

Determinants for sickness absence and return to work among employees with common mental disorders – Protocol of a Scoping Review

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A scoping review of the existing evidence on prognostic factors of sickness absence (SA) and return to work (RTW) among workers with a common mental disorder (CMD) will be conducted in a systematic way following all ‘a priori’ methodological steps as planned in this study protocol. A best evidence synthesis of known prognostic factors for (recurrent) SA and RTW in workers with CMD, classified consistent with the domains of the International Classification of Functioning, Disability and Health will be presented in the scoping review aiming the designing of more effective interventions for preventing SA and promoting RTW.

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Background

Common mental disorders (CMD) are highly prevalent worldwide and negatively affect workability. CMD are often chronic and recurrent disorders that lead to long-term and recurrent sickness absence (SA), work disability, and early retirement [1-3]. Due to SA or reduction of work productivity, CMD generate high direct and indirect costs which are followed by a substantial economic burden in many European countries [4].

There are numerous factors that influence SA and the return-to-work (RTW) process among workers with a CMD. There is a large amount of literature on SA and RTW among workers diagnosed with a CMD. For this reason, before we continue with a longitudinal study, it is

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important to collect the existing evidence on factors that positively or negatively influence SA and (successful) RTW. In such situation, a scoping review would be the right study design which helps to better analyze the existing evidence.

Per definition, a scoping study is a technique that is used to collect and map the relevant literature in field of interest. In contrast to a systematic review, a scoping review addresses a broad research question and does not restrict its inclusion criteria to a narrow range of appropriate and quality assessed studies. Also data extraction and their evaluation remain more or less narrative or descriptive [5].

By the use of a scoping review we will be able to give a rapid overview of the existing literature on SA and RTW among the ones diagnosed with a CMD, to identify gaps in the literature and raise research questions that might be answered by upcoming primary or secondary studies.

This scoping review will be used to inform practitioners, researches, policy makers and other interested stakeholders on the determinants for SA and RTW which could help to build interventions to prevent sick leave and promote RTW among workers with a CMD.

Methods

In the scoping review, we will apply the following methodological steps [5]:

- (i) Identify and formulate the research question
- (ii) Identify relevant studies (both secondary and primary studies)
- (iii) Select studies by rigorously applying the inclusion and exclusion criteria
- (iv) Map the evidence on exposure and outcome
- (v) Collate, summarize and report the results descriptively; identify evidence gaps; formulate the scope of relevant future secondary (e.g. systematic reviews) or primary studies

(i) Identify and formulate the research question

We have formulated the following research questions that are planned to be answered by the scoping review:

- Which potential risk factors for (recurrent) SA or RTW in workers with CMD have so far been studied?
- Which prognostic factors are related to SA due to CMDs?
- Which prognostic factors are related to RTW in workers with CMDs?
- Which prognostic factors are related to the recurrence of SA due to CMDs?
- Which are the omissions in the current knowledge or evidence?

(ii) Identify the relevant literature

As a first step, we will collect search words that correspond to our predefined PEOS group: “population” (P), exposure (E), outcome (O) and study design (S). After completing the list of key words, a sensitive and a specific search string will be prepared for PubMed and then translated for EMBASE, PsycInfo and PSYINDEX. So, the search will run in four large and relevant electronic databases (MEDLINE, EMBASE, PsycINFO and PSYINDEX). At the beginning we will search only for secondary studies, more specifically, we will search for systematic reviews and meta analyses. The same search will be repeated but this time looking only for primary studies.

To make sure that we are not missing relevant literature, the electronic search will be followed by a manual search and a search for grey literature in the System for Information on Grey Literature in Europe (SINGLE) [6]. The manual search includes screening the references that were included in the systematic reviews that fulfilled the predefined inclusion criteria (see table 1); contacting authors that worked in the same field or searching manually in specific web-sites for possible projects or research.

Only articles published in a English and German language will be considered. The used search strings and each step of screening results will be documented.

(iii) Study selection by relevant inclusion and exclusion criteria

Only studies that fulfill our inclusion criteria will be included in the scoping review (Table 1). All obtained literature will be screened by two review authors independently. Disagreements among the two reviewers will be resolved by discussion. Is there any persisting difference of opinion after discussion, a third reviewer will be involved and a consensus will be reached between the three review authors. All screening steps including also the reasons for exclusion will be documented; the final selection results will be provided in form of a flowchart [7].

Table 1 Literature inclusion and exclusion criteria

PEOS	Inclusion criteria	Exclusion criteria
Population	→ Working-age population with a CMD as main diagnosis (ICD F00 – F99) e.g. anxiety, depression, adjustment disorder, burnout, stress related disorders)	→ Working-age population with CMDs only as a comorbid condition → Working-age population with severe CMDs (e.g. psychosis, schizophrenia, bipolar disorder, alcohol abuse)
Exposition	→ All examined prognostic factors	→ No further restriction
Outcome	Studies on → Sickness absence → Recurrent sickness absence → Return-to-work	Studies on → Work disability → Early retirement → Retirement → Work ability → Work functioning
Study design	→ Secondary studies: Quantitative, qualitative or mixed methods systematic reviews or overviews of systematic reviews on prognostic studies → Primary studies: All observational, prognostic (e.g. cross-sectional studies, cohort studies, case-control studies) and qualitative study types → Publication language: Studies published in English and German	→ Secondary studies: Narrative reviews → Primary studies: Letters, editorials, commentaries, government reports, meeting abstracts, Animal or human experimental studies, Intervention studies (controlled and uncontrolled studies) → Publication language: Studies published in other languages

In case of an unmanageable amount of literature, during the screening process it might be necessary to narrow the research question and consequently to reduce the number of mental health diagnoses (exposure) or number of further outcomes that are related to the two main outcomes (sickness absence and return to work). The methodology of scoping reviews allows the post hoc narrowing of the research question and adoption of the criteria set a priori [5].

Data represented in the systematic reviews will not be reanalyzed, but we will use these to make sure that our systematic search did not miss important literature. This means that we will manually add all studies enrolled in the found systematic reviews of this study.

(iv) Evidence mapping

One of the main results of the scoping review will be the mapping of the generated evidence. To better answer the research question, we will chart the determinants for SA and RTW of the target working age population diagnosed with a CMD (see Table 1). The ICF Framework [8] will be used to chart these prognostic factors.

(v) Best Evidence Synthesis

Main data on prognostic factors as well as their association with sickness absence and return to work will be extracted by one author; a second author will be involved to prove the correctness and completeness of the extracted data or to add missing information. In case important information will be missing in the literature that was selected for inclusion, the authors will be contacted and will be asked for providing the missing data.

Conclusively we will summarize and report the results in a narrative way. Main generated information will include (but will not be limited to): Bibliographic information of the publication, study type, study goal(s), used methods, geographic coverage (study location e.g. country), study population (e.g. community-based, population-based, specific occupational groups), mental illness or mental health complaints (e.g. anxiety, depression, adjustment disorder, and burnout), outcome measures (e.g. RTW-rates, time until RTW, working hours, sick leave rates, etc.), and study results (e.g. effect sizes of associations and its limitations).

When several publications are based on the same study, in order to avoid considering the same results more than once, all publications will be used to generate the study data but these data will be reported in the scoping review only once.

Ultimately, gaps in the literature will be identified and reported. Subsequently, we will present a best evidence synthesis of known prognostic factors for (recurrent) SA and RTW in workers with a CMD. Levels of evidence will be determined using a rating system adapted from that used by Detaille et al. [9]. Hence, we will create an overview of evidence based predictors for (recurrent) SA and RTW, and provide insight in existing research gaps.

Literature

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