



Restart - Return To Work After Long-tem Sickness Absence From Work. A Quasi-experimental Study

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Abstract

Background: People with long-term sickness absence due to diffuse health problems are difficult to rehabilitate back to work. In this quasi-experimental study 48 individuals with time-limited sickness benefit were recruited to a return to work (RTW) project. The intervention group (30) participated in a 12-month programme based on a cognitive approach with the aim of strengthening the individuals' self-esteem and empowerment. The reference group (18) received rehabilitation as usual. **Methods:** Evaluation methods used for the study group were self-reported questionnaires at baseline, before intervention and at follow-up after 1 year. **Results:** One year after the intervention 27% had returned to full or part-time work and yet another 10% were in work training and 13% in rehabilitation/treatment with an optimistic back to work prognosis. In the reference group only 1 person had partially (25%) returned to work. Subjectively rated health (SRH) and sleep quality improved following the intervention. MADRS scores decreased during the year for the intervention group. The results support the idea that return to work is an important contributor to better self-perceived mental health for people who have been outside the labour market for a long time. **Conclusion:** The project shows that long-term sickness absence due to diffuse and subjective health problems is not a permanent condition even in participants with substantial work absences periods. In addition, the importance of structured co-operation between the authorities and the project leaders is supported by previous research.

Introduction

In the western world today many people are outside the labour market because of the high incidence of illness during the past years. This is also true for Sweden. People outside the labour market are not able to earn their own living by gainful employment and consequently depend on the support of society for their living. The number of people with sickness benefit is unsatisfactorily high in many countries and the gradual acceleration of younger beneficiaries is alarming (1, 2). The inflow of sickness benefit is

especially high among women, indicating a gender health inequality (3).

Different studies (4, 5) show that sick leave can have both positive and negative effects on peoples' life. From a societal perspective long-term sick leave (> 90 days) implies high costs and negative effects on the labour market and societal productivity. From an individual perspective long-term sick leave is associated with several negative consequences such as impaired life quality with reduced leisure activities, decreased possibilities of and desire for social and family activities, reduced self-esteem and risk of additional diagnoses (6-8). However, in a study by Floderus et al (5) individuals with periods of sick leave between 12-18 months report both negative and positive consequences. In this study, negative experiences were more prevalent among men while women more often tended to report positive experiences for life style factors such as relationships with children, partner and friends.

Furthermore, the opportunities for return to work (RTW) tend to become worse over time, in the sense that individuals often lose their employer during long periods of sickness absence. Besides lengthening the sick leave even more, this also tends to have a negative influence on the individuals' self-esteem and empowerment, leading to deterioration of important health aspects (4, 9-11). RTW after long-term sick leave is a complex phenomenon and has to a high degree to do with the individual's own motivation, attitudes, social situation, coping ability and own prognosis of work ability (12-18). Studies as well as official reports have pointed out a connection between the time before RTW and the individual's motivation and own trust in or expectations of RTW (7, 19-21). The higher the degree of motivation, the shorter the time to RTW. In addition, Falkdal (7) reports that too slow a rehabilitation time schedule has no positive effect when the sick role is already fortified.

Recent RTW studies have reported the importance of co-operation for successful rehabilitation results (7, 22-24). There is, for example, evidence that faster RTW is more successful among individuals with musculoskeletal disorders when there is co-operation between multidisciplinary professions (22). Another study (25) has found lower costs of social welfare for individuals with short-term sick leave when using structured and rapid co-operation and

follow-up of treatment, compared to the control groups usual care. Furthermore, there is evidence in a few studies, however rather weak and mostly for individuals with musculoskeletal disorders and in the main with a short time absence from work, that cognitive behavioral treatment (CBT) has a positive effect on return to work (26-31). The research in this field, rehabilitation for RTW, is limited (32) and there is a need for more evidence.

According to The Swedish National Audit Office report (11), "Irrevocable disability pension", at best one percent of individuals on disability pension returned to the labour market, and thus long-term sickness benefit is viewed as a final stage. From this point of view it has been considered highly important to develop valid methods for rehabilitation and prevention to reduce and prevent unnecessary long-term sick leave, especially among those 30 to 45 years of age, where sick leave has been increasing since the beginning of the year 2000.

The present study is a quasi-experimental study based on a cognitive approach, which aims to promote RTW for individuals on long-term sick leave by co-operation, coaching, motivating talks and rehabilitation support during a period of 12 months.

Purpose

Overall, the aim was to test the effects of an intervention programme using a cognitive approach to RTW for individuals on long-term sick leave (> 12 months). Furthermore, the aim was to investigate the effects of the intervention programme on self-reported health outcomes.

Subjects

A total of 30 out of 48 people, who at the time were on time-limited sickness benefit due to health problems related to stress and pain, were recruited from the register of the Regional Social Insurance Office (SIO) to participate in a rehabilitation programme. Inclusion criteria were: age 30-45, individuals enrolled in the SIO register with still at least one year until the end of the current period of sickness benefit and with minor mental disorders such as depression, anxiety, fatigue or exhaustion.

Exclusion criterion: diagnoses with severe psychiatric diseases such as psychosis, schizophrenia, bipolar diseases and addiction problems. The remaining 18 people were at the time for inclusion in the project prevented from participating for various reasons. This

group was established as the reference group.

The mean age of the participants in the intervention group was 43. Most of them (28) were women and the average absence from work was 6 years, with a range of 2-17 years. The mean age in the reference group was 42, 16 women and two men, all with the same reasons for absence from work. Of the participants in the intervention as well as in the reference group, approx. 40 % or more were reported sick for some kind of psychiatric or stress-related disorders. More than 60 % of the participants in both of the groups had diagnoses for chronic muscular pain. About 30% in the intervention group were registered with somatic disorders. Only three participants in the intervention group had an employer. For the reference group we do not have that information registered. According to the findings 57 % of the participants in the intervention group meet the criteria for one or more psychiatric diagnoses such as panic anxiety, generalized anxiety and depression.

Accomplishment process

Step 1 - Introduction

After selection by the SIO the individuals received information in two steps - firstly, individual information by post from the SIO and secondly they were invited to a group information meeting. This meeting explicitly included a presentation of the entire team, information about the goals and information about the participants' expected participation in the project. Prior to the intervention the participants also met with a physician. The purpose of this meeting was to discuss the participants' somatic condition and to screen them for psychiatric disorders using the Mini -International Neuropsychiatric Interview (MINI) (33). Participants without severe psychiatric disorders were admitted to participate in the intervention, while those with identified severe disorders (2) were transferred to psychiatric treatment in agreement with the SIO. All of the individuals consented to participate in the study through a written agreement.

Step 2 – Intervention

The intervention lasted three months and comprised three phases: coaching, plan of action and transference.

Coaching phase

The coaching programme was based on recent stress theories and research on work environment conditions (34-37). The aim of the programme was to eliminate and break up those kinds of "locked in" effects related to former work and life experiences. Furthermore, the coaching aimed to make participants reflect on their

life situation and how their own choices and motivations were related to their goals. In this phase the participants received coaching during a period of 3 months. The programme was carried out for every participant individually in three meetings (approx. 3 hours/meeting) based on dialogues and comprised for example: reflections on life patterns, the individual's own choices and own responsibility for change of their situation. The tests used in this phase included self-estimated test measuring, private and work conditions, work-related stress, self-esteem and motivation profile. The aim was to increase the individual's knowledge about opportunities for returning to work.

Plan of action

At the end of the programme every participant completed, in consultation with the coach, their own plan of action through a formulized agreement, included work related as well as private goals regarding opportunities for returning to work. Thus it was also a method for increasing individuals' motivation and it served as a base for their further rehabilitation activities.

Transference phase

After approximately three months, each participant met jointly with the coach, the project coordinator and representatives from the SIO and Employment Office (EO) in order to be transferred back to the SIO and, if possible, to the EO for support and/or work training in an individual process for RTW during approx. seven months. This meeting was arranged to create mutual understanding and expectations of each individual's plan for achieving a RTW. At this meeting the participant was requested to present his or her plan of action in order to discuss the realisticness of the plan and to make a schedule for the rest of the time in the project. This phase focused on co-operation between the members of the team and the participants' plans of action in order to proceed with the rehabilitation process in an effective way.

Methods

RTW was the overall goal and outcome was defined as individuals returned to work status (fully or partially) at a distinct time point (1 year after inclusion). Participants in work training or in other work-related activities with return to work as an end in view in her or his plan of action were included in the measurement return to work. RTW was measured for both the intervention and reference groups.

Self-reported questionnaires were used for the intervention group at two points in time: 1) at baseline,

prior to the intervention and 2) at follow-up one year after start. The second questionnaire was sent by post to the participants. The participants' self-perceived health situation, including physical and mental self-assessments, were monitored using a baseline questionnaire adjusted for this project. In the questionnaire participants' self-reported health (SRH) (38), self-perceived sleep quality (39), home situation, and social situation were all single items assessed using Visual Analogue Scales (VAS) and presented as a percentage figure from 0-100%, with 0 as the lowest possible value (phrased "very poor") and 100 as the highest (phrased "very good").

Locus of control was assessed using the Mastery-scale (40). The participants' mental health (degree of depression) was assessed using the Montgomery-Åsberg (41) Depression Rating Scale (MADRS).

In addition, in order to get more information about the participants' experiences of the intervention a short-interview was carried out immediately after completing the coaching programme. These interviews lasted between 45-60 minutes.

Statistical analyses

All data were analyzed using SPSS software for Windows XP (version 15.0.1. 2005).

Data was first assessed for means and standard deviations for the group. To test changes and to detect group differences T-tests or one-way ANOVA analyses were performed. A two-way ANOVA for repeated measurement (in work /still with sickness benefits x time) was used to detect group differences as well as analyzing interactions. Only significances < 0.05 were used.

Results

At the one-year follow-up approximately 27% of participants in the intervention group were in full or part-time employment. Yet another 10% were in work training or other work-related activities, and 13% were still in treatment (CBT, physiotherapy) with a good prognosis for successful RTW. Participants still on sickness benefit were 47% and one person was put on permanent disability pension.

All of the participants (30) completed the programme and accomplished an individual plan of action for further rehabilitation and RTW. Most of the plans included supporting activities prior to, or parallel with their return to work. The timetables for returning to

work varied somewhat between participants. Some of them started with work training immediately (n=10) and some needed supportive activities before or parallel to entering working life (n=13). The supportive activities included CBT treatment, physical training and/or medical treatment or further medical investigations. Furthermore, some participants (n=6) were estimated to be in too poor a condition, both physically and mentally, to make return to work possible within the timeframe of the project. The participants' status after 1 year³ and is presented in Table 1.

In the reference group only 1 person out of 18 was in work training, with a designated work ability of 25% at the one-year follow-up. The remaining 17 persons in the reference group were still on sickness benefit.

Results of health assessments at 1-year follow-up

Prior to the intervention, mean self-reported health (SRH) was very low: 25.6 (SD 19.4) out of a maximum of 100, where the target level for healthy individuals is set to 70-80% (42). The corresponding figures for self-perceived sleep quality were 28.5 (SD 26.2).

SRH improved significantly, but remained at a low level for the total group during the study period. This pattern was also true for the participants' self-perceived sleep quality.

The improvement of SRH and self-perceived sleep quality was mainly due to a marked improvement seen among individuals returning to work or in activities believed to result in employment (Illustration 3 and 4). Participants who remained on sickness benefit or disability pension did not experience improved self-perceived health or sleep quality. The participants' home and social situation did not change significantly during the follow-up and was not associated with individuals returning to work or in work training at the 1-year follow up. Locus of control was only measured before intervention. Those having a higher locus of control prior to intervention also returned to work or were in work training following the intervention to a higher extent than those still on sickness benefit (20,1 SD 0,80 compared to 16,7 SD 0,67) pThe mean MADRS score prior to the intervention was 18.0 points (SD 10.3). About one fifth of the participants had a MADRS score of 27 or higher, indicating a high likelihood of moderate or severe depression. The mean MADRS score improved for the total group at the 1 year follow-up to 14.5 points (SD 8.56). In the post analysis the group that returned to work or those who were in work training had a significantly lower MADRS score prior to the intervention compared with those still on sickness benefit or in need of further support subsequent to the intervention (Figure 3). There were no differences in MADRS score reduction

by work status at the time point for 1 year follow-up. Those with a high MADRS score prior to the intervention were in need of further supportive activities following the intervention to a higher extent than those who had returned to work or who were in work training.

Results from the "short interviews"

The results from the interviews showed that approximately 70% of the participants were satisfied or very satisfied with the coaching programme while 17% did not feel satisfied and considered that the programme did not meet their expectations. The rest, 13%, were neither satisfied nor dissatisfied or did not answer at all. The structure of the intervention with 3x3 hours coaching, with intermediate tasks at home and time for reflection, seemed to have worked well for most of the participants. For example, some expressed that: "it was very positive, super to be seen"; "...I have gained a better insight and my self-esteem has increased."; "...I am proud to have managed to get through the whole programme."; "...to have been treated as an independent human being has been the best benefit..." and "...this has been helpful to the functioning of my brain."

Co-operation during the project

During the project regular meetings were scheduled with representatives from the SIO and the EO in order to reach a deeper understanding of the participants and their ability to reach their goals. Overall the meetings aimed to facilitate the effectiveness of the individual's RTW and were an important part of the intervention.

Discussion

At the one-year evaluation 37% of the participants were in either full- or part-time work or in work training. In the reference group, 94% of the individuals were still on sickness benefit at 1 year follow-up, and only one person was partly in work training. Furthermore, all the participants significantly improved their health, sleep quality and mental status during the project, a finding that was most apparent in the group returning to work or in work training after one year. This finding supports the idea that a successful RTW is an important contributor to a better self-perceived health status. Another more general interpretation is that the participants, whether returning to work or not, had reached a better understanding of their total life situation and of circumstances that have had negative impact on their health, both physically and mentally. In addition, those returning to work experienced their health as more improved compared with those still on

sickness benefit.

About the study group

The selected group of participants represents a group that is difficult to rehabilitate for several reasons: as a group they had diffuse, complex subjective health problems, long periods of absence from work often combined with low motivation for RTW. Different studies have shown that longer periods of sickness absence, a low degree of motivation, and an expected sickness absence duration longer than 3 months are associated with a longer time before returning to work (7, 9, 11, 20). In consequence, rehabilitation for individuals with long-term absence from work often requires long-term interventions and some will remain on sick leave, sickness benefit or more likely disability pension after recurrent interventions.

The 30 participants in this project were individuals with quite heterogeneous health problems, stretching from musculoskeletal disorders to serious mental diseases. In general many participants had traumatic backgrounds and difficult social and psychosocial life situations. Poor self-confidence was common, as were a low ability to define limits for themselves and to find meaningfulness and to cope with life events. Their motivation for RTW varied from those highly motivated to return to work, to those with low or no motivation for RTW activities. Those not motivated for RTW usually had a history of many periods of very long-term work absence, which had resulted in adoption of a permanent sick role (9). As a consequence these persons had developed a new way of life which may explain their fear and anxiety when facing return to work demands.

Our results also showed that participants with higher locus of control scores and lower MADRS-points before the intervention had a more positive prognosis for RTW compared to those with lower locus of control scores and/or higher MADRS-points.

These instruments (scales) have never, to our knowledge, been used for evaluation of the possibility of rehabilitating participants with a long period of sickness absence.

Considering the participants' poor health further resources such as physician specialists, CBT experts and also physiotherapeutic competence were required for the project. Nearly half of the study group was determined to be in need of CBT treatment for their RTW. In this project it has been possible to offer participants such treatment immediately after completing the coaching programme.

There is no clear evidence that interventions that focus on solutions and or CBT methods have positive effects on RTW in cases with mild mental illness. Only a few studies found evidence or just a tendency of shorter

sick leave after CBT-related interventions (31, 43, 44). Recent research has mostly focused on individuals with short-term absence from work (between 3-6 months) and usually with musculoskeletal diseases. The results from this project suggest that there is a need for further research into the effects of CBT-related interventions on RTW, especially among individuals with diffuse diagnosis and long-term absence from the labour market.

About the intervention

Despite many positive experiences mentioned by most of the participants in the "interviews", several also expressed uncertainty and were more or less afraid to participate in the programme. However, depending on the degree of motivation most of their hesitation faded away during the project. One important conclusion is that information should be offered in different steps and in plenty of time before the start, so that several members of the team can introduce themselves, their different functions and different roles early in the intervention. Another important conclusion is that expectations vis-à-vis the participants, for example the aim of RTW, should be clearly expressed at the beginning of the programme.

Furthermore, the idea of creating a plan of action was to involve the participants in further rehabilitation activities and to suggest adequate measures for RTW. All of the participants (100%) reported their needs and goals, most of them with expectations of RTW.

At the transference phase, when the individuals finally met with the SIO and EO and a suggested timetable for their work training process was discussed, some of the participants hesitated and considered themselves not ready for this step. However, most of the participants experienced these meetings as very valuable for their possibility of returning to work. At the same time, the meetings also were experienced as stressful by some of the participants because of the demanding approach.

The intervention's transference phase represents a kind of crossroads for the individuals, either leading towards a working life or towards a life with further sick leave or permanent disability pension. At first sight, working life tends to be attractive, but when faced with reality many participants focused more on hindrances than on the possibility of returning to work.

About co-operation

Co-operation between the team members during the process has been crucial for the result. The selection, the diagnoses and other questions about the individuals were regularly discussed and contributed to increasing knowledge about the participants and their need for further RTW activities in all parts of the co-operation. Research on the effects of co-operation

on an individual's possibility of returning to work is limited. Abasolo (22) found evidence for faster RTW in individuals with musculoskeletal disorders when using multidisciplinary co-operation.

Conclusions

This study shows that long-term sickness absence (> 12 months) due to diffuse and subjective health problems is not a permanent condition even in participants with substantial work absence periods. A cognitive approach to strengthening individuals' empowerment and to increasing their self-esteem and to developing their own rehabilitation plan seems to be an effective method if combined with close co-operation with other rehabilitation team members, which has also been found in former studies.

The results in this study may also support the idea that rehabilitation aimed at returning to work is an important contributor to better self-perceived mental health for people who have been outside the labour market for a long time. However, we conclude that the intervention programme used in this project is most successful for individuals who are motivated to return to work, who have a higher locus of control and who score low on the depression rating scale MADRS. In addition, the individual's own will power, attitudes and ambitions seem to be of great importance for his or her probability of returning to work.

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Illustrations

Illustration 1

Illustrations

Illustration 1. Status after 1-year follow-up. .

Activities	1 year follow-up n (%)
Employment (full or part-time)	8 (27)
Work training or other work-related activities	3 (10)
Treatment and supporting activities for ex. CBT, physiotherapy)	4 (13)
No work-related activities – still on sickness benefit	14 (47)
Permanent sickness benefit <small>Webmed Central > Original Articles</small>	1 (3)

Illustration 2. SRH for those at work or in work training before the intervention, and after 1 year, compared with those still on sickness benefit or disability pension.

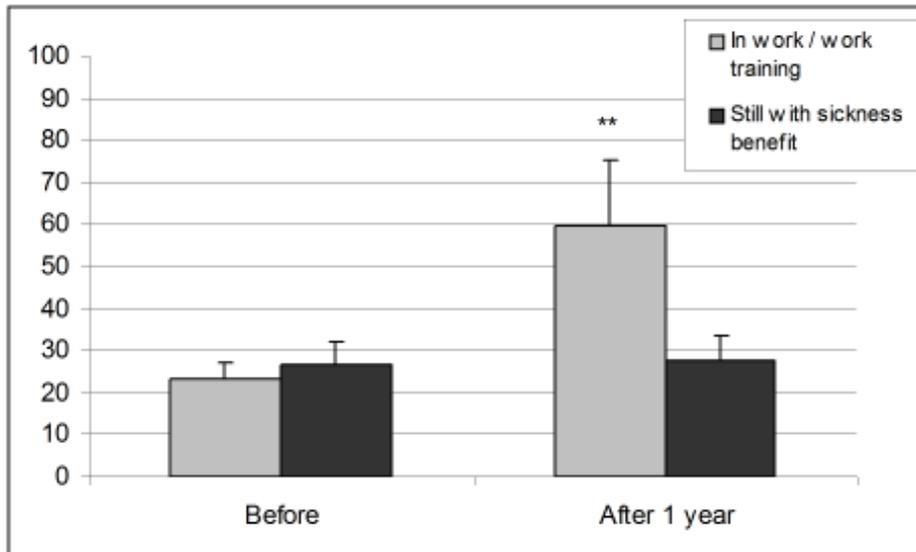


Illustration 3. Self-rated quality of sleep, before the intervention, and after 1 year.

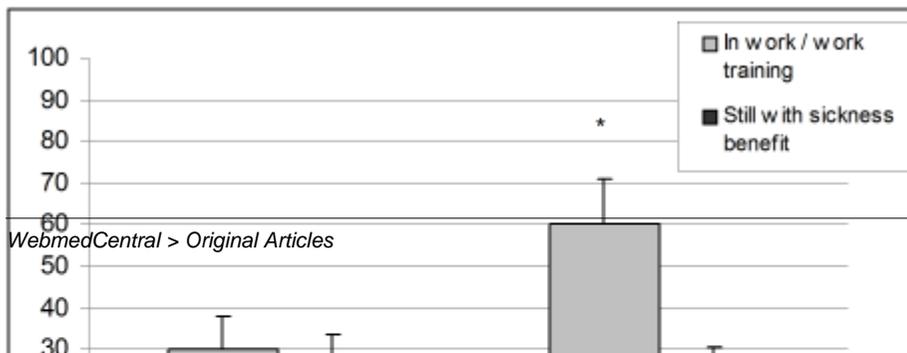
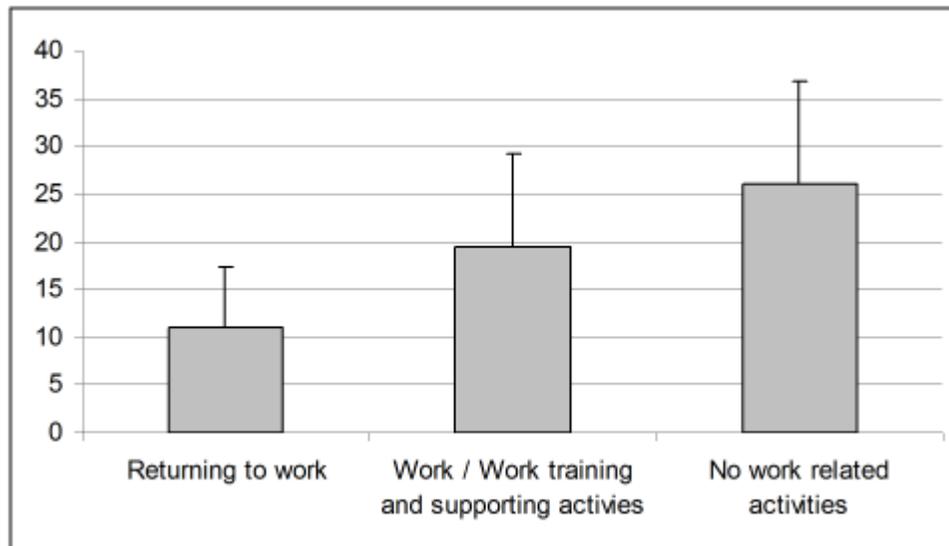


Illustration 4. MADRS points (prior to intervention) for different groups (participants at work / work training, parallel activities or participants still on sickness benefit).



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