
Detection, diagnosis, treatment and prevention of burnout and career related depression in workers in human services and additional study of primary and secondary prevention.

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Introduction

The purpose of this study was to look at the possible relation between physical activity and burnout in nurses and teachers.

Burnout can be described as emotional exhaustion resulting from chronic tension and stress (Maslach & Jackson, 1981). Stress, often caused by high demands in the job setting, appears as the fourth most important cause of prolonged job inactivity or absenteeism (Swinnen & Simon, 1995). Symptoms of stress include sleep disturbances, forgetting, concentration problems, fatigue, gastro-intestinal complaints, heart disturbances, neck and back pain. Career-related depression would, according to Maslach & Jackson (1981), exist primarily in the 'people-helping' professions, such as nursing, medicine, teaching, or police work (Cherniss, 1992). Research has focussed on defining burnout (Golembiewski, 1989; Leiter, 1989; Maslach & Jackson, 1981), detecting burnout (Capel, 1991; Brissie et al., 1988; Burke & Greenglass, 1988; Cherniss, 1992), and developing instruments to measure burnout (Meier, 1984; Schaufeli & Van Dierendonck, 1993). Burnout has three defining aspects: emotional exhaustion, reduced personal accomplishment, and depersonalisation. Emotional exhaustion is very similar to depression with which it shows a high correlation and overlap. All three burnout aspects are related to depression, anxiety, low self-esteem and self-efficacy, and chronic stress.

One of the strategies proposed to prevent burnout is physical activity (Weiskopf P.E., 1980). Physical activity is a method used to diminish daily stress and increase psychological well-being (Thayer et al., 1994 in Gauvin & Spence, 1996). Several studies have shown that in some populations physical exercise correlates with small to moderate decreases in depression (Thayer et al., 1994; Martinsen & Stephens, 1994 ; Morgan, 1994; North et al., 1990). Exercise can reduce anxiety (Petruzello et al., 1991; Landers & Petruzello, 1994) and improve psychological well-being (Koniakgriffin, 1994; Casper, 1993). Since burnout is related to depression, anxiety, and psychological well-being and since physical activity has a positive influence on these factors, we suggest a possible relation between burnout and physical activity.

Materials and methods

This investigation focuses on the existence of burnout in 'people-helping' professions, specifically in populations of teachers in secondary schools and nurses in general hospitals.

Burnout was measured using the "Vlaamse Maslach Burnout Inventory" (Vlerick, 1994), a translation of the Maslach Burnout Inventory (Maslach, 1981). We added a list of demographic variables for each person and the subjects were asked whether they had already experienced a burnout period during their careers. The Monica Optional Study on Physical Activity-Questionnaire (MOSPA) was used to measure the subjects' physical activity levels. All (working) subjects were asked to complete these

questionnaires anonymously. After three "school" to five "hospital" weeks the questionnaires were collected in a box placed at a frequently visited spot. The sample of teachers and nurses was divided into three groups: "high", "moderate", and "low" burnout. A descriptive analysis was performed for the demographic variables. Burnout scores and levels of physical activity were statistically analysed.

Results

The sample consisted of 621 teachers and 800 nurses. The respective response rates for the burnout inventory were 33% and 49%. In the population of teachers (T) only very few MOSPA-questionnaires were returned, in the nursing sample (N) we counted a response rate of 49%.

The means scores calculated for exhaustion were 15.6 (T) and 10.86 (N); for personal accomplishment 34.9 (T) and 37.82 (N); for depersonalisation 5.4 (T) and 4.97 (N). In the teacher sample, we noted differences in demographic variables related to the different burnout groups. The "high burnout" group was characterised by teachers working in second and third grade in technical and professional education classes. Frequently reported causes of burnout were "too much work", work insecurity/instability, problems with students, school authorities, and colleagues, and many aims not realised. 33% of the teacher sample had already experienced a burnout period in their career.

In the sample of nursing personnel, the mean values calculated were 10.78 for emotional exhaustion, 37.76 for personal accomplishment, and 4.99 for depersonalisation. High burnout scores were noted primarily in female nurses, around a mean age of 36 years, graduated from a non-university school of higher education. These demographic characteristics differed little between groups. Also in this nursing population the main cause of burnout was a "too-heavy workload" especially due to a shortage of personnel. 77.8% of the "high burnout" group had experienced a period of burnout in their careers.

Male nursing personnel with low burnout levels were most active (3252.77 kcal) and differed significantly from their "high burnout" counterparts. In the female population no differences were observed.

Conclusions

Burnout scores in the teaching and nursing populations were comparable to, though a little lower than, the values noted in several studies (Wandling & Smith, 1997; Schlenz & al., 1995; Piedmont, 1993). This conclusion may be due to the influence of the "healthy worker effect" which leads to underestimating the real problem. Burnout certainly exists, and the low response rate of the teaching population is direct proof of this. The highest burnout values were, as expected, noted for teachers working in secondary schools with "difficult" students. Technical and professional education classes often consist of students who are demotivated.

In the nursing profession the "burnout" problem is different and much easier to talk about. The main cause was found in the shortage of personnel, which leads to higher workloads. It seemed that physically active males had lower burnout scores, which points to a possible preventive effect against burnout. The fact that no other correlations were found could be due to the low burnout values. In many studies on clinically and non-clinically depressive people, the influence of physical activity was also higher in the clinically depressive populations (Thayer & al., 1994; Morgan, 1994; North et al. 1990).

We suggest that further studies focussing on the effect of physical activity in the work setting should be performed in order to elucidate the effect of such interventions.