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Process evaluation of a problem solving intervention to prevent recurrent sickness absence in workers with common mental disorders

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ABSTRACT

Common mental disorders (CMDs) are a major cause of sickness absence. Twenty to 30% of the workers who return to work after sickness absence due to CMDs experience recurrent sickness absence. We developed the Stimulating Healthy participation And Relapse Prevention (SHARP)-at work intervention, a problem solving intervention delivered by occupational physicians (OPs), to prevent recurrent sickness absence in this worker population in The Netherlands. A process evaluation was conducted alongside a cluster-randomised controlled trial to (1) evaluate whether the SHARP-at work intervention was implemented according to the protocol and differed from treatment in the control group, and (2) to investigate the relationship between the key elements of the intervention and the effect outcome (i.e. recurrent sickness absence). We collected process data for both the intervention and control group on recruitment, reach, dose delivered, dose received, fidelity, context and satisfaction. Data on recurrent sickness absence was collected through the registry system of the collaborating occupational health service. The study was performed in the Netherlands, and between 2010 and 2012, 154 OPs and 158 participants participated. Compared to the control group, participants in the intervention group more frequently had two or more consultations with the OP (odds ratio [OR] = 3.2, 95% confidence interval [CI] = 1.2–8.8) and completed more assignments (OR = 33.8, 95% CI = 10.4–109.5) as recommended in the intervention protocol. OPs and participants were satisfied with the intervention and rated it as applicable. Several individual intervention components were linked to the effect outcome. The process evaluation showed that the SHARP-at work intervention was conducted according to the protocol for the majority of the participants and well-received by OPs and participants. Furthermore, the intervention differed from treatment in the control group. Overall, the results provide support for implementing the intervention in practice.

Introduction

In many Western countries, common mental disorders (CMDs), such as depression, anxiety and adjustment disorders, are highly prevalent in the labour force (Kessler & Frank, 1997; Sanderson & Andrews, 2006; Wittchen & Jacobi, 2005). CMDs do not only cause sickness absence and work disability (Bültmann, Christensen, Burr, Lund, & Rugulies, 2008; Henderson, Glozier, & Elliott, 2005; Sanderson & Andrews, 2006; Stansfeld & Candy, 2006), but are also related to on-the-job productivity loss because of reduced work functioning (Lee, 2010; Lerner et al., 2004; Lim, Sanderson, & Andrews, 2000). To reduce the individual and societal burden of sickness absence due to CMDs, interventions have been developed to facilitate return to work (RTW) (Blonk, Brenninkmeijer, Lagerveld, & Houtman, 2006; Furlan et al., 2011; Pomaki, Franche, Murray, Khushrushahi, & Lampinen, 2011; van der Klink, Blonk, Schene, &

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van Dijk, 2003). The primary goal of these interventions is to get the worker back to work, though research has shown that 20%–30% of the workers who return to work after sickness absence due to CMDs experience recurrent sickness absence (Koopmans et al., 2011; Virtanen et al., 2011). As comparison, for musculoskeletal disorders studies have shown that recurrence of sickness absence ranges between 18 and 38% (Bültmann et al., 2007; Gross & Battie, 2005).

To prevent recurrent sickness absence in workers who have been on sickness absence due to CMDs, the "Stimulating Healthy participation And Relapse Prevention (SHARP)-at work" intervention was developed (Arends, van der Klink, & Bültmann, 2010). The intervention is provided by occupational physicians (OPs or simply physicians) and aims to guide workers through a problem solving process. Furthermore, the supervisor is involved to enable practical solutions that can be implemented. The intervention was evaluated in a cluster-randomised controlled trial (cluster-RCT), and the effect evaluation showed that the intervention group had a significantly lower incidence of recurrent sickness absence compared to the control group. No effects were found regarding the reduction of mental health complaints (Arends, van der Klink, van Rhenen, de Boer, & Bültmann, 2013).

Although an effect evaluation is often the primary goal of intervention research, it does not provide insight into why and how an intervention was successful or failed. This impedes the generalisability and implementation of intervention results (Egan, Bambra, Petticrew, & Whitehead, 2009; Murta, Sanderson, & Oldenburg, 2007; Saunders, Evans, & Joshi, 2005). A process evaluation can be conducted to collect data about how interventions were planned and implemented. A properly conducted process evaluation can help explain the success or failure of finding a relationship between the intervention and the outcome(s) of interest. Kristensen (2005) emphasised the importance of distinguishing between theory and program failure (Kristensen, 2005). When an intervention is delivered and received as planned but no effect of the intervention is found, theory failure is plausible. However, when an intervention is poorly executed (i.e. not delivered or received according to the protocol), this indicates program failure and no conclusions should be drawn about the effectiveness of the intervention (Egan et al., 2009; Kristensen, 2005). The process evaluation framework of Steckler and Linnan (2002) can be related to the theoretical model of Kristensen because in this framework the different elements are specified that need to be evaluated to understand whether program failure occurred. Steckler and Linnan summarised the elements of a process evaluation into seven components: fidelity (quality), recruitment, reach (participation rate), dose delivered (completeness), dose received (exposure), implementation and context (Steckler & Linnan, 2002).

Previous research on process evaluations of occupational intervention studies has been fragmented and unstructured (Bambra, Egan, Thomas, Petticrew, & Whitehead, 2007; Murta et al., 2007). Especially, the linkage of process variables (e.g. reach, dose received) to effect outcomes is often missing. Murta et al. (2007) performed a systematic review of process evaluations conducted for occupational stress management programs and found that only 46% of the 84 included studies made an explicit link between process evaluation variables and the outcome (Murta et al., 2007).

This study reports on a theoretically founded and structured process evaluation of the SHARP-at work intervention. The framework of Steckler and Linnan was used to develop, plan and guide the process evaluation (Murta et al., 2007; Saunders et al., 2005; Steckler & Linnan, 2002). The aims of the study were: 1) to evaluate whether the SHARP-at work intervention was conducted according to the protocol and differed from care as usual, and 2) to investigate the relationship between the key elements of the intervention and the effect outcome of the trial.

Methods

Design

The process evaluation was part of a cluster-RCT evaluating the effect of the SHARP-at work intervention on the prevention of recurrent sickness absence in workers who had returned to work after sickness absence due to CMDs. The trial was conducted in the Netherlands. Occupational physicians were randomised into intervention and control groups. Workers were recruited by the physicians and their allocation followed the allocation of their physician. For more detailed information on the design of the cluster-RCT, see (Arends et al., 2010).

Participants

253 occupational physicians were recruited from one of the largest occupational health services in the Netherlands. All physicians were eligible except those with an upcoming retirement, resignation, sabbatical or pregnancy leave. After the recruitment and training of physicians, 212 workers between 18 and 63 years were recruited by their physician to participate in the study. Participants had to be diagnosed by their physician with a CMD at the start of their sickness absence period (of at least two weeks) and had to have planned RTW within two weeks. Detailed information on exclusion criteria can be found elsewhere (Arends et al., 2010).

Procedure

The Medical Ethical Board of the University Medical Center, Groningen approved the study. After workers were recruited by their physician and consented to participate in the study, they received the baseline questionnaire. Following this, the physicians in the intervention group initiated the intervention. Physicians in the control group continued with treatment according to care as usual. Three months post baseline, questionnaires were sent to participants and physicians including questions about the treatment process.

Intervention

Physicians received a two-day training in the SHARP-at work intervention which was provided by experienced trainers in occupational health care interventions and guideline training. Three feedback moments (approximately 6, 12 and 18 months after the intervention training) were organised to discuss problems and successes with conducting the intervention.

The SHARP-at work intervention expands on the guideline of the Netherlands Society of Occupational Medicine on "Management of mental health problems of workers by the occupational physician" (van der Klink, 2007). This is an evidence-based guideline directed at structuring physicians' treatment to help sick-listed workers with mental health problems to return to work. The goal of the guideline is to help workers regain control by activating them to go through a problem solving process to find and implement solutions for problems that caused sickness absence and hinder. This is in line with patient empowerment theories which state that treatment should be aimed at helping patients to get a sense of control, self-determination and goal attainment (Aujoulat, d'Hoore, & Deccache, 2007; Menon, 2002). Though relapse prevention is part of the guideline (one consultation has to take place after RTW to address relapse prevention), limited attention is given to a structured follow-up by physicians after RTW has been accomplished. The SHARP-at work intervention was developed to focus on the prevention of recurrent sickness absence by structuring