JOBS

İşletme Bilimi Dergisi (JOBS), 2017; 5(2): 1-23. DOI: 10.22139/jobs.299082

THE LEVEL AND COST BURDEN OF ABSENTEEISM AMONG HEALTH CARE PROFESSIONALS

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ABSTRACT

Aim: This study aims to identify the prevalence of unscheduled absenteeism resulting in loss of labor among healthcare professionals and its cost burden on hospitals.

Method: The study was conducted through the participation of 951 hospital employees that comprised the doctors, nurses/midwives, other healthcare professionals and administrative staff employed at two different hospitals in Turkey. 'Health and Work Performance Questionnaire (HPQ)' developed by Kessler et al. (2003) was used as the data collection tool.

Findings: The results indicated greater absenteeism in healthcare professionals aged 30 and under, married employees, female employees, nurses/midwives, university hospital staff and employees with a maximum of 5 years of service. The unscheduled absences and the cost of absenteeism were calculated as 11.52 days and 2372.46 TRY per employee per year.

Results: The study results revealed the significance of unscheduled absenteeism in hospitals and its financial consequences. Hospital administrators could develop effective solutions by analyzing the underlying causes.

Key Words: Absenteeism, Productivity, Workforce, Labor Loss, Cost Burden

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Journal of Business Science (JOBS), 2017; 5(2): 1-23. DOI: 10.22139/jobs.299082

SAĞLIK ÇALIŞANLARI ARASINDA İŞE DEVAMSIZLIK DÜZEYİ VE MALİ YÜKÜ

ÖZ

Amaç: Bu çalışmada kurumlarda işgücü kaybına yol açan planlanmamış işe devamsızlık sorununun sağlık çalışanları arasında görülme düzeyinin, bu sorunu etkileyen faktörlerin ve hastanelere olan mali yükünün belirlenmesi amaçlanmıştır.

Yöntem: Çalışma Türkiye'de bir üniversite hastanesi ve bir eğitim ve araştırma hastanesi olmak üzere iki hastanede çalışan hekim, hemşire-ebe, diğer sağlık personeli ve idari personelden oluşan 951 hastane çalışanı üzerinde yürütülmüştür. Veri toplama aracı olarak Kessler ve arkadaşları (2003) tarafından geliştirilen "WHO's Health and Work Performance Questionnaire (HPQ)" formu kullanılmıştır.

Bulgular: 30 yaş altı olanların, evli ve kadınların, hemşire ve ebelerin, üniversite hastanesinde çalışanların ve hizmet yılı en fazla 5 yıl olanların daha fazla işe devamsızlık yaptığı ve devamsızlık nedeniyle daha fazla mali yüke neden oldukları bulunmuştur. Çalışan başına yıllık 11,52 gün planlanmamış devamsızlık yapıldığı ve yıllık kişi başı 2372,46 TL mali yüke neden olduğu hesaplanmıştır.

Sonuç: Çalışma sonuçları hastanelerde planlanmamış devamsızlıkların düzeyinin ve finansal sonuçlarının önemli olduğunu göstermektedir. Hastane yönetimleri bu sorunun altında yatan nedenleri araştırarak etkili çözümler geliştirebilir.

Anahtar kelimeler: İşe Devamsızlık, Verimlilik, İş Gücü Kaybı, Mali Yük

I. INTRODUCTION

Absenteeism, postulated to originate from job dissatisfaction and low organizational commitment (Jex, 2002), can be defined as unscheduled employee absence from workplace (excuse, illness, etc.) or the number of days an employee does not show up at work except for annual leave and public holidays (Eren, 1993; Verlag, 2007). As absenteeism is characterized as employee absence from scheduled work, it differs from other types of absence (public holidays and annual leave) (Mani and Jaisingh, 2014). Annual leaves are scheduled in advance and organizations are prepared for their negative impacts. Therefore, these types of absence from work do not negatively impact organizations; on the contrary, they benefit both the organization and the employee. As absence due to illness and family issues is generally abrupt and unavoidable, organizations might not always be prepared in terms of staff adequacy. In literature, unscheduled absenteeism

is examined in two categories: unexcused/voluntary absenteeism and excused/involuntary absenteeism (Jex, 2002; Mani and Jaisingh, 2014). Not coming to work without an acceptable excuse is regarded as an unexcused absence (Jex, 2002), while an excused absence is generally an absence allowed for acceptable circumstances such as health problems (Weyman, et al., 2013).

Sickness absenteeism refers to the inability of employees to work because of illness and health problems (Weyman et al., 2013). It is possible to distinguish this type of absenteeism as short-term and long-term absenteeism. An employee's illness or disability is called short-term when it lasts less than seven days, and long-term absenteeism when it lasts longer than seven days. The duration and frequency of absenteeism is important in terms of helping to explain the type of absenteeism. While short-term absenteeism, such as cold or flu, is a frequently reported and has high reporting rates and long-term absenteeism and low reporting rates are also indicative of more serious health problems. Figure 1, which shows the relationship between health complaints and the frequency of absenteeism, suggests that different health problems bring about different types of absenteeism (Aalbers, 2013).

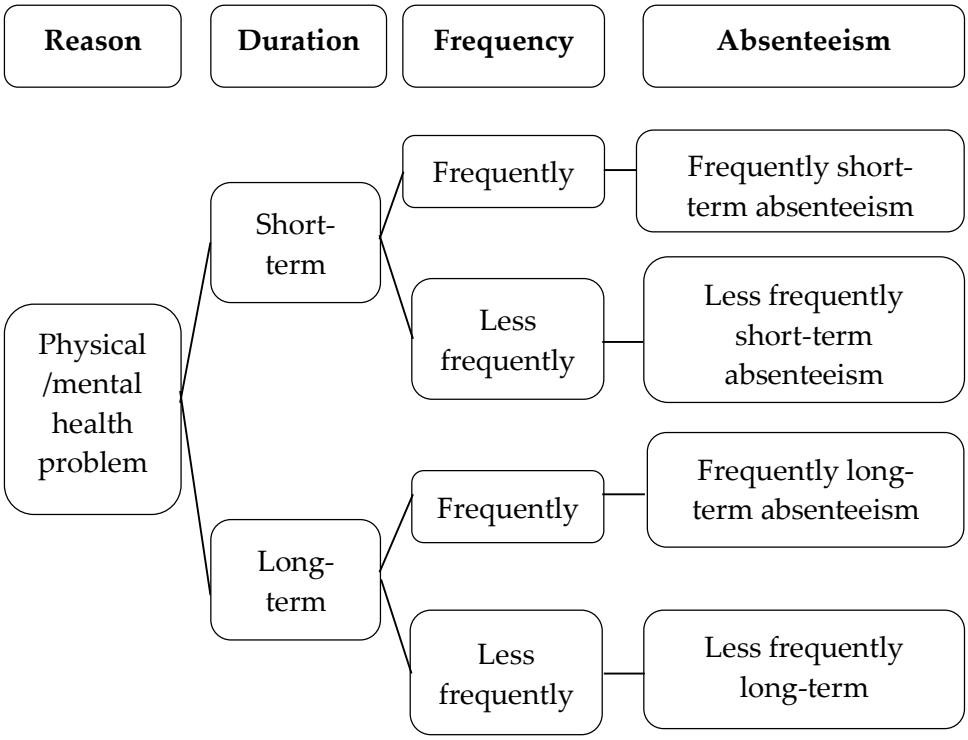

Figure 1: Types of Sickness Absenteeism

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Source: Aalbers, 2013

Although the significant majority of absences is attributed to illness or work impairment, there are also other causes of absenteeism. A study investigating the causes of absenteeism in the United States revealed that the most prevalent cause for employee absence was illness (34%) followed by family issues (22%), personal needs (18%) and stress (13%) (Chenoweth, 2011).

The reasons for the loss of productivity are not always health or disease. Some psychological factors, which are considered as personal factors, have effects on absenteeism. Mostly, employees have to make a risk selection between their health status and their professional future (career and social relations) (Aronsson and Gustafsson, 2005). Because they either want to opt for their health, get back on the job, miss out on possible promotion opportunities and perhaps lose their jobs of prefer careers and worsen their health. Other personal factors include over dependency (can not say no), problems with child care, family members who are obliged to look after, financial concerns and conservative attitudes towards absenteeism. Prater and Smith (2011) argue that the causes of employee sick leave are financial obligations, duty awareness, unwillingness to work overtime, workload, deadlines, previously scheduled meetings/interviews, fear to lose job and organizational culture.

A study on the financial consequences of absenteeism indicated a yearly loss of billions of dollars due to absenteeism. The average loss per employee due to work impairment or personal reasons for 1997, 2004 and 2011 were 6.2, 7.5 and 9.3 days, respectively. There was a yearly increase in absenteeism and absences due to illness/work impairment and personal/familial responsibilities were 7.7 and 1.6 days, respectively (Dabboussy and Uppal, 2012).

Absenteeism among health professionals appears to be a major problem, especially when compared to employees in other sectors. High absenteeism rates negatively affect health institutions in terms of health expenditures, employees and patients. The study carried out on the healthcare staff employed at Kingstone General Hospital in Canada showed that the majority of absences were due to illness and injury, and that the most common medical problems were gastrointestinal diseases and musculoskeletal disorders (Donovan, 2006). In Canada, over 16 million patient care hours or 9000 full-time nursing positions are lost per year due to injury or illness. This creates a significant problem of care quality resulting from the insufficient number of nurses (Registered Nurses'

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Association of Ontario, 2005; Tsiba et al., 2013). In the United States, the yearly cost of unscheduled absenteeism by employees in many sectors including healthcare is estimated to be 850,000 USD (Commerce Cleaning House [CCH], 2006). Another study conducted in the United Kingdom in 2014 reported that approximately 7.2 and 4.4 days per employee were lost to illness and injury in 1993 and 2013, respectively. The most common form of illness absence in the working population is short-term absence due to minor health issues (Office for National Statistics [ONS], 2014). In their study spanning 24 countries, Parboteeah et al. (2003) identified a variation in absenteeism behavior between cultures. The most prevalent type of absenteeism in Turkey is taking a sick leave without being sick (Örücü and Kaplan, 2001).

Although absenteeism is a very costly problem accentuated for years by many employers (Lowe, 2002), attention to the issue of absenteeism, particularly among healthcare professionals, is unfortunately limited in Turkey. Absenteeism in healthcare professionals results in significant issues such as decreased productivity and quality of care (Registered Nurses' Association of Ontario, 2005), and direct costs (Jex, 2002). This study was aimed at determining the prevalence of unscheduled absenteeism resulting in labor loss among healthcare professionals, the underlying factors and its cost burden on hospitals.

The average absence rates in Europe are between 3% and 6% of the working time, which is estimated to cost about 2.5% of Gross Domestic Product. While some countries try to control costs, others focus on health and refinement. Two main findings have been put forward in the study of the European Foundation for the Improvement of Living and Working Conditions in order to assess the extent of the absenteeism and policies developed to deal with it. The first is the limited information on extent, causes and costs of absenteeism, and the second is the change in politics related to management and control. Data on absenteeism are rare in some countries and are missing in others. Moreover, the fact that definitions and measurement methods are diversified makes it difficult to compare internationally. Although it is not observed that there is a general tendency of absenteeism (European Foundation for the Improvement of Living and Working Conditions, 2010).

Today, businesses in India are seriously concerned with the issue of controlling absenteeism. Strikes and lockout measures have received a great deal of attention. Therefore strikes and lockout are more cause celebre and visible when absenteeism in not taken into consideration. It is very important to understand absenteeism in terms of management and human

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resources, which is one of the most important difficulties to increase organizational effectiveness and productivity (Mani and Jaisingh, 2014).

1.1. Absenteeism as performance criterion

Adam Smith (2006), who believes in the superiority of his workforce, argues that employees are influential in increasing or decreasing production. It is known that production; especially service can not be carried out exactly without manpower and know-how. For this reason, health and welfare of the workforce that carries out the production and service has become an important issue to be emphasized. Labor productivity has become an important factor on strength and sustainability of an organization's overall performance. Reductions in health-related productivity can manifest as absenteeism or lower presenteeism (Koopman et al., 2002).

Productivity measurement is often designed in terms of productive time lost. Productivity is seen as a loss when you do not come to work due to an employee sickness. Measuring such productivity losses is relatively easy because there are administrative reporting systems that can produce valid, reliable, accurate reports. Because such absences are necessary to be recorded. However, the type of productivity that is more difficult to assess arises when the optimal capacities of physically employed workers are at a low level (Ozminkowski et al., 2003). Because these productivity losses are not available in the records, it is difficult to determine the quantity of losses.

Physical and mental illness affects both work quality and quantity. The quantity of work may be reduced because the employee may run slower than normal or the quality of work causes more serious errors that have negative effects on perception, reasoning, recall, and decision making (TMS Consulting, 2012). Loss of productivity in the workplace is often due to health problems and disorders and lack of control in planning of work speed. This leads to an increase in the indirect costs of health problems among employees (Alavinia et al., 2009).

In some countries, several methods have been used to calculate the cost of absenteeism, but some countries have not yet identified any methods. The size of costs is well known in some countries, such as the United Kingdom, where some studies on the costs of absenteeism are made. A significant proportion of countries do not seem very willing to calculate the cost of absenteeism. In general, the costs of absenteeism are high, the measurement of these costs is variable and there is the risk of making direct comparisons between countries. The lack of clarity on how

cost statistics are compiled has some consequences. The first of these, this may mean that there is no data on the costs to employers or governments. Second, it is extremely difficult to compare the reported costs when no cost calculation methods are available. Without a clear definition of which costs are included or excluded, it is difficult to compare differences in the proportion of gross domestic income. It is obvious that absenteeism is costly, but it is difficult to determine exactly how costly it is in any country (European Foundation for the Improvement of Living and Working Conditions, 2010).

II. Method

2.1. Population and sample

The population of this cross-sectional study comprised the physicians, nurses, midwives, other healthcare professionals (surgical technician, anesthesia technician, biologist, child development specialist, dietitian, pharmacist, physical therapy technician, physiotherapist, first and emergency aid technician, laboratory technician, audiometrist, psychologist, X-ray technician, medical technician, social worker, medical technologist) and administrative staff employed at an university hospital (Kirikkale University Medical Faculty Hospital-KUMFH) and a training and research hospital (Kirikkale High Specialty Hospital-KHSH). The researchers did not conduct sampling in either hospital and tried to reach the entire population (1684 employees). However, 361 out of 520 KUMFH employees and 647 out of 1164 KHSH employees participated in the study. As the KUMFH and the KHSH staff returned respectively 25 (out of 361) and 32 (out of 647) incomplete questionnaires, a total of 951 (56.47%) questionnaire forms were analyzed.

2.2. Data collection tool

A questionnaire was used as the data collection tool. The questionnaire form comprised two sections. The first section was based on the 6 questions on absenteeism in the employee version of the World Health Organization's 'Health and Work Performance Questionnaire (HPQ)' developed by Kessler et al. (2003) commonly used in absenteeism research. The respondents were queried about the number of full- and half-days they had been absent from work due to physical or psychological health problems, the number of full- and half-days they had been absent from workplace due to non-health related reasons (excluding annual leaves and public holidays) and the number of days they had been on annual and

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sick leave. The second section of the questionnaire included questions such as their health status and the number of monthly working hours, in addition to socio-demographic questions. Whereas, in the original HPQ, the respondents were requested to recall the last 4 weeks, the present study involved a two-week period (14 days) to facilitate recollection. Subsequently, both the level of absenteeism and the costs were calculated initially for a two-week period and then monthly and yearly.

2.3. Data analysis

The study data was analyzed with SPSS version 21.0. The student's t test and one-way ANOVA were conducted to analyze whether absenteeism varied with respect to socio-demographic characteristics and health status. If the findings indicated the existence of a significant relationship between groups, the Tukey-HSD test was used to identify which group the significance originated from.

Before examining the cost burden of absenteeism, one needs to compute how much labor is lost. The hourly wage of each employee was calculated by dividing the declared monthly salary (including additional wages) by monthly total working hours. The days they had been absent from work due to illness or non-illness related reasons in the last two weeks were converted to hours in order to calculate lost time in hours. Then, the economic cost of the productivity loss was calculated by multiplying lost time with hourly wage for each employee. Subsequently, the estimated monthly and yearly costs were obtained by multiplying these results with 2 and 24, respectively.

III. Results

Table 1 shows the distribution of the employees by socio-demographic characteristics and health status. Approximately 70% of the employees were aged 40 and under. The majority of the staff were female, 75.6% were married and 72.5% had children. A significant majority declared to be in good health. Although the genders and health statuses of the participants from the two hospitals were similar, the KHSH respondents were older with longer years of service and there were a greater number of health professionals who were married and who had children at KHSH. In addition, the majority of the KUMFH respondents were physicians while the majority of the KHSH respondents were nurses and midwives.

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Table 1.
Distribution of the Hospital Staff by Socio-Demographic Characteristics

Variables		KHSH		KUMFH		Total (n= 951)	
		Number	%	Number	%	Number	%
Age (years)	< 30	100	16.3	153	45.5	253	26.6
	30–39	288	46.8	118	35.1	406	42.7
	≥ 40	227	36.9	65	19.3	292	30.7
Gender	Female	332	54	189	56.3	521	54.8
	Male	283	46	147	43.8	430	45.2
Marital Status	Married	488	79.3	231	68.8	719	75.6
	Unmarried	127	20.7	105	31.3	232	24.4
Children	Yes	497	80.8	192	54.1	689	72.5
	No	118	19.2	144	45.9	262	27.5
Occupation	Physician	59	9.6	126	37.5	185	19.5
	Nurse-midwife	243	39.5	107	31.8	350	36.8
	Other health professional	210	34.1	60	17.9	270	28.4
	Administrative staff	103	16.7	43	12.8	146	15.4
Years of Service	1–5 years	65	10.6	142	42.3	207	21.8
	6–10 years	101	16.4	76	22.6	177	18.6
	11–15 years	119	19.3	49	14.6	168	17.7
	16–20 years	172	28	40	11.9	212	22.3
	21 years +	158	25.7	29	8.6	187	19.7
General Health Status	Excellent	32	5.2	13	3.9	45	4.7
	Very good	93	15.1	75	22.3	168	17.7
	Good	269	43.7	161	47.9	430	45.2
	Fair	192	31.2	75	22.3	267	28.1
	Poor	29	4.7	12	3.6	41	4.3

The number of days the hospital staff had not showed up at work due to illness and non-illness related reasons, as well as, the number of days they had taken annual and sick leaves are given in Table 2. In general, the KUMFH staff had a greater tendency to be absent from work than the KHSH staff. In the last two weeks, illness related and non-illness related absences per employee were 0.44 and 0.48, respectively. Based upon this average, the monthly and yearly estimates were respectively (0.44 × 2) 0.88 days and (0.44 × 24) 10.56 days for illness related absence and respectively (0.48 × 2) 0.96 days and (0.48 × 24) 11.52 days for non-illness related absence. KUMFH had a greater number of scheduled absences than KHSH in the last two weeks and, in general, the number of days on annual leave (0.32 days) was greater than that on sick leave (0.22 days).

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Table 2.
Absence Distribution of the Hospital Staff (Days)

Variables		KHSH (n= 615)		KUMFH (n= 336)		Total (n= 951)	
		M	SD	M	SD	M	SD
Unscheduled absence	Illness related absence	0.36	0.90	0.58	1.67	0.44	1.23
	Non-illness related absence	0.45	1.03	0.54	1.25	0.48	1.11
Scheduled absence	Sick leave	0.18	0.80	0.29	1.14	0.22	0.93
	Annual leave	0.26	0.95	0.44	1.42	0.32	1.14

Table 3 shows that the cost of illness related absences per employee was greater for KUMFH while the cost of non-illness related absences and the total cost of absences were greater for KHSH. The is due to the higher number of employees working at KHSH (615) compared to KUMFH (336). In the last two weeks, both the cost of health-related absences per employee (68.51 TRY) and the cost of non-health related absences per employee (36.81 TRY) of the KUMFH staff were greater than those of the KHSH staff.

Table 3.
Cost of Absenteeism (TRY)

Hospital	Cost of Absenteeism								
	Illness related costs			Non-illness related costs			Total cost of absenteeism		
	2-weekly	Monthly*	Yearly*	2-weekly	Monthly*	Yearly*	2-weekly	Monthly*	Yearly*
KHSH	22,641.10 (36.81)	45,282.21 (73.63)	543,386.51 (883.56)	29,368.28 (47.75)	58,736.56 (95.51)	704,838.75 (1146.08)	52,009.39 (84.57)	104,018.78 (169.14)	1,248,225.26 (2029.63)
KUMFH	23,018.43 (68.51)	46,036.86 (137.01)	552,442.36 (1644.17)	18,980.90 (56.49)	379,61.79 (112.98)	455,541.50 (1355.79)	41,999.33 (124.99)	83,998.66 (249.99)	1,007,983.92 (2999.95)
Total	45,659.54 (48.01)	91,319.07 (96.02)	1,095,828.90 (1152.29)	48,349.35 (50.84)	96,698.35 (101.68)	1,160,380.25 (1220.17)	94,008.71 (98.85)	188,017.43 (197.70)	2,256,209.11 (2372.46)

Note: The values given in parentheses represent the average costs of absenteeism per employee. (*) Represent estimates (Monthly= 2-weekly × 2; Yearly= 2-weekly × 24).

According to Table 4, employees aged 30 and under, as well as, married employees and female employees had a greater tendency for absenteeism. In addition, nurses and midwives displayed greater absenteeism than other occupational groups, and the KUMFH staff and the employees with 1–5 years of service had a higher tendency to be absent. However, the results indicated that absenteeism did not vary with the general health status of the staff.

Table 4.
Absenteeism by Socio-Demographic Characteristics

Variables		n	M	SD	t/F*	p	Post Hoc.
Gender	Female	521	6.95	12.91	2.70	0.007	
	Male	430	4.84	10.76			
Age (years)	< 30[1]	253	4.52	11.99	7.399*	0.001	1-2 p=0.030
	30–39[2]	406	2.78	7.67			1-3 p<0.001
	≥40[3]	292	1.72	5.43			
	Total	951	2.92	8.57			
Marital Status	Married	719	5.52	11.15	-2.147	0.032	
	Unmarried	232	7.46	14.33			
Occupation	Physician[1]	185	2.07	6.59	7.817*	<0.001	1-2 p=0.005
	Nurse-midwife[2]	350	4.66	10.96			2-3 p<0.001
	Other health professional[3]	270	1.89	7.18			2-4 p=0.003
	Administrative staff[4]	146	1.72	5.39			
	Total	951	2.92	8.57			
Years of Service	1–5 years[1]	207	4.34	11.26	2.559*	0.037	1-5 p=0.033
	6–10 years[2]	177	2.82	7.70			
	11–15 years[3]	168	3.28	10.27			
	16–20 years[4]	212	2.26	6.63			
	21 years and over[5]	187	1.86	5.45			
	Total	951	2.92	8.57			
Hospital	KHSH	615	5.09	9.31	-3.116	0.002	
	KUMFH	336	7.63	15.73			
General Health Status	Perfect[1]	45	2.66	9.02	1.179*	0.318	
	Very good[2]	168	1.95	8.51			
	Good[3]	430	2.90	8.78			
	Fair[4]	267	3.32	7.71			
	Poor[5]	41	4.78	10.96			
	Total	951	2.92	8.57			

The biggest disadvantages of hospitals are that they consist mostly of female employees because generally females have high absenteeism rates. In this study, the occupational group with the highest number of

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absenteeism among hospital staff was also seen in nursing-midwife profession group. Accordingly, it has been determined that the costs of these problems are mostly in the nurses-midwives profession group. It is possible for women to have more absences due to too much work in their career life, pregnancy or responsibilities related to child care etc.

Older employees who are afraid of losing their current job or who are reluctant to find a new job are avoiding absenteeism. Especially their sickness absenteeism is longer than other employees. Another explanation is related to the moral attitudes of older workers on absenteeism. It is likely that an employee who just starts working or changes institutions too often has a lower dependency on the organization. For this reason, it can not be focused and more absenteeism can be expected.

According to KHSH, KUMFH's employees are more likely to absence because of more workload, longer working hours and more restrictive pressures on the permits and sick leave. Therefore, the cost of absenteeism per capita in KUMFH is also higher.

IV. Discussion

In this study, it was researched relationships between absenteeism and socio-demographic variables, the dimension and cost of absenteeism that is an important managerial and organizational problem in hospitals. Numerous factors such as individual characteristics, work and family life, health problems and organizational factors affect absenteeism.

Past research indicates that absenteeism is generally most prevalent among women (Bierla et al., 2013; Josephson et al., 2008; Isah et al., 2008; Kivimaki et al., 2001; Al-Shammari et al., 1994; Kristensen et al., 2010; Rajbhandary and Basu, 2010), which is attributed to the social roles assigned to women. A higher rate of absenteeism is reported for women in comparison to men as primarily women are responsible for domestic chores and child care (Josias, 2005). The present study similarly revealed that female employees were more absent from workplace than male employees.

There is a bidirectional relationship between absenteeism and age. According to one view, absenteeism due to illness or other causes increases with age (Josephson et al., 2008; Josias, 2005; European Foundation for the Improvement of Living and Working Conditions, 2010; Tripathi, 2010). Josephson et al. (2008) reported prolonged sickness absence in nurses aged 50 and over in Sweden. Similar results were also reported in Nigeria (Isah

et al., 2008), Canada (Gorman et al., 2010) and Finland (Kivimaki et al., 2001). A study conducted in Denmark revealed that hospital employees in the 50–69 age group had fewer and shorter absences than the other age groups (Kristensen et al., 2010). Another study found that employees aged 25–45 had fewer absences than younger and older employees, indicating that absences were longer but less frequent in older employees whereas they were shorter but more frequent in younger employees (Örücü and Kaplan, 2001; Josias, 2005; Health and Safety Executive, 2005). A study conducted with nurses in the United States on the relationship between absenteeism and age showed that younger nurses took more days off due to illness than senior nurses (Trinkoff et al., 2001). Furthermore, a study carried out in Nigeria among all health professionals reported that younger employees had shorter but more frequent absences (Bamgboye and Adeleye, 1992). Fear of losing one's job or lack of self-confidence for finding a new job are counted among the causes of the increased rate of presenteeism in older employees. Another cause of the lower tendency of absenteeism in older employees might be their ethical attitudes. Older employees avoid being absent as much as possible while younger employees do not refrain from taking a sick leave (Bierla et al., 2013). This behavior of younger employees is attributed to their recent introduction to working life and low organizational commitment. Work can appear to be heavier than it actually is for employees at the beginning of their career, which could lead to work avoidance. Likewise, it is quite possible for a new employee to scarcely have any organizational commitment. Although senior employees are more experienced, knowledgeable, dependable and loyal, their recuperation and return from an accident or illness takes longer than younger employees. Similar to the literature, the results of the present study also showed that younger employees at the beginning of their career (1–5 years of service) displayed greater absenteeism. In a study conducted in 2011 to assess the level of absenteeism among the paramedical staff employed at General Pediatric and Neonatology Hospital, the researchers found that 30-year-old nurses with 5 years of service or less had a higher absenteeism rate (Tsiba et al., 2013).

According to the present study, unmarried employees were more frequently absent from work. Married physicians and nurses were reported to have a lower absenteeism rate in Finland (Kivimaki et al., 2001) while, in Sweden, domestic responsibilities were reported to increase the possibility of absenteeism in female nurses (Borda and Norman, 1997) and, in Nigeria, married health professionals were more frequently absent from work due to domestic problems (Isah et al., 2008).

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Studies have consistently identified nurses and midwives to be the occupational group who experienced the greatest absenteeism problem among healthcare professionals. Health Canada (2004) reported an increased rate of absenteeism among nurses in Canada and argued that long working hours and nursing staff shortages exacerbated this situation. Eriksen et al. (2003) indicated that sickness absence rate among nurses' aides was higher than other occupational groups in Norway. They concluded that the decision to be absent from work was related not only to the severity of the illness but also to various social, psychological and physical factors. Working conditions might contribute to illness and illness might influence the decision to be absent from work (Eriksen et al., 2003). In addition, absenteeism decreases as hierarchical position rises (Bierla et al., 2013). The probability of absence significantly decreases in employees with greater responsibilities. Similarly, a study conducted in Finland reported significantly lower absence rates for the physicians than the nurses (Kivimaki et al., 2001) and another study carried out in the United Kingdom identified greater absence rates and durations for the ancillary staff than the physicians and the dentists (Ritchie et al., 1999). During the influenza epidemics in Hong Kong between 2004 and 2009, absenteeism was highest among the administrative staff and lowest among the medical staff (Ip et al., 2015). The study conducted with the participation of the healthcare professionals in a tertiary care hospital in Canada in 2004–2005 reported that 72% of the staff were absent at least once per year and that the median number of days of absence per person per year was 7 days (Donovan, 2006). Again in Canada, the medical, nursing, technical and support staff were absent for 6, 15.8, 13 and 16.6 days, respectively, in 2011 (Statistics Canada, 2011). Although the factors underlying the greater absenteeism of nurses in comparison to the other health professionals are not precisely known in the present study, existing literature suggests various causes such as family issues, lack of motivation, illness, finance, favoritism, unfriendly nurse managers, long working hours, excessive workload, difficult working conditions, lack of equipment, inequitable promotions, staff shortages and lack of a reward system for absenteeism among nurses (Mudaly and Nkosi, 2015). The principal factors that underlie these causes are poor management and unfavorable working conditions (Munro, 2007; The Minister of Public Works and Government Services Canada, 2007; Becker and de Oliveira, 2008).

Absenteeism behavior in healthcare professionals also varies with respect to the hospital they are employed at. KUMFH (a university hospital) employees displayed greater absenteeism than KHSH employees (a public hospital). This greater tendency for absenteeism in KUMFH

employees than KHSH employees is due to the greater workload, longer working hours and restrictive constraints regarding annual and sick leaves. The fact that the recollection period for the determination of absences was limited to two weeks might have been a significant limitation for the study. Although a two-week recollection period was chosen to help the respondents to recall the number of days they were absent on annual or sick leave, this two-week recollection period might have prevented the projection of the actual absenteeism of each employee throughout the year.

In addition to demographic characteristics and working conditions, current health status is another factor that results in absenteeism (Rantanen and Tuominen, 2011). Although existing literature indicates higher absenteeism in employees with poor health (Bierla et al., 2013), in the present study, absenteeism did not vary with respect to the health status. In Sweden (Peterson et al., 2011), Norway (Eriksen et al., 2003) and Denmark (Kristensen et al., 2010), researchers have reported a greater probability of sickness absence for healthcare professionals who complained of health problems. Although the most common cause of absenteeism is health issues, broader problems such as monotony and work-related stress are also mentioned in some countries. Musculoskeletal problems and respiratory conditions are the most common two causes, followed by back pain and pain due to recurrent injuries. In the United Kingdom, musculoskeletal problems and psychiatric problems account for respectively one fourth and one fifth of the total number of absent days (Office for National Statistics, 2014). 17.3% of healthcare professionals were reported to have been absent for 1–2 hours due to musculoskeletal problems in the last four weeks. Both productivity and output were affected by musculoskeletal problems (Campo and Darragh, 2012). Likewise, in a Portuguese hospital, nurses and nurses' aides missed an average of 6.2 days per person due to musculoskeletal problems between 2009 and 2013 (Queiroz-Lima and Serranheira, 2016). In the study conducted by Jain et al. (2013) to investigate the impact of depression on productivity and its cost burden, the researchers revealed that depression of any severity (mild, moderate or severe) decreased productivity and that absenteeism increased with the severity of depression. However, health issues should not be considered as a valid excuse for taking a leave or being absent on its own. Despite their health problems, factors such as organizational commitment, the social cost of absence, pressure for attendance and sick pay regulations influence an employee's decision to take a sickness leave or to be absent (European Foundation for the Improvement of Living and Working Conditions, 2010).

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Research has revealed the great extent of the cost of absenteeism to organizations. Among the staff of both hospitals, the nurses and the midwives were the occupational group who had the highest absenteeism and therefore resulted in the greatest cost. The annual cost per employee was 2372.46 TRY. The yearly loss related to absenteeism is estimated to be billions of dollars only in Canada (Williams, 2003). The medical, pharmaceutical, presenteeism and absenteeism costs for 10 chronic health conditions in the staff employed at the Dow Chemical Company were evaluated. In 2002, the average costs per employee were 2278 USD for medical care, 661 USD from absenteeism, and 6721 USD from work impairment, while the total labor costs due to presenteeism, medical care and absenteeism were 6.8%, 2.3% and 1.0%, respectively (Collins et al., 2005). The cost of the sickness absences for nurses and nurses' aides employed at a Portuguese hospital between 2009 and 2013 was 189,679.87 EUR, which was estimated at approximately 10% of total hospital costs (Queiroz-Lima and Serranheira, 2016). Cardiovascular diseases, musculoskeletal disorders, ear, nose and throat problems, and cancer were the costliest health issues resulting in absenteeism among American employees. The average cost of psychiatric problems per employee was 179 USD, constituting 4.8 % of the total healthcare costs (Goetzel et al., 2003). Sullivan and Decker (1988) found that the yearly average unscheduled absence of health professionals was 6.5 days and that the replacement of an absent employee with another nurse cost a yearly amount of 800–1400 USD per capita. The cost of sickness absences to the British sectors varies between 8.4 billion GBP and 12 billion GBP per year and the loss for absences related to mental health problems constitutes 40% of the total loss due to sickness absences (The Sainsbury Centre for Mental Health at Work, 2009). In France, Germany, Italy, Spain and England, the absenteeism costs for schizophrenia caregivers and other caregivers in 2010, 2011 and 2013 were 2457 EUR and 1458 EUR per person (Gupta et al., 2015).

Furthermore, it is not possible to conduct a head-to-head comparison between countries due to methodological differences. The study carried out by the European Foundation for the Improvement of Living and Working Conditions (2010) to evaluate the extent of absenteeism and the policies developed to combat absenteeism revealed two fundamental findings. The first finding is the limited amount of knowledge about the extent, causes and costs of absence while the second finding is the change in management and control policies for absenteeism. Data on absenteeism are very scarce in some countries and missing in others. In addition, the difference in the definitions and methods of measurement complicate international comparison.

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V. CONCLUSION and RECOMMENDATIONS

Research clearly demonstrates the fact that absenteeism is a significant problem among healthcare professionals. Absenteeism is one of the most important difficulties in improving organizational efficiency and productivity. Therefore, absence management and understanding absenteeism from a human resources perspective is of great import. However, zero absenteeism does not mean that employees have better health and work-life conditions. Sometimes employees refrain from being absent although they are sick, which is referred to as presenteeism. Presenteeism can result in decreased productivity and loss of labor.

Nurses and midwives constitute the majority of the hospital staff and are the employees responsible for the highest productivity loss and indirect cost. The majority of nurses and midwives are women and they generally have irregular working hours and heavy workloads. Conversely, they can display a greater tendency for absence than other occupational groups due to being paid lower wages. Staff shortages are only one of the frequently experienced issues in hospitals and most of the time they lead to many other problems. Therefore, some restrictions should be implemented to prevent abuse of the flexibility of annual and sick leaves by employees. In addition to hospital administrators, nurse managers also have a key role in decreasing absenteeism among nurses.

The study results revealed that the age, gender, marital status and working time of health professionals were among the other factors affecting the increase in absences. Employees under the age of 30 and newly hired employees can be more absent due to low organizational commitment. Although absenteeism did not vary with respect to perceived health status in the present study, the rate of absenteeism could differ depending on employee health status. Although unfavorable health conditions generally lead to unscheduled absences, the present study did not reveal the existence of a relationship. Hospital staff who are in poor health spend this period of time either by going on a sick leave or by working while sick (i.e. presenteeism).

A systematic staff planning should be carried out to minimize the negative impact of absent employees by accounting for the possibility of unexcused absences. Each unit supervisor needs to develop different solutions to these estimated probabilities. In order to prevent a decline in patient care and service quality due to absences, the reward, wage and promotion systems should be regulated. Furthermore, employees who

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would benefit from the right to a marriage and maternity leave, an unpaid leave, and a military service or other long-term leave should be predetermined and staff planning should be reorganized. Absenteeism causes numerous financial costs for administrators such as overtime pay and the recruitment and training of new employees. Absenteeism is not only a cost burden for organizations but also costly to society and individuals. High absenteeism rates could result in decreased individual income and labor supply.

Inconsistency and deficiency in monitoring and tracking absences are among the major problems in absence management. Most importantly, the definitions and methods of measurement for absenteeism vary between countries. First of all, these variations should be precisely identified and a standard practice should be implemented in organizations for relevant data. Absenteeism is a critical organizational problem at both national and international level. Further research should be conducted on the identification of the causes of absenteeism and the proportions of the types of absence in total indirect costs should be clearly differentiated.

An 'Employee Support Unit' should be set up in hospitals to ensure a more secure, healthy and productive working environment and employees should be supported in terms of both health and social service. To that end, early diagnosis and treatment of illness through periodic examinations, promoting the utilization of personal protective measures in the workplace, providing health education and counseling services, refraining from assigning additional responsibilities outside the job description, promoting organizational commitment, improving relationships between colleagues and minimizing work stress by encouraging participation in recreational activities would greatly contribute to decreasing absenteeism. Therefore, in order to identify the causes of absenteeism and to develop effective solutions, a more detailed insight could be obtained particularly through sampling from occupational groups with higher absenteeism rates and conducting qualitative interviews.

This study did not include private and military hospitals. Therefore, as the study results are limited to these two hospitals, the researchers would advise caution in generalizing these results to other hospitals. Larger scale studies including private and military hospitals should be carried out for a more comprehensive analysis. Moreover, this study was conducted cross-sectionally and did not investigate the impact of seasonal diseases such as flu, cold and allergies on absenteeism. Future studies

should be designed to cover absenteeism resulting from seasonal diseases in order to achieve more robust results.

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