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Reduction of sickness absence by an occupational health care management program focusing on self-efficacy and self-management

Running title: Occupational Health Care Management

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Abstract

Background: The aim of occupational health care management programs (OHMP) is to improve the health status of employees, increase work ability and reduce absence time. As better health is associated with better coping abilities, work-related self-efficacy and self-management are important abilities that should be trained within OHMPs.

Objectives: To study the effectiveness of an OHMP including special interventions to enhance self-efficacy and self-management.

Methods: Effects of an OHMP on sickness absence was studied by comparing an intervention group of 159 employees and two control groups with 250 employees from the German Federal Pension Agency. A core feature of the OHMP were group sessions with all members of working teams, focussing on self-efficacy and self management of the individual participant as well as the team as a group (focus groups). Participants in the OHMP were asked for their subjective evaluation of the focus groups. Rates of sickness absence were taken from the routine data of the employer.

Results: Participants of the OHMP indicated that they had learned better ways of coping and communication and that they had generated specific intentions to make changes in their working situation. The rate of sickness absence in the intervention group decreased from 9.26% in the year before the OHMP to 7.93% in the year after the program, i.e. by 14.4%, while there was an increase of 7.9% and 10.7% in the two control groups.

Conclusions: The data suggest that OHMP with focus on self-efficacy and self management of individuals and teams are helpful in reducing work absenteeism.

Keywords Occupational health care management, self efficacy, focus group, team training, sickness absence, prevention

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1. Introduction

Health problems in connection with the workplace, which are associated with sickness absence, absenteeism, work overload, work dissatisfaction or reduced work productivity are multidimensional phenomena [15, 28, 32]. Health problems can be affected by work organization [4], environmental endangerment [20], organizational changes [3], intra-group behavior and team climate [10, 14, 29], work demands and controlling by superiors. Psychological and psychosomatic factors seem to be of greater importance for workplace health and absenteeism, than somato-medical health impairments [6, 8, 16, 19, 26, 32].

This is especially relevant for employees in office jobs and even more so in the case of civil servants. Epidemiological data show that in the public service domain the rates of sickness absence are almost double that of industry, building, or manufacturing sectors [17]. In these jobs there are no physical strains but special psychological burdens due to complex organizational structures and interactional processes [22, 2]. Large agencies are organized in such a way that there are explicit hierarchical structures, where individuals do not have the right to make decisions on their own but must always try to reach agreement with groups of decision-makers and superiors, thus competencies and decision processes are very complex and can provoke anxiety [20]. These structures can induce feelings of insecurity, being lost, frustration, helplessness, and anxiety in the context of rivalries with colleagues, sanctions by superiors, or uncertainty about what one has to do or is not allowed to do. Individuals often feel lost in such huge organizations and have the impression that there is nothing they can do to shape their working life. In addition, individuals who seek employment as a civil servant often have anxiety-prone personalities and are, therefore, especially unable to cope with the structures of large authorities [20,

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30]. The consequence is an increased rate of irritation, discontent, frustration, inner withdrawal, and anxiety, which is associated with increased rates of sickness absence and work impairment [18].

A definition of occupational health management (OHM) was given in the declaration of occupational health in the European Union 1997 [8]. OHM includes all activities by employers, employees and society which aim at improving health and wellbeing at the workplace. This includes improvement of work organization and work environment, support of an active communication and training of interpersonal competencies. Occupational health management programs (OHMP) have been implemented in many companies to improve health and reduce absenteeism [11, 31]. In modern work situations, reduction of mental stress in the workplace is of primary importance [27, 1]. Many reports in the literature suggest that subjective feelings of control over one's work as well as social support and good communication within a team are important for mental health status and psychological well-being of employees in the workplace, for work productivity, and presenteeism [10, 13, 22, 23, 24, 25, 32].

Given this theoretical basis an OHMP was initiated by the German Federal Pension Agency. A core feature of this OHMP were group sessions with all members of working teams, focussing on self-efficacy and self management of the individual participant as well as the team as a group (focus groups). Self-efficacy and self-management in this context means the ability for self-initiated proactive behaviour at work, self-organisation behaviour, and the ability not passively to wait what happens next but to act oneself and in a team when problems have to be solved. Self-efficacy means to know that one´s actions can lead to results.

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As there is a lack of data on the efficacy of OHMPs [12] a controlled study was conducted to test the effects of the programme in respect to self evaluation of the participants and the rate of sickness absence.

2. Method

Institution and participants

The German Federal Pension Agency (Deutsche Rentenversicherung Bund) is responsible for the administration of pensions for about half of the German population. It is a big institution with several thousand employees. It was decided to start an OHMP in one of their departments with 159 employees. For the purposes of this study two other departments were selected as control with 216 and 234 employees. The control departments had the same working and organisational structure but did not participate in the OHMP.

OHMP

The OHMP consisted of a series of courses and public lectures on general health matters. Their content was selected according to a prior survey of interests in the employees. 69% of the 159 employees participated in a review of their workplace on how to sit in front of computer screens or how to organize the workflow, 15.7% participated in diet courses, 5.7% in courses in gymnastics and dancing classes, 5% in stress reduction courses, and 5% in laughing classes.

GREAT focus groups

As central part of the OHMP were ”focus groups”. Nine teams from the department agreed to participate in such focus groups, which accounted for 55% (80% female, age 35 to 50 years) of

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the employees of this department. The groups were conducted outside the normal working day and workplace in a rehabilitation center.

The details of the interventions during the group sessions were described in detail in a manual. It advises how to motivate participants to speak with each other and not with the group leader, or how to develop solution-oriented ideas and specific plans for action. The participants were told that the aim is to find new solutions for a better coping with their daily duties and hassles. The members of the group were asked for their ideas, questions and problems concerning their work-situation, or other topics they wanted to speak about in the group. Topics to be reviewed and discussed in the groups were:

- Rooms: Are there needs for changes or optimization concerning rooms and furnishing?
- Work: Why is one's own work of importance? Are there needs for changes or optimization concerning work duties, work organization, interaction with superior institutions, needs for training, relation between demands and feasability?
- Colleagues: Are there needs for changes or optimization concerning the interaction between colleagues?
- Need and possibilities for support: Does somebody in the group need support because of psychological or somatic problems? Everybody can have problems and need help some day.
- Resources: What is the strength of this team? What are the specialties of the team? What is identity of the team?

The aim of the focus groups was, independent of the topic at hand, to ask what oneself can do to optimize work processes and social interactions. Whenever participants started to complain about something, they were advised not to wait for "the institution" or others to solve the problem but to take it into their own hands. The leading theme was: "Do not wait for others to solve your problems, stand together and solve your problems yourself". At the end of the session

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a protocol was written with specific goals of action, in order to allow a self-evaluation later on. The specialty of these focus groups was that they are directly focusing on the concrete work situation and on planning concrete actions, and not only on stress management in general.

The groups were moderated by a physician who also worked in this institution, and therefore was familiar with internal organizational structures, but did not belong to the same department and did not have any superior role towards the group participants. The group moderator was trained and supervised by one of the authors (M.L.), an experienced psychotherapist, who had developed the rational of the group and had written the manual. The group moderator did not report any information about group contents to persons who did not participate in the group.

Evaluation

Participants were asked anonymously to evaluate how they had experienced the GREAT focus group. This was done by a short questionnaire with questions on whether they liked the organisation of the group, the topics, and whether they see possibilities for transfer for themselves or colleagues.

The pivotal outcome criterion for the evaluation of the OHMP was the rate of sickness absence in the intervention department over one year before and in the year after the OHMP as compared to the two control departments. The rates of sickness absence are routine data from the personnel management department of the agency. As there are narrow legal limitations with respect to the handling and publication of data on employees the global sickness rate were the only data which could be used for this publication. All analyses could only be done on the accumulated level of the departments as it was not allowed to study individuals. This means that a person's response to the survey questions could not be matched to his or her rate of sickness absence.

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3. Results

Eighty-seven participants gave a rating on how they had experienced the GREAT focus group. 92% of the participants were very satisfied with the context factors like travel to the location, rooms, meals and drinks. 74.7% said that an open exchange concerning their problems was possible; 86% saw the group as helpful for the solution of problems; 41% expressed a motivation to change behavior or situations; 64% said that they had gained insights that they felt to be useful for improving their working situation; and 79% said that they would encourage colleagues to participate in such a group.

[insert figure 1 about here]

Figure 1 shows that in the intervention department there is a reduction of 14.4% in days lost due to sickness absence for all employees, i.e. from 9.26% of 159 employees in the year before the occupational health care management to 7.93% in the year after the program. In the same period, there is an increase in sickness absence of 7.9% (8,03% to 8,14% of 216 employees) and 10.7% (7,26% to 8,04% of 234 employees) in the two control departments in which no occupational health management activities and no GREAT focus groups took place.

4. Discussion

In the literature there is evidence that patients with work-related stress complaints and sickness absence are difficult to treat [7]. According to meta-analytic results, stress-intervention programs have limited effects in respect to absenteeism problems [5].

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The first result of our study is that participants reported that in the GREAT focus groups they had learned better ways of coping and communication and that they had generated specific intentions to make changes in their working situation. This shows that after participation in the focus groups the employees were action oriented and subjectively feeling some control and self-efficacy.

The second result is that these positive subjective ratings are paralleled by a reduction of sickness absence in the intervention department, whereas in the control departments the respective rates were stable or even showed some increase. The reduction in the rate of sickness absence is relevant, especially so as only half of the employees in this department participated in the program. Thus, the results suggest that OHMP with focus groups are helpful in reducing work absenteeism.

Limitations of the study are that we had to compare departments instead of groups with randomly assigned individuals. For legal, institutional, and general confidentiality reasons information on attendance and sickness absence was only available at department levels. Also, the intervention was only targeting the department, i.e. a group of employees, rather than individuals. Therefore, comparison was only possible between the intervention department with 159 employees and two other departments with 216 and 234 employees that had a similar organization and work. Still, more detailed process analyses are needed to control for a Hawthorne effect. Open questions for future research are how OHMPs must be tailored to special workplaces, to what degree effects are specifically due to the focus groups, and whether effects can be improved if all employees are participating.

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As controlled trials on the effects of OHMPs are rare, results of our study add empirical evidence in this field, suggesting that OHMPs are a way to improve self-efficacy and self-management and even more to reduce rates of absenteeism.

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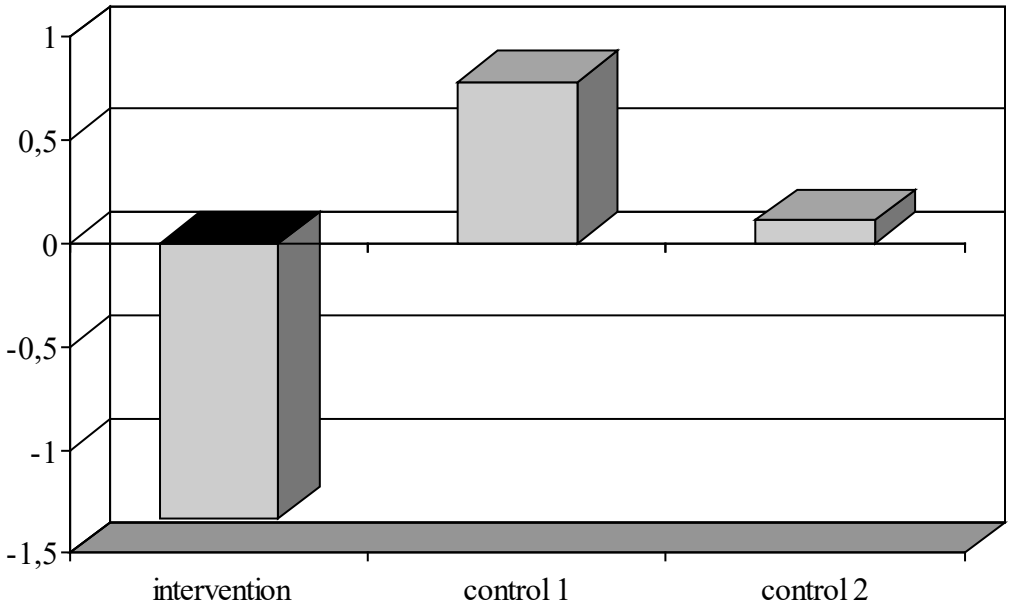
Figure 1

Changes in the rate of percent of employees on sickness absence *in the intervention department and two control departments. (Intervention department: 159 employees; control 1: 216 employees; control 2: 234 employees)*



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