than the males, although the number of male participants were marginally higher (138 out of 274). Bekker found that although female seemed to have more number of sick leave taken than men, this varied by country, age, profession and mostly seemed restricted to short term leave (17).

There are many different theories as to the reasons for gender differences in sick leave, for example the theory of double working women (paid work with family obligations). However, Mastekaasa found that the association between having children and sickness absence was weak (18). In a review of the literature regarding the relationship between sick leave and gender, Kristensen and Bjerkedal found that only part of the difference in sick leave could be explained by absence due to pregnancy (28). A study by Smeby (2009) found that gender differences in sick leave could not be explained by work-related factors or by general health or mental distress (19), however, in contrast Laaksonen et al (2010) found that differences in occupations held by women and men explained a substantial part of excess in sick leave among females (20).

4.3 Race

In race, the number of sick leave taken by Indian was the highest (94/107) which could be probably explained because of the maximum study populations being the Indians (219/274).

4.4 Profession

The number of sick leave taken by ancillary staff was the highest (54/107). This might be due to the working environment of ancillary staff which was more prone to get sick than academic and administrative staff. The concept of disease (SL), is often misunderstood between professionals (academic and administrative staff) and employees (anxillary staff). Solli (2011) discussed the capability based health and disease concepts, which was based on a value-neutral and scientific concept which is often used by professionals and the other based on value-laden and relational concept, often referred to by employees (21). The different concepts may contribute to a better understanding of how disease justifies sickness absence at the individual and organizational level. In a study concerning attitudes and beliefs of employees in the public sector about common health problems and work, Buck et al., (2011) found that, others perception were important in influencing sickness absence and sickness presenteeism (22). The study found a high degree of consensus among employees who acknowledged that 'health problems would impact on work in a variety of ways, including performance, colleagues work, and inter-personal relationship in the workplace' (22). On the other hand, Barnes reported on the common health problems and work, that moral pressure, the associated concept of legitimate illness and its impact on work were the major themes of common health problems and work (23).

Occupational groups whose everyday tasks are to provide care or welfare services (or teach or instruct) have a substantially increased risk of sickness presenteeism and of higher sick leave (24). Various studies have also indicated that perceived high occupational stress are predictive for sickness absence (25). A significant proportion of all sick leave may be due to illness caused by working conditions and heavy physical work; difficult work postures and low job control (26). Mehlum stated that employees who suffer from work-related illnesses have a greater need for sick leave than employees with similar illnesses caused by factors other than their work (26).

Psychosocial work environment is also important to understand and explain sick leave and presenteeism. A study on work related psychosocial risk factors for long term sick leave underlined the characteristics of work and the workplace, such as physical and psychosocial risk factors, safety/accident risk, the organizational work environment, management, general well-being, etc. (27). Different forms of stress, somatic, behavioral, emotional, and cognitive were all found to be moderately correlated to sick leave (28). Significant predictors for long-term sick leave were high levels of role conflict, emotional demands and low support from leadership. The risk for sick leave was higher in women, older employees and less education.

4.5 **Reason for SL**

The number of sick leave taken due to cough, flu, fever, sore throat and oral ulcer were the highest (50/107). The Star reported in tropical countries, common cough, flu, fever and sore throat occurs pretty much all around the year, with the peak season occurring during April to June and October to January (29). Staying out from work may even save others employees from catching their illness or spreading infection around the work place. It is also difficult to be productive at work when sick. Some appropriate reasons to stay home on SL are contagious illness like diarrhea, severe sore throat, flu, conjunctivitis, certain rashes, common cold with uncontrollable cough, all highly infectious and also communicable. Sick presenteeism in these conditions could rather cause collateral damage to other co-staff and the work atmosphere. Hence it is better on sick leave than sick presenteeism with communicable illness.

4.6 Country of origin

As the significant academic staff population were mostly expatriates, the country of origin was included in this study.

4.7 Study limitations

Though all efforts were taken to cover all sick leaves availed among the study population, sick leave certificates submitted from private clinics or dental clinics were not accounted in this study. Most staff residing outside campus seldom used the university clinic for their health issues, thus their sick leave history may also not be part of this data. Thus we cannot generalize the study outcome to the entire university staff population, and is only limited to those who availed the university clinic services.

5. CONCLUSION

In conclusion, we attempted to evaluate the sick leave availing pattern and reason for sick leave in the private university. The age range between 36 to 45 years and female employees, staff of Indian origin and ancillary staff availed higher sick leave than others. The reasons for most sick leave taken were cough, flu, fever, sore throat or oral ulcer. Lastly, the number of participants who took less than 6 days/year of sick leave were the highest which indicate that the staff in AIMST University utilized the sick leave fairly and no excessive sick leave usage was identified.

Further investigation on sick leave utilization should be continued at the structural, organizational and individual levels. The increase of sick leave among young employees were considerable high and should be studied further. The increase in sick leave utilization among women are still unexplained as no research or data available to explain it. Motivated, satisfied and fulfilled employees are far less likely to be sick and tired of work.

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