Singapore Med J 1999; Vol 40(5):349-351

Trends in Absenteeism Rates Following Psychological Intervention-Preliminary Results

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ABSTRACT

Objective: To determine the relationship between absenteeism rates and psychological intervention over a 6-month period in an agency with 334 employees in Klang Valley, Malaysia, which had the highest absenteeism rates.

Methods: The absenteeism rates were measured every 6 months between January 1991 and December 1992. All employees were interviewed and those who scored one positive item on the diagnosis interviewed schedule (DIS) screening, were given counselling, referrals to appropriate agencies and treatment by 2 psychiatrists.

Results: Between July and December 1992, the frequency of absenteeism decreased, but the severity rate of absenteeism and the mean length (of a spell and lost time percentage) were higher compared to those in the preceding 6 months. We found that the percentage of absenteeism rate of less than 7 days was significantly reduced between July and December 1992, as compared to July and December 1991.

Conclusion: Psychological interventions were likely to have contributed to the decreased absenteeism rates of less than 7 days but not for longer periods of absenteeism, which can be attributed to more serious illness or injuries.

Keywords: absenteeism, trends, psychological interventions, GHQ

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INTRODUCTION

Evidence exists to show that personal stress and employees' productivity are related and that employee assistance programmes improve employee productivity without reducing employee stress[1]. It has also been documented that for pregnant women, the frequency of sick leave increases with work load but this is related to the degree of their job satisfaction and job security[2]. Sickness absence also increases for moderate drinkers of alcohol, as reported for both male and female white collar workers[3].

Chemical dependants have also been noted to be significantly different in terms of absenteeism as compared with control groups[4]. It is also reported that drinking excessive alcohol and smoking are considered part of risk behaviours that contribute to the increase in absenteeism and healthcare costs[5].

Qualitative methods to study absenteeism includes using focus groups and these have suggested that: (a) the feeling of well-being at work; (b) the organisational structure; and (c) the department leader, are factors that contribute to absenteeism rates[6].

It has been suggested in other studies[1,3,7] that an occupational health service with an absenteeism control programme[8] could help to examine the various categories of absenteeism, develop accurate tracking systems and determine acceptable levels of absenteeism[8]. It also suggests early interventions to identify and develop preventive strategies for the individuals and the company.

The aim of this study was to examine the relationship between absenteeism rates and psychological (psychotherapeutic) interventions over a 6 month period in an agency which had the highest rates of absenteeism as reported in a local study[9].

METHOD

This agency was selected for psychological intervention from July to December 1992 because it had the highest indices of absenteeism among 62 agencies, which had responded to a study involving a total of 220 sampled agencies in Klang Valley, Selangor.

The questionnaires used included the Malay translated version of the General Health Questionnaire, (GHQ)[10], Diagnostic Interview Schedule (DIS) screening[11], physical health and stress at work questionnaire developed by the team. Two research assistants were trained to administer the questionnaire which were all self rated, but the interviewer aided whenever the interviewees had problems answering the questions.

All 334 employees in this agency were screened over a period of one month in July 1992. All those who answered any question affirmatively on the DIS screening questionnaire and an equal number of other workers who did not, were interviewed by two psychiatrists using the DIS[11] interview schedule, leading to a diagnosis using the DSM III-R[12].

The results of the General Health Questionnaire, the Stress at Work questionnaire and the Physical Health questionnaire were used to look at the reasons for absenteeism. The controls were matched

by age, race and sex; the 2 psychiatrists were 'blinded' to those who were positive on the DIS screening. The controls were also necessary for the validation of the 'GHQ' in the community to be reported later.

Counselling, referral to appropriate treatment agencies and even medication, when necessary, were provided to all the employees interviewed. The research team which composed of two research assistants and two psychiatrists, were present at the agency between July and December 1992, and all the employees were encouraged to meet with the team whenever they had problems.

The indices of absenteeism employed for this study

1. Frequency rate of sickness absenteeism =

$$\frac{\text{Total number M/C (medical certificate) slips in 6/12}}{\text{Average number of workers}}$$

2. Severity rate of sickness absenteeism =

$$\frac{\text{Total number of days of medical leave in 6/12}}{\text{Average number of workers}}$$

3. Mean length of spell =

$$\frac{\text{Total number of days of medical leave in 6/12}}{\text{Total number of medical certificates}}$$

4. Lost-time percentage =

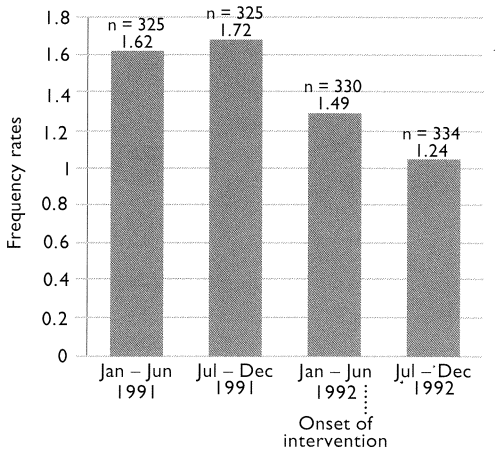
$$\frac{\text{Total number of days of medical leave in 6/12}}{\text{Total number of working days for all workers}} \times 100$$

The above were calculated for 4 periods: 1) January 1991 – June 1991; 2) July 1991 December 1991; 3) January 1992 – June 1992, and 4) July 1992 – December 1992. The dates were obtained from records available in the agency.

The length and reasons of medical leave were also examined and reclassified arbitrarily using 7 working days and above as the cut-off point to differentiate between milder illness which could possibly avoid absenteeism and those due to more severe illnesses or injury.

The rates for staff retirement, staff transfers and new employees were also noted. Chi-square was used to compare rates between the different periods in time at $p = \leqslant 5.05$.

n = average number of employees



n = Average number of employees

Fig 1 – Frequency rates of sickness absenteeism from January 1991 to December 1992.

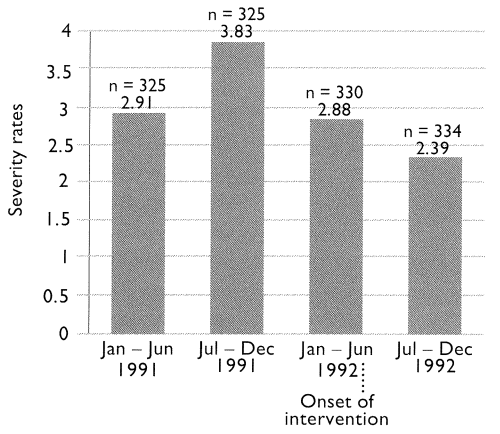


Fig 2 – Severity rates of sickness absenteeism from January 1991 to December 1992.

RESULTS

Fig 1 shows the frequency rate of absenteeism to be lower for the period July to December 1992 than for the period January to June 1992. The decrease was statistically not significant. However there was a significant decrease when the frequency rate of absenteeism for July to December 1992 was compared to July to December 1991 ($p < 0.04$).

Fig 2 shows the severity rates of sickness absenteeism to be higher in the periods July to December 1992 and July to December 1991 as compared to January to June 1992 and January to June 1991. The decrease in the first 6 months of both years was significant compared to the last six months of both years ($p < 0.007$).

The mean length of absenteeism (2.73 days) was longer for the period July – December 1992, as compared with other periods, but was significantly more so when compared with January – June 1992 (1.92 days, $p < 0.01$).

There was a marginal non-significant increase in lost-time percentage rates between July and December 1992 (2.2) as compared with January to June 1992 (1.92). The rates were also not significantly lower than for the period July to December 1992 (2.48).

Table I shows the total days of medical leave taken for a period of seven and more days as well as less than seven days. The period of intervention from July – December 1992 shows a significant decrease in the total length of medical leave of less than seven days compared with the preceding periods. The total length of medical leave of less than seven days during the July – December 1992 intervention period was significantly less than those of the other periods, ie. July – December 1991 and January – June 1992.

Table I – Trends in sickness absenteeism 1991 – 1992

	Less than seven days	Seven days and more	Total days of medical leave (100%)
Jan – Jun 1991	655 (69.1%)	293 (30.93%) n = 14 range = 7 – 64 mean = 20.9	948
Jul – Dec 1991	918 (74.1%)	321 (25.9%) n = 8 range = 15 – 61 mean = 40.12	1239
Jan – Jun 1992	614 (64.5%)	337 (35.5%) n = 11 range = 7 – 64 mean = 30.67	951
Jul – Dec 1992	527 (58.1%)	397 (41.9%) n = 16 range = 7 – 65 mean = 17.43	924

DISCUSSION

The last six months of the year coincide with long periods of school vacations, and all the indices of sickness absenteeism were increased during that period in 1991 when compared to the preceding six months. This seasonal variation could be coincidental; it could imply a need to be at home, or it could be that the end of the year, coinciding with the monsoon season, could account for more illnesses. To keep these variables similar, the indices over the last six months of the year between 1991 and 1992 were compared.

It shows that there was a significant drop in mean frequency rate, mean severity rate during the period July – December 1992, which is the intervention, as compared to July – December 1991, a year before.

The mean length of spell, however, increased significantly and this is shown in Table I, which indicates that there was a significant drop in medical leave of less than seven days and a significant increase in longer periods of medical leave of more than seven days. This suggests that intervention had succeeded in reducing short periods of medical leave while the longer periods were not as drastically changed. There was also an overall significant decrease in the total number of days of medical leave during the intervention period as compared to July – December 1991. The figures over the two years do not necessarily indicate that there is an overall trend towards decreasing rates. The staff turnover was also low with 1.5% retiring annually, 1% new entries, and 1% taking transfers out of the agency. These would not have affected the final outcome.

This agency was corporatised on 1 September 1990, before the study period. The effects of corporatisation was present throughout the study period and was most unlikely to influence the outcome of the results.

ACKNOWLEDGEMENTS

This project was supported by IRPA grant 03-07-03-070. Our thanks to the staff of the agency who participated whole-heartedly; Dr Osman Che Bakar, Prof Graham Mellsop and Assoc Prof Dr Kok Lee Ping for their advice and my research assistants Puan Sumiah Samsi, Cik Zurita Abu Kassim, Cik Siti Meriam Ibrahim and Cik Fariza Zan for their invaluable help; the staff and management of Tenaga Nasional, Kapar Kelang, all other agencies who co-operated; and, last but not least the Research Committee of the Faculty of Medicine UKM, without which this study would not be possible.

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