

Randomized Controlled Trial of Adding Telephone Follow-Up to an Occupational Rehabilitation Program to Increase Work Participation

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Abstract Purpose Transfer from on-site rehabilitation to the participant's daily environment is considered a weak link in the rehabilitation chain. The main objective of this study is to see if adding boosted telephone followup directly after completing an occupational rehabilitation program effects work participation. Methods A randomized controlled study included participants with chronic pain, chronic fatigue or common mental disorders on long-term sick leave. After completing 31/2 weeks of acceptance and commitment therapy based occupational rehabilitation, participants were randomized to boosted follow-up or a control group before returning to their daily environment. The intervention was delivered over 6 months by on-site RTW coordinators mainly via telephone. Primary outcome was RTW categorized as participation in competitive work ≥ 1 day per week on average over 8 weeks. *Results* There were 213 participants of mean age 42 years old. Main

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diagnoses of sick leave certification were mental disorders (38%) and musculoskeletal disorders (30%). One year after discharge the intervention group had 87% increased odds (OR 1.87, 95% confidence interval 1.06–3.31, p=0.031), of (re)entry to competitive work \geq 1 day per week compared with the controls, with similar positive results for sensitivity analysis of participation half time (\geq 2.5 days per week). The cost of boosted follow-up was 390.5 EUR per participant. *Conclusion* Participants receiving boosted RTW follow-up had higher (re)entry to competitive work \geq 1 day per week at 1 year when compared to the control group. Adding low-cost boosted follow-up by telephone after completing an occupational rehabilitation program augmented the effect on return-to-work.

Keywords Acceptance and commitment therapy \cdot Mental disorders \cdot Musculoskeletal pain \cdot Vocational rehabilitation \cdot Telerehabilitation



The research question

Can adding a dose of boosted RTW follow-up delivered over six months increase work participation?

Measured until one year after discharge from the occupational rehabilitation program

Special features of this study

Inclusion with an "open door policy":

- Mental and somatic disorders
- Unemployed or employed
- No maximum duration of sick leave

Transdiagnostic approach with mixed groups

Referred from general practice

Sick-leave of over 8 weeks duration

Age 18 – 59 years old

Health problem:



- common mental disorder
- chronic pain condition/musculoskeletal disorder
- chronic fatigue condition

Self-defined goal of return to work (RTW)

3 ½ weeks of on-site occupational rehabilitation

Acceptance and Commitment Therapy (3rd generation cognitive therapy)

Mental and physical training

Group and individual session

Work-related problem solving

Contact with stakeholders (GP, social security, employer, others)

Participants

278 Entered rehabilitation

- 36 Declined participation in study

- 25 Excluded from participation

213 Study participants

Who did the GPs refer?

79% female

Age 42 years old on average (range 20 – 59)

58% did not have a higher education

40% not employed

56% on "work assessment allowance"

15% more than 3 years or never been in work



Diagnostic groups*



*The main medical cause of sickness certification according to national sick-leave data



Boosted follow-up over six months



RTW coordinator

SOCIETY INVESTS: "1 extra day of work" on delivering supported follow-up per participant



Working at least one day per week on average



Darkest line is intervention group. X axis: Proportion over cut-off. Y axis: Development over time up to one year.

Important to follow work participation over time

The total number of days worked during the first year:

Intervention group (71 days) Control group (68 days).

The development over time :

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After one year the intervention group had 87% increased odds of having (re)entered competitive work at least 1 day per week compared with the control group.

OR 1.87 95% Cl 1.06 - 3.31 $p \le 0.031$



Working at least "halftime" per week on average

33%

28%

Darkest line is intervention group. X axis: Proportion over cut-off. Y axis: Development over time up to one year.

Cost of intervention: 390 Euros

Number needed to treat:

10

For every ten participants receiving boosted follow-up one more person entered the work force

A booster of telephone follow-up reinforces the effect of rehabilitation

No conflicts of interest

















Thank you to my team!!!



Telephone follow-up in an occupational rehabilitation programme – a randomised controlled trial

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Transfer from on-site rehabilitation to the participant's daily environment is considered a weak link in the rehabilitation chain. Various follow-up regimes have been implemented after multidisciplinary rehabilitation, however, consensus is lacking on recommended content, duration and intensity.

Questions

Main question: Does adding boosted return-to-work (RTW) follow-up by telephone after completing an occupational rehabilitation programme effect work participation over the first year for individuals on long-term sick leave? Secondary question: What is the added cost of boosted follow-up from the perspective of the occupational rehabilitation institution?

Methods

A randomised controlled trial included participants of working age with chronic pain, chronic fatigue or common mental disorders on long-term sick leave (>8 weeks' duratientry/re-entry to work. Generalised estimated equations (GEE) regression analysis was used.

Results

Of 213 participants 80% were women. Mean age was 42 years. Main diagnoses of sickness certification were mental (38%) and musculoskeletal (30%) disorders. The mean total number of days worked during the first year following the rehabilitation programme was marginally higher for participants in the intervention group (71 days) compared with the control group (68 days). Initially, the control group had higher entry/re-entry to work. After 6 months, the intervention group had surpassed the control group, and the proportion of participants working 1 day or more per week continued to increase. One year after discharge the intervention group had 87% increased odds (odds ratio 1.87, 95% confidence interval 1.06–3.31, p = 0.031), of entry/re-entry to competitive work ≥ 1 day

A chain is no stronger than it's weakest link

A **weak link in the rehabilitation chain** is the transfer from intensive on-site rehabilitation to the participants daily home and work environment.

- Loss of support: Participant moves from having easy access to advice and help to "being on my own again". Loss of feedback.
- Shift of setting: From specialized and sheltered rehabilitation and back to the daily grind and commitments at home and work
- Loss of continuity: Sometimes change in care providers

Relapse prevention after rehabilitation is a neglected area of research:

Also a great loss for the therapist also: The real world environment is a unique arena for training to use a new cognitive skill sets. Real world exposure to hurdles of daily life.

Solution hypothesis: Aftercare, continued support => boosted RTW folow-up

Development over time for each of the groups:

Odds of working 1 day or more per week One year after the OR program

Odds of working 1 day or more per week Directly after the OR program



Odds of working 1 day or more per week

Development over time for each of the groups:

151% increase for the intervention groupOR 2.5195% Cl 1.67 - 3.77 $p \le 0.001$

 29% increase for the control group

 OR 1.29
 95% Cl 0.87 - 1.91 $p \le 0.204$

Intervention group versus control goup after one year:

95% higher for the intervention groupOR 1.9595% Cl 1.11 - 3.42 $p \le 0.021$

Intervention :

Odds of working 1 day or more per week one year after the OR program for the INTERVENTION GROUP

Odds of working 1 day or more per week one year after the OR program for the CONTROL GROUP

THA NKY OU!

