

Health care interventions in case of long-term sick leave

A systematic review and assessment of medical, economic, social and ethical aspects

SBU ASSESSMENTS | ASSESSMENT OF METHODS IN HEALTH CARE AND SOCIAL SERVICES

DECEMBER 2022 | WWW.SBU.SE/359E

Summery and conclusions

Background

Persons on long term sick leave (defined as longer than 3 months) may benefit from interventions facilitating return to work.

Aim

The aim of this systematic review was to evaluate effects of interventions that may be initiated within the health care system. The primary outcome of interest was return to work. Secondary outcomes included intervention's effects on health and functioning. The aim was also to examine the cost-effectiveness of the evaluated interventions, highlight ethical aspects and identify scientific evidence gaps to guide future research.



Conclusions

- Unimodal and multimodal interventions and interventions that involve workplace contact or coordination activities towards the workplace may have a positive effect on return to work in the short time perspective (up to 12 months) for persons on sick leave for mental or musculoskeletal disorders. The certainty of the evidence was assessed to be low. It was not possible to estimate the size of the effect.
- It was not possible to determine the effect on return to work for interventions targeting health care professionals or health care organizations. The certainty of the evidence was assessed to be very low.
- It was not possible to determine intervention effects on return to work in the long-time perspective for any

- type of intervention. The certainty of the evidence was assessed to be very low.
- It was not possible to determine the effect of interventions on participants' health or function for any type of intervention. The certainty of the evidence was assessed to be very low.
- It was not possible to determine the effect on return to work, health or functioning for persons on sick leave for breast cancer diagnosis.
- There were no studies investigating return to work interventions for patients on sick leave for post covid or bipolar disorder.

Method

A systematic review was conducted in accordance with the PRISMA statement. The protocol is registered in Prospero (CRD42022315330). The certainty of evidence was assessed with the GRADE framework. Studies considered for inclusion were targeting populations on sick leave due to the most common diagnoses for long term sick leave based on Swedish statistics. All types of interventions were considered and were characterized as unimodal (one treatment), multimodal (several treatment modalities), intervention including workplace contact or workplace coordination, and interventions aiming at health care personnel/organizations.

Results were summarized for short time (≤12 months) and long-time (>12 months) effects on return to work. Effects on health and/or function were assessed regardless of follow-up time.

Effects on costs and cost effectiveness were assessed based on results in included studies.

Ethical analysis was performed by the project group, which included an academic scholar in ethics. The method was mainly based on discussion, aimed at identifying conflicts of interest between different agents involved, and potential ethical dilemmas.

Inclusion criteria:

Population

Persons on sick leave for a condition that is common when on long term sick leave according to Swedish statistics.

Intervention

Any intervention that could be initiated within health care practice with the overall aim of facilitating return to work. Interventions could be unimodal or multimodal. Furthermore, it could be collaborative with other organisations, such as employer, occupational health care, or social insurance agency.

Control

Any control, which could be no treatment, treatment as usual, wait list or other active treatment.

Outcome

Primary: measures of sick leave, work participation and/or return to work.

Secondary: measures on health and or functioning.

Health economic outcomes: effects on cost and cost effectiveness

Study design

Randomized controlled studies, including cluster randomized studies.

Other criteria

At least 6 months follow-up.

We performed risk of bias assessments and included studies with low or moderate risk of bias in the analysis.

Due to extensive heterogeneity, we performed a synthesis without meta-analysis investigating effects for each intervention category (unimodal, multimodal, workplace contact or coordination, and interventions targeting heath care staff) and study populations on sick leave for mental disorder, musculoskeletal disorders, or both.

Language: English, Swedish, Norwegian or Danish.

Search period: From 2000 to 2022. Final search May, 2022.

Databases searched: Cochrane Library, EMBASE, PsycINFO (EBSCO) and Medline.

Client/patient involvement: No

Results

We included 95 articles based on 68 unique studies. A total of 40 000 persons were evaluated for the return-to-work outcome. We included 10 studies that evaluated effects on costs and cost effectiveness.

Most of the studies included did not report significant findings on return to work.

We found low certainty evidence that unimodal, multimodal and workplace/coordination interventions may improve return to work.

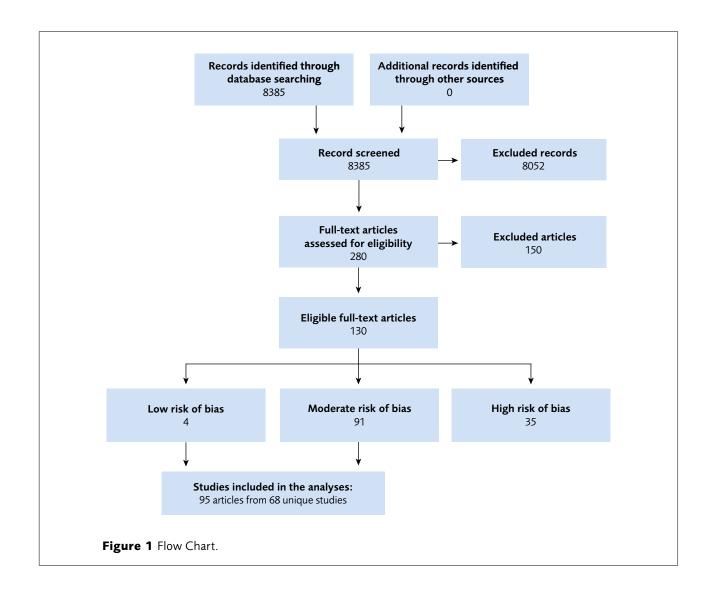


Table 1 Summarized results of interventions having positive effects for populations with mental or musculoskeletal disorders as compared to treatment as usual.

		Population								
		Mental or Musculos- keletal disorder			Mental disorder			Musculoskeletal disorder		
	Outcome	RTW short	RTW long	HoF	RTW short	RTW long	HoF	RTW short	RTW long	HoF
Type of intervention	Unimodal intervention	⊕⊕○○	⊕000	⊕000	⊕⊕○○	⊕000	⊕000	⊕000	⊕000	⊕000
	Multimodal intervention	⊕⊕○○	⊕000	⊕000	⊕000	⊕000	⊕000	$\oplus \oplus \bigcirc \bigcirc$	⊕000	⊕000
	Coordination/Workplace intervention	⊕000	⊕000	⊕000	⊕000	⊕000	⊕000	⊕⊕○○	⊕000	⊕000
	Interventions targeting health care personnel	⊕000	⊕000	⊕000	⊕000	⊕000	⊕000	⊕000	⊕000	⊕000

RTW = return to work; **shor**t = short period, 12 months or shorter; **long** = long period, longer than 12 months; **HoF** = Health or functioning.

 $[\]oplus \bigcirc \bigcirc \bigcirc =$ very low certainty, the effect is unclear

 $[\]oplus \oplus \bigcirc \bigcirc$ = low certainty, the intervention may have a positive effect

Ethics

The practice of sick leave and return to work is a complex ethical situation where patients may be vulnerable in terms of reduced autonomy and integrity.

Discussion

Despite lots of well conducted research, few studies presented robust support of the relative effectiveness of the investigated intervention. Our results are in line with other systematic reviews in the area. We advise that well conducted research studies with positive findings is replicated in future research. There is a need present outcomes and results in a way that makes it possible to perform meta analyses.

Conflicts of Interest

In accordance with SBU's requirements, the experts and scientific reviewers participating in this project have submitted statements about conflicts of interest. These documents are available at SBU's secretariat. SBU has determined that the conditions described in the submissions are compatible with SBU's requirements for objectivity and impartiality.

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