

Common mental health problems at work: What we now know about successful interventions. A progress review

Details of the studies included in the progress review

This paper provides details of the six intervention studies that met the critical appraisal criteria for inclusion in the progress review of interventions for people with common mental health problems at work (Seymour, 2010).

We took the 2005 review on *Workplace Interventions for People with Common Mental Health Problems* (Seymour & Grove, 2005) as a starting point and brought it up to date by examining the literature published between 2004 and the end of 2008.

Bakker, I.M., Terluin, B., van Marwijk, H.W.J., van der Windt, D.A.W.M., Rijmen, F., van Mechelen, W. & Stalman, W.A.B. (2007) A cluster-randomised trial evaluating an intervention for patients with stress-related mental disorders and sick leave in primary care. *PloS Clinical Trials* 2 (6) e26. (www.plosclinicaltrials.org)

A cluster randomised controlled trial (RCT) of primary health care practices in Amsterdam found that there was no significant difference on duration of sick leave or on severity of self-reported symptoms – anxiety, worry, tiredness, listlessness – between a minimal intervention for these kinds of stress-related disorders (SMD) and care as usual. The focus was on people who had been on sick leave for less than three months.

Intervention

46 primary care physicians (PCPs) were randomised to either receive the training in providing a minimal intervention for stress-related disorders (MISS) or to provide care as usual.

The training was delivered by an occupational physician and also the primary care physician who had developed the intervention, one of the study authors. Training comprised two sessions of 3.5 hours with two follow-up sessions of 2 hours each. The training took place over a period of 6-10 weeks.

Physicians were taught to use specific methods of communication to help the patient to achieve functional recovery. Taking account of the time constraints of the consultation, this outcome was meant to be achieved within three physician-patient meetings.

Physicians were also taught specific skills:

- How to diagnose a 'stress-related mental disorder' (SMD);
- How to detect symptoms of depression and anxiety;
- How to give information and promote the patient's understanding;
- How to emphasise the patient's active role with regard to successful return to work;
- How to give advice on the content of functional rehabilitation;
- How to engage in active monitoring, in order to evaluate whether the patient had made efforts to translate their work situation into a problem that could be solved;
- How to refer a patient on to more specialised care if there was no progress in their circumstances.

Physicians in the control arm of the trial received no information or advice beforehand, but they were offered the training at the end of the trial.

Outcomes measured

The primary outcome measure was duration of sick leave in days, from the first day of sick leave until full (not part-time) return to work lasting for a period of at least 4 weeks without partial or full relapse into sick leave. Patients recorded their days of sick leave and this information was collected at baseline and again at 2, 6 and 12 months during telephone interviews.

Secondary outcomes were levels of self-reported distress, depression, anxiety and somatisation. These were measured with the Four-Dimensional Symptom Questionnaire at baseline and at 2, 6 and 12 months by mailed questionnaire.

Sample

139 PCPs were approached in two districts in Amsterdam where the researchers had existing networks. A total of 46 (Intervention group I = 24, Control group C = 22) consented to randomisation to either arm of the study.

Patient participants were recruited via the records of primary care attenders of the included practices. Exclusions applied to those with very severe psychiatric disorders, those with a terminal illness or those with an inadequate command of the Dutch language.

Inclusion criteria were symptoms of SMD and sick leave for no longer than three months from a paid job. Final numbers of patients in the trial were (at baseline): I = 178; C = 159; and at 12 month follow-up I = 167; C = 139.

Findings

The intervention demonstrated no effect on amount of sick leave taken. Over the course of the study, the severity of patients' self-reported symptoms fell in both intervention and control groups, but there was significant difference in severity between the two groups.

Secondary analysis showed that among the group of patients diagnosed as having stress-related mental health problems, those treated by PCPs in the intervention group seemed to return to work slightly more quickly than those in the usual care group. But interpretation of this secondary analysis is not straightforward.

Several explanatory factors were posited for lack of effect: the inclusion of patients with a very wide range of problems; inclusion of patients with conditions of a more chronic nature that require more extensive care; underestimation of accurate diagnosis of SMD; or the possibility that the intervention was too minimal. A key issue was thought to be the practitioners' lack of time or ability to apply what they had learnt in training to the patient consultation. The extent to which PCPs actually applied their skills was not addressed.

Blonk, R.W.B., Brenninkmeijer, V., Lagerveld, S.E. & Houtman, I.L.D. (2006) Return to work: A comparison of two cognitive behavioural interventions in cases of work-related psychological complaints among the self-employed. *Work & Stress* **20** (2) 129-144.

A randomised controlled trial (RCT) was conducted in the Netherlands over a period of 20 months on a brief intervention, commencing 2-3 weeks after start of sick leave, based on CBT principles combined with graded activity and a phased return to work.

Intervention

There were two intervention arms comprising:

- (1) CBT conducted by **psychotherapists**, which included graded activity (CBT):
 - 11 forty-five minute sessions twice weekly;
 - Highly structured protocol used in the Netherlands for treatment of burnout or other adjustment disorders;
 - Amount of work resumption possible was registered in each session;
 - First six sessions focused on cognitive restructuring and on registration of symptoms and situations;
 - The following five sessions focused predominantly on a further expansion of cognitive restructuring;
 - Six modules were used including cognitive restructuring; work resumption; time-management; workplace interventions; conflict handling; fatigue;
 - Assignments, the majority of which were related to the work situation, were given at the end of each session and discussed at the following one.

- (2) A brief combined intervention (CI), specifically designed for this study and **conducted by labour experts*** based on CBT principles with a strong focus on graded activity and workplace interventions:
 - Five to six sessions of one hour, twice a week;
 - Conducted by labour expert either at person's home or workplace;
 - Stress management element which included psycho-education on work stress, registration of symptoms and situations, relaxation, self-help books on rational emotive behaviour therapy, time management and writing assignments;
 - Homework assignments given at the end of each session;
 - Advice on work processes;
 - Suggestions on how to lower workload and job demands and increase decision latitude e.g. priority setting, planning, conflict management, delegation etc.
 - Partial return to work discussion (at third session);
 - Strong emphasis on partial work resumption.

The control group received no treatment but was given:

- Two brief sessions with a **GP** – hired by the insurance company to check validity of the claim;
- First session shortly after initial sick leave to check legitimacy of work disability benefit;
- Second session held after four months and purpose similar to first session.

*Labour experts are specialists in work efficiency, occupational health, work processes and in designing workplace interventions. Their main tasks include advising employer, employee or self-employed person on capabilities of employee and what adjustments are required to enable a return to work. They were trained in brief CBT-based stress management; meetings were held with them every three months to attune interventions and discuss their caseloads.

Outcomes measured

- Psychological complaints (Depression Anxiety Stress Scale; Maslach Burnout Inventory);
- Return to work (operationalised as length of time until partial return to work and length of time until full return to work – data extracted from insurance company database);
- Working conditions;
- Social support.

Sample

The RCT was carried out with self-employed people with adjustment disorders related to matters such as burnout and job stress. They were all insured for work disability with a private insurance company and had approached their insurance company when they were unable to work due to these psychological

complaints. They were briefly informed about the study and sent additional information in order to decide on participation.

Exclusions applied to those suffering from serious psychiatric disorders – major depression, addictive disorders, post-traumatic disorders and other anxiety disorders; and those who did not want to postpone any current treatment during the research period.

122 self-employed people enrolled in the study and were randomly assigned to one of the three treatment conditions (CBT = 40; CI = 40; Control = 42). Participants received questionnaires before the intervention (pre-test); and 4 months (post-test); and 10 months (follow-up) after the onset of the intervention.

Due to the failure to return pre- or post-test questionnaires by some participants, numbers in the treatments groups reduced to CBT = 33; CI = 32; Control = 33. At the 10 month follow-up the number of participants was CBT = 30; CI = 30; and Control = 29 respectively.

The number of participants who returned all three questionnaires was CBT = 30; CI = 28; and Control = 28.

Findings

The trial group returned to either full- or part-time work within a shorter period of time than those in the group who only received CBT or the control group who received two brief sessions with their GP.

Participants in the CI group had a shorter period of time to both partial and full return to work than had the CBT or control group. Partial return occurred 17 days earlier in the CI than the CBT group; and 30 days earlier in the CI than the control group. The difference between CI and the other two conditions for full return to work was approximately 200 days.

There appeared to be no difference between the CBT group and the control group in partial and full return to work and no differences were found between any of the interventions with respect to psychological complaints. Irrespective of type of intervention, participants reported a decrease in symptoms, predominantly in the first four months of the trial, with effects still visible after 10 months.

Salient points include the importance of emphasising return to work and the use of workplace interventions, in combination with individual-focused interventions, as important tools to promote work resumption among individuals on sick leave owing to work-related psychological problems. Early partial return to work is an important factor in full return to work. Most significantly, decrease in psychological complaints may not be an important factor, or the sole factor, for fostering work resumption. However, given the small sample size, this intervention would benefit from replication.

Brouwers, E.P.M., Tiemens, B.G., Terluin, B. & Verhaak, P.F.M. (2006) Effectiveness of an intervention to reduce sickness absence in patients with emotional distress or minor mental disorders: a randomised controlled effectiveness trial. *General Hospital Psychiatry* **28** 223-229.

An intervention in the Netherlands that focused on understanding causes, developing and implementing problem-solving strategies and promoting early work resumption and preventing long-term sickness absence was tested in a randomised controlled trial (RCT).

Intervention

Social workers delivered the intervention and general practitioners offered usual care to the control group over a period of 18 months.

Eleven social workers received a three-day training programme conducted by the researchers. There were also two follow-up sessions at different times during the study period, to refresh knowledge and check adherence to the protocol.

The intervention with the patients aimed at activating and supporting them to restore coping and to adopt a problem-solving approach. There were five individual 50-minute sessions over 10 weeks. The content is set out in a treatment manual.

Specifically the intervention included:

A three-stage graded activity model:

- First stage – acknowledging problem and accepting responsibility for its resolution;
- Second stage – patients made a list of their problems and were helped to devise strategies to resolve them;
- Third stage – there was a focus on implementing the strategies.

Patients were encouraged to make a daily activity schedule that incorporated time for:

- Relaxation, rest and physical activity;
- Working on the problems by means of e.g. written assignments;
- Other activities of daily living such as childcare, housework.

Patients were motivated to:

- Solve work-related problems actively;
- Get in touch with their occupational physician;
- Discuss reintegration and return to work as soon as possible.

Patients in the control arm of the trial received GPs' usual care, comprising any combination of guidance and counselling by the GP, medication and referral to mental health care.

Outcomes measured

The primary outcome measure was sick leave duration (in days), defined as the period between the first day of absenteeism and the first day of work resumption (full or partial). Information on sick leave duration was gathered at all measurements.

Secondary outcome measures were levels of anxiety and depression, measured using the Hospital Anxiety and Depression Scale and the Four-Dimensional Symptom Questionnaire. Functional status was measured using the SF-36. All measurements were taken at baseline, 3, 6 and 18 months. A short questionnaire was developed to measure patient satisfaction with treatment and this was administered once, 3 months after baseline.

Sample

Patients were recruited by 70 GPs in the city of Almere in the Netherlands. Inclusion criteria comprised:

- Self-report or GP assessment of emotional distress or minor mental disorder;
- In paid employment;
- On sick leave with emotional or mental health problems for less than 3 months;
- Intending to go on sick leave due to emotional or mental health problems after a visit to the GP;
- Aged between 18 and 60 years;
- Diagnosis of generalised anxiety disorder, mild depressive disorder or no mood/anxiety disorder according to DSM-IV and ICD-10 criteria;
- Dutch speaker.

Exclusion criteria that applied were:

- Patients with moderately severe or severe mood disorders;
- Patients with agoraphobia;
- Patients with panic disorder or social phobia;
- Patients already receiving psychotherapy.

A total of 370 patients gave permission to the researchers to contact them about the study. After applying the inclusion and exclusion criteria, 194 patients participated in the study (Intervention group I = 98; Control group C = 96).

Findings

There was no significant difference in outcomes such as sick leave duration, mental and physical health between the study groups and only the treatment group reported higher satisfaction. The authors offered a range of explanatory factors for no effect:

- Patients' prognosis may have been so favourable that the effect of usual care was unable to surpass that of the intervention;
- Intervention may not have been delivered by the social workers with sufficient fidelity to the protocol;
- The intervention was delivered to the patients only, whereas critical decisions about work resumption take place elsewhere and rely on interactions between patients, employers and occupational health physicians – in other words the intervention may not have had the power to influence important players at the workplace through the patient.

Fleten, N. & Johnsen, R. (2006) Reducing sick leave by minimal postal intervention: a randomised, controlled intervention study. *Occupational Environmental Medicine* **63** 676-682.

A randomised controlled trial (RCT) that included a one-year follow-up was carried out on a minimal postal intervention in Norway.

Intervention

Within two weeks of the start of sickness absence, sick-listed employees received a letter from the Norwegian National Insurance Office (NIO). They were sent a letter that described:

- Their opportunity to return to an adjusted job on sickness benefits for 12 weeks after approval by the National Insurance Office (NIO);
- The importance of cooperation between employee, employer and NIO on modified work measures;
- The obligation for formal approval by NIO to receive sickness benefits for more than 12 weeks.

They were also sent a questionnaire about their sick leave that asked:

- Are you familiar with the use of modified work measures in your workplace?
- Do you think that modified work measures could reduce your actual sick leave? (visual analogue scale (VAS) ('certainly no' to 'certainly yes'))
- Do you think that the modified work measures could reduce further sick leave (VAS)?
- Do you think you could return to work immediately if modified work measures were offered? (VAS)
- Which measures do you think could reduce the duration of this or future sick leave(s)? (eight alternatives including none or others)
- How long do you expect this sick leave episode to last? (seven categories)
- Are you anticipating new episodes of sick leave within the next year?
- Do you agree to your answers being copied to your local NIO?

Finally those approached to participate had to sign and return a consent form to allow for contact by the NIO.

Those in the control arm of the trial received normal follow-up activities from the NIO.

Outcomes measured

The primary outcome measure was probability of returning to work within one year.

Sample

990 newly sick-listed people with musculoskeletal or mental disorders were included consecutively; 495 were eligible to receive the intervention. The final intervention group comprised 192 men and 330 women; and the control group comprised 197 men and 298 women.

79 people in the intervention group and 90 in the control group mental had mental disorders. These were re-coded into depression and 'other' mental disorders.

Findings

The trial demonstrated a significant reduction in length of sick leave for those off work with mental health problems. Mean length of sickness absence for these participants was 80.7 days in the intervention group and 117.2 in the control group.

Early intervention, within one month of sick leave commencing, as well as a focus on return to work regardless of mental health symptoms, were critical success factors.

Dialogue with the employer, and return to work, was deemed easier if sick-listed employees were informed about possibilities for modified work.

However, the mental health sample in the trial was small and so the intervention would benefit from a further trial in the UK. There were also no apparent measures that might have captured any co-morbidities between musculoskeletal disorder and poor mental health.

Schene, A.H., Koeter, M.W.J., Kikkert, M.J., Swinkels, J. A. & McCrone, P. (2007) Adjuvant occupational therapy for work-related major depression works: randomized trial including economic evaluation. *Psychological Medicine* **37** 351-362.

A randomised controlled trial (RCT) of occupational therapy alongside treatment as usual was conducted, as part of the Programme for Mood Disorders of the Department of Psychiatry of the Academic Medical Centre in Amsterdam, for adults with depression in Amsterdam.

Intervention

Outpatient psychiatric treatment as usual (TAU) or TAU plus occupational therapy (OT) for 6 months including (i) diagnostic phase with occupational history and work reintegration plan and (ii) therapeutic phase with individual sessions and group sessions.

TAU comprised usual outpatient treatment for depression i.e. clinical management according to APA Guideline and antidepressants if indicated and acceptable to patients; treatment delivered by three supervised senior psychiatric residents. Visits lasted 30 minutes every 2-3 weeks and consisted of symptom assessment, psycho-education and general support and CBT techniques; and if indicated a prescription for medication. The patient and their physician jointly made decisions on treatment type, intensity and duration.

TAU + OT comprised delivery by the same senior psychiatric residents; OT involved three manual-based phases e.g. **diagnostic phase** (4 weeks) – five contacts with detailed occupational history, video observation in a role-play work situation, contact with OH physician from employer and plan for work reintegration; **therapeutic phase** (24 weeks) weekly group sessions with 8-10 patients and bi-weekly individual sessions; preparation for return to work, contacting the place of work and if possible starting to work. Individual sessions further explored the relationship between depression and work, work problems and support and evaluation of work resumption; **follow-up phase** (20 weeks) involved three individual visits.

Outcomes measured

Depression; work resumption; work stress; costs. Assessments were at baseline and at 3, 6, 12 and 42 months.

Sample

Those eligible for inclusion in the trial comprised adults 18 years or older who had had one or more episodes of major depressive disorder but no substance misuse; no psychotic symptoms; BDI score >15; work reduction of at least 50% of regular hours from a minimum of 2 weeks to a maximum of 2 years. Work-related depression was defined as a disorder predominantly caused or evoked by stressful psychological circumstances in the workplace.

62 adults with major depression and a mean absenteeism of 242 days were randomised to TAU (n = 32) or TAU + OT (n = 30). They were allocated in blocks of 20 into 10:10 (I/C) groups after initial screening by two trained senior psychiatrists.

Findings

Addition of OT to TAU increased and accelerated work resumption. Those in the intervention group started work three months earlier than controls, even while remaining symptomatic. The intervention did not improve depression outcome; delivered a reduction in work-loss days during the first 18 months; did not increase work stress; and had a 75.5% probability of being more cost effective than TAU alone.

OT is a specific type of intervention that does not include CBT elements, which might explain the lack of effect on depressive symptoms. Nevertheless, between 12 and 42 months depression severity stabilised in the TAU group and further reduced in TAU + OT group. Overall fewer OT patients had to be admitted for intensive treatments over the course of the trial.

Although there were significant improvements on return to work, it seems unlikely that in the UK context at least, people who had been off as long as some in this sample would keep their jobs. Also the interventions are much better and longer than might be considered in the UK. As with other studies in this data set, the sample size is small. However, replication of this trial in the UK would be of benefit, particularly one that compared an OT with a CBT-type intervention.

Wang, P.S., Simon, G.E., Avorn, J., Azocar, F., Ludman, E.J., McCulloch, J., Petukhova, M.Z. & Kessler, R.C. (2007) Telephone screening, outreach and care management for depressed workers and impact on clinical and work productivity outcomes. A randomized controlled trial. *JAMA* **298** (12) 1401-1411.

This study described a randomised controlled trial (RCT) of a telephone screening, outreach and care management intervention in the United States for depressed workers and its impact on clinical and work productivity outcomes.

Intervention

A telephone outreach and care management programme was delivered by care managers, licensed master's degree-level mental health clinicians employed by United Behavioral Health (UBH). They received additional training to conduct the study, as well as 60 minutes supervision per week.

The intervention group received:

- Structured telephone intervention systematically assessing need for treatment;
- Facilitation of entry into in-person treatment – psychotherapy as well as antidepressant medication;
- Monitored and supported treatment adherence;
- For those declining in-person treatment – provided structured psychotherapy via telephone;
- All treatments according to clinical need and participant's willingness to accept treatment;
- All received psycho-educational workbook following initial contact.

Those assigned to care as usual were informed that their screening responses indicated possible depression. They were advised to consult a clinician and could also receive any of the provided benefits from UHB, just not the additional telephone case management.

Outcomes measured

Depression severity was measured by means of the Quick Inventory of Depressive Symptomatology (QIDS); and work performance by means of the World Health Organisation Health and Productivity Questionnaire (HPQ), which is a validated self-report instrument assessing job retention, time missed from work, work performance and critical work incidents.

Sample

604 adult (18+ years) employees enrolled in United Behavioural Health Plan identified in a 2-stage screening process as having significant depression.

There were two recruitment phases:

1. Health Risk Appraisal survey conducted in 16 large companies from diverse sectors and diverse range of occupations.
2. Employees whose screen was positive for depression were invited to participate in a telephone call from a survey interviewer to assess their depression more specifically using QIDS. Those with at least moderate depression were eligible for randomisation.

Those with lifetime bipolar disorder, suicidality, recent mental health speciality care, or substance disorder were excluded from involvement. Those eligible to participate were randomised into treatment (n = 304) and control (n = 300) arms of the trial. The treatment group was slightly older, predominantly female, better educated, somewhat less depressed and worked rather more hours.

Findings

The intervention group had significantly lower QIDS self-report depression scores; significantly higher job retention; and significantly more hours worked. In other words the intervention demonstrated considerable improvement in clinical and work outcomes.

The 2.6 hour improvement per week in overall work functioning among intervention participants was due to a combination of increased job retention and increased hours worked.

Transferability of findings to a UK context is compromised by the lack of such health insurance arrangements in this country. However, the variety of web-based, email and interactive voice recognition technologies – all of which are available in the UK – should ensure that the costs of screening and recruiting depressed workers into such interventions are low.

The sample size in this trial is satisfactory and the intervention would benefit from replication in the UK, taking into account some of the limitations identified, e.g. the QIDS-SR might have misclassified cases; and the HPQ might have been systematically biased.

References

Seymour, L. & Grove, B. (2005) *Workplace Interventions for People with Common Mental Health Problems*. London: British Occupational Health Research Foundation. (www.bohrf.org.uk/downloads/cmh_rev.pdf)

Seymour, L. (2010) *Common Mental Health Problems at Work: What we now know about successful interventions. A progress review*. London: Sainsbury Centre for Mental Health. (www.scmh.org.uk)