


# BMJ Open Vocational rehabilitation for mental health service users with chronic mental illness in low-income to upper-middle-income countries: a scoping review protocol

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## ABSTRACT

**Introduction** Work is integral to the occupations of human beings and accounts for up to a third of time spent in an average adult life. Occupational therapists play a role in vocational rehabilitation of mental health service users (MHSUs) with the aim of optimising their work participation. It is advisable that occupational therapists providing vocational rehabilitation to MHSUs with chronic mental illness in mental healthcare settings are guided by a practice framework developed for that particular context. This scoping review aims to summarise existing evidence on vocational rehabilitation for MHSUs in low-income to upper-middle-income countries. The findings will inform subsequent phases of research undertaken to formulate a vocational rehabilitation practice framework for MHSUs in Namibia.

**Methods and analysis** The scoping review will employ the five stage methodological framework proposed by Arksey and O'Malley. This will be used in conjunction with the Preferred Reporting Items for Systematic Reviews extension for Scoping Reviews (PRISM-ScR) and Joanna Briggs scoping review guidelines. MESH terms, Boolean operators and truncation strategies will be employed for a comprehensive article search in electronic scholarly databases. These databases will include PsycINFO, EBSCOhost, HINARI, Google scholar, Medline, CINAHL, PubMed, Cochrane Library, Scopus, Science Direct and Wiley Online Library. Mendeley and Rayyan, both open source platforms, will be used for title, abstract and full-text screening, as well as data extraction. Data will be sifted and sorted by key categories and themes using a data charting form.

**Ethics and dissemination** The scoping review findings will be published in a peer-reviewed journal and presented at local and international conferences. Ethical clearance for this study will not be required as secondary data will be utilised and there are no patients involved.

## INTRODUCTION

The first author (MC) for this scoping review protocol is pursuing doctoral studies of which the proposed scoping review forms the foundation. The envisaged outcome of the doctoral studies will be a vocational rehabilitation

## Strengths and limitations of this study

- Regular peer debriefing with second and third authors will enhance credibility of the scoping review findings.
- A health sciences librarian have been consulted and will remain involved in the search strategy.
- The scoping review protocol have been submitted for registration and publication, thus exposing it to a rigorous peer review process.
- A key limitation is that the review will include sources published in English only due to lack of funding for this project.

(VR) practice framework for mental health service users (MHSUs) with chronic mental illness in Namibia, which will be used by occupational therapists working in mental healthcare settings. The process of developing this practice framework will follow four sequential phases; (1) scoping review of VR of MHSUs in low-income to upper-middle income countries, (2) stakeholder engagement to explore factors to be considered for VR in Namibia, (3) expert consensus on guideline statements and (4) evidence synthesis to produce the draft occupational therapy VR framework for MHSU with chronic mental illness. The second and third authors are involved in the project as primary (LvN) and secondary (HMvB) supervisors, respectively.

## Background

Work provides a significant life role that accounts for up to a third of an average adult life.<sup>1</sup> Work is also fundamental to the practice of occupational therapy, which is built on a belief in the necessity and value of occupation.<sup>1</sup> Occupational therapists use occupations or activities that are meaningful and purposeful to restore or maintain function in

the areas of work, self-care and leisure for people with physical and/or psychosocial dysfunction. The meaning of vocational or work rehabilitation is understood differently by different groups of people and professions. In occupational therapy practice, VR is defined as an evidence-based systematic process provided in different settings, services and activities to working age individuals with health-related impairments, limitations or restrictions with work functioning, and whose primary aim is to optimise work participation.<sup>2</sup> VR 'is whatever helps someone with a health problem to stay at, return to and remain in work'.<sup>3</sup> It enables persons with physical or mental impairments or disabilities to overcome barriers to accessing, maintaining or returning to employment or other useful occupations.<sup>4</sup> It is provided in different settings including hospitals, rehabilitation centres, workplace, sheltered employment facilities, etc. In the VR process, occupational therapists often provide a bridge that links clients to employers, doctors, and other stakeholders involved.<sup>1</sup>

van Biljon *et al*<sup>5</sup> identified six types of VR services specifically offered by occupational therapists. These are prevention, screening, assessment, intervention, placement and follow-up. Prevention focuses on providing education and raising awareness of good work practice to avoid development and/or worsening of illness. Vocational assessment entails measuring or determining the ability of a person who has an illness to be able to work whereas intervention aims at correcting or compensating for work ability deficits and improve work performance.<sup>5</sup> Intervention which is the focus of the proposed scoping review, therefore, include work preparation, readiness, work hardening, guidance, accommodation, adaptation, workplace visits, self-employment initiatives as well as support groups.<sup>5</sup> Placement entails facilitating clients' return to work while follow-up involves monitoring and evaluating progress made with clients who received VR service through telephonic or electronic communication or workplace visits.<sup>5</sup> Although the types of VR identified above seem to follow a sequential process from prevention to follow up, current evidence suggests a paradigm shift towards 'place first then train'.<sup>6</sup> Place first then train VR strategy promotes rapid placement of MHSUs in competitive work settings, followed by in vivo support, resources and training that helps the individual to successfully remain in those settings.<sup>6</sup> This means that placement and follow-up can be viewed as part of VR intervention. However, based on the first author's experience in and observation of VR for MHSUs in low-income to middle-income countries, the concept of 'place first then train' as well as supported employment is not well established in these settings.

For MHSUs with chronic mental illness, work is of particular importance to their mental health and well-being. Evidence indicates that engagement in employment or work by itself is 'associated with reduced symptoms, reduced hospital admissions, improved social skills, improved self-esteem, improved family atmosphere

and greater personal independence'.<sup>2</sup> Moreover, work is a significant means for MHSUs to meet their basic needs and is relevant to their social status, feeling of personal accomplishment, freedom and security.<sup>4</sup> Work enables social inclusion and provides opportunity for MHSUs to make a meaningful contribution to the community.<sup>7</sup> Swart and Buys<sup>2</sup> assert that people with mental disabilities should work to get better rather than getting better to work. Lloyd<sup>7</sup> reported that 'people with chronic mental illness actively strive to obtain meaningful roles and an appropriate vocational place in the community'.

Occupational therapists play a central role in VR for MHSUs with chronic mental illness. They use their knowledge of pathology together with their ability to analyse activity to improve the occupational performance area of work.<sup>5</sup> Using a Delphi technique with a panel of 35 occupational therapists, Buys<sup>8</sup> identified 16 occupational therapy professional competencies that are essential in the delivery of VR services to workers with disabilities in South Africa. One of the key competencies identified by Buys<sup>8</sup> is that occupational therapists should understand various VR services and apply the VR process within a variety of contexts.

Ross<sup>1</sup> suggests five types of knowledge that occupational therapists use in occupation-focused VR. These include; (1) work and workplace knowledge; (2) occupational knowledge; (3) social equity knowledge; (4) condition-based knowledge and (5) other knowledge. Work and workplace knowledge entails the nature and demands of the job, employer perspective as well as legislation governing work. Occupational knowledge is drawn from the occupational science paradigm. It is centred on human occupation and enshrines the value of participation in meaningful occupations, worker identity as well as occupational justice. Social equity knowledge is about the impact of societal barriers on social inclusion, whereas condition-based knowledge entails the nature of individuals' condition or disability's potential impact on function. Finally, Ross<sup>1</sup> categorises other knowledge as sector-specific information such as the field of insurance and information technology.

Given the above background, it is indeed essential that occupational therapists providing VR to MHSUs with chronic mental illness in mental healthcare settings are guided by a framework developed for a particular context. This is aligned to the decoloniality concept, which stresses the need for contextually relevant practice that prioritises the physical, environmental, socioeconomic and cultural conditions of the people whom occupational therapists serve.<sup>9</sup> The proposed scoping review, therefore aims to gather evidence on VR strategies and interventions used in institutional settings for MHSUs in comparable contexts to Namibia. Countries to be considered as having comparable contexts to Namibia shall be based on income groups as defined by the World Bank. Three of the four income groups, namely low, low-middle-income and upper-middle-income countries will be considered for the proposed scoping review.

## Review objectives

Given the above background, the key objectives of the proposed scoping review are:

1. Provide a detailed overview of all the studies on VR of MHSUs with chronic mental illness, within the occupational therapy scope of practice, in low-income to upper-middle-income countries.
2. Identify the different types, principles and strategies of institution-based VR interventions within the occupational therapy scope of practice for MHSUs who have chronic mental illness in low-income to upper-middle-income countries.

## Review question

The following question will be considered in the scoping review: What is known from the existing literature about institution based VR for MHSUs who have chronic mental illness from low-income to upper-middle-income countries?

## METHODS

### Study design

The proposed scoping review will employ a methodological framework originally suggested by Arksey and O'Malley<sup>10</sup> and subsequently refined by Levac *et al.*<sup>11</sup> and Colquhoun *et al.*<sup>12</sup> The framework is composed of five successive stages namely:

1. Defining the research question.
2. Identifying relevant studies.
3. Study selection.
4. Charting the data.
5. Collating, summarising and reporting the results.

The aforementioned framework will be used in conjunction with the Preferred Reporting Items for Systematic Reviews extension for Scoping Reviews (PRISMA-ScR) proposed by Tricco *et al.*<sup>13</sup> PRISMA-ScR provides a reporting guide that outlines a minimum set of items that should be included in scoping reviews.<sup>13</sup> The guideline consist of 20 essential reporting items and two<sup>2</sup> optional items applicable for scoping reviews. According to Tricco *et al.*<sup>13</sup> in addition to providing a reporting guidance for this specific type of knowledge synthesis, PRISMA-ScR increases methodological transparency and update of research findings.

### Time frame

The scoping review will be conducted between June 2021 and August 2021. Additional time may be allocated to allow authors to incorporate changes to the scoping review protocol based on inputs from reviewers.

### Stage I: defining the research question(s)

A clear review question helps the researcher to search literature effectively, and provides a sound structure for the development of the scoping review report.<sup>14</sup> A scoping review question should have three elements; population, concept and context (PCC).<sup>14</sup> Arksey and

O'Malley<sup>10</sup> recommend that a wide approach should be maintained in phrasing the scoping review question in order to generate breadth of coverage. Subquestions may be necessary to justify mapping of the evidence by population or context.<sup>14</sup> Therefore, the broad question for this scoping review is; what is known from the existing literature about institution based CR fitting into the scope of occupational therapists for MHSUs who have chronic mental illness from low and middle income countries? Breaking down the question into PCC, the population is 'MHSUs with chronic mental illness', the concept is 'VR', and the context is 'institutions in low to upper middle income countries'.

### Stage II: identifying relevant studies

In order for the scoping review to be as comprehensive as possible, the research evidence will be searched through different sources, namely, electronic databases, reference lists and handsearching of key journals.<sup>10</sup> A preliminary literature search on the scoping review topic to clarify the inclusion and exclusion criteria was conducted on a couple of databases including Pubmed with the assistance from a qualified subject librarian. A full search strategy is attached as online supplemental file Annexure A.

In order to refine the search, the librarian recommended the use of Medical Subject Heading (MeSH) terms, Boolean operators (ie, AND, OR, NOT) and truncation (\*) strategy. The outcome of the preliminary literature search was a list of pertinent words and index terms to inform the subsequent structured search.<sup>15</sup> The identified primary and secondary search terms are as follows: vocational rehab\*, work rehab\*, occupational rehab\*, psychosocial rehab\*, psychiatric rehab\*, mental disorders, chronic mental illness, persistent mental illness, severe mental illness, excluding Europe and North America. The next step will be a comprehensive structured search as suggested by the Joanna Briggs Institute (JBI).<sup>14</sup> The comprehensive structured search will be carried out on each of the following electronic scholarly databases; PsycInfo, EBSCOhost, Google Scholar, Medline, CINAHL, PubMed, Cochrane library, Scopus, Science Direct, HINARI and Wiley online library. Grey literature will be searched through library links such as 'libguides.sun.ac.za/medicine/thesis'. Search results will be exported from databases and imported to Mendeley citation management software where duplicates will be removed. Citations will be exported from Mendeley in a Research Information System format and imported to Rayyan for title and abstract screening. Bibliographies of studies identified through electronic database searches will be checked until saturation point is reached.<sup>10</sup> Saturation point will be reached when no new sources are identified from bibliographies of included sources. Full texts of articles will be reviewed if the researcher is not in a position to decide on the inclusion or exclusion of the study on the basis of the title and abstract.<sup>15</sup> Finally, the researcher



will handsearch key journals in order to identify articles that could have been missed in databases and reference list searches.<sup>10</sup>

### Stage III: study selection

Rayyan, which is an open source web-based software platform, will be used for title and abstract screening, full-text screening and data extraction. Two reviewers, the first author and the third author, will be independently engaged in the screening process. Each reviewer will have three options when selecting the articles, that is, Yes, Maybe or No. A third reviewer, the second author, will be used if there is conflict in the selection process and her vote will be final. The Rayyan software for deduplication of citations and use of exclusion and inclusion key words will be used. During the selection process Rayyan detects, highlights and summarises keywords for include, keys words for exclude, as well as exclusion reasons. This function will help the author to identify sources that may be included or excluded, respectively.

### Inclusion criteria

Studies meeting the PCC criteria will be considered for inclusion.<sup>14</sup> In this study, the type of participants (P) are MHSUs who have chronic mental illness, the concept (C) is VR within occupational therapy scope of practice, and the context (C) is institutions in low to upper middle income countries. Therefore, peer-reviewed sources on VR interventions that fit into the occupational therapy scope and performed in low-income to middle-income countries, available in English and published between 2010 and 2021 will be included in the scoping review. Additional inclusion criteria will include grey literature sources and sources that passed through the ethical clearance process.

Given the above mentioned criteria the following definition of terms will be used:

#### *Chronic mental illness*

Diagnostic criterion of non-organic and personality disorders; long history (2years or more) of previous hospitalisations or outpatient treatment; and disability criterion including disturbing behaviour, impairment in work and non-work activities and mild impairment in basic needs.<sup>16</sup>

#### *Vocational rehabilitation*

A multiprofessional evidence-based approach that is provided in different settings, services, and activities to working age individuals with health-related impairments, limitations or restrictions with work functioning, and whose primary aim is to optimise work participation.<sup>2</sup>

#### *Institutions*

These are facilities where MHSUs may receive VR service. They include clinics, hospitals or rehabilitation centres, day-care centres, half-way houses or home, sheltered employment facilities, correctional facilities and forensic mental health settings.

### *Low-income to middle-income countries*

Countries whose economies are classified as low income, low-middle income or high middle income by the World Bank.

The review will only include recent sources from the last decade (2011–2021) because of the significant development that has happened in terms of VR in this period from ‘train and place’ to ‘place first then train’. Also, there has been an increase in the number of occupational therapists providing VR services to MHSUs in the last decade hence the need to focus on research produced during this period. The sources will be limited to those published in English because of limited funding for this project.

### Stage IV: charting the data

The fourth stage of the scoping review as proposed by Arksey and O’Malley<sup>10</sup> will entail charting the data of articles selected in stage three. The charting process involves synthesising and interpreting qualitative data by sifting and sorting information by key categories and themes.<sup>10</sup> In order to take a broader view on VR for MHSUs, at the same time applying a common analytical framework to all selected studies, a ‘descriptive-analytical’ method will be employed.<sup>10</sup> The first author will develop a data charting form which will be independently reviewed by the second and third authors. All 12 items from the Template for Interventions Description and Replication checklist<sup>17</sup> will be incorporated in the data charting form (online supplemental file Annexure B) which will be used to enter the data from selected sources using Microsoft Excel programme. The following information will be captured during this process; Author(s), year of publication, origin/country of origin, aims/purpose, study population and sample size, methodology/methods, intervention type, comparator and details of these, duration of the intervention, outcomes of interventions used and details of these, key findings that relate to the scoping review question.

### Stage V: collating, Summarising and reporting the results

This stage entails three subphases; (1) data collation and analysis, (2) reporting of results and outcomes, (3) and relating the results to scoping review objectives and/or questions.<sup>13 15</sup> A flow diagram will be used to present the numbers of sources of evidence screened, assessed for eligibility and included in the review.<sup>13</sup> Basic numerical and descriptive qualitative analysis of the distribution of the studies by year of publication, countries of origin, VR intervention type/strategy and research methods adopted will be presented in a table format. Categories of VR intervention will be based on groups suggested by van Biljon *et al.*<sup>5</sup> These include work preparation, work readiness, work hardening, guidance, accommodation, adaptation, work placement, workplace visits, self-employment initiatives and support groups. In addition, study population, duration of intervention, outcomes of the intervention, key findings and the gaps in research will be presented

for each and every source included. Gaps in research will entail areas of further study identified by the sources. Given the above, it is envisaged that a comprehensive summary of evidence on institution based VR for MHSUs with chronic mental illness will be presented. However, analysis of extracted data is not expected to go beyond a basic descriptive analysis as this is not expected of this scoping review.

### Stage VI: consultation exercise and Stakeholder involvement

Consultation and stakeholder involvement is an optional but essential sixth stage suggested by Arksey and O'Malley.<sup>10</sup> In order for the scoping review results to be made more useful key stakeholders should contribute through sharing insights otherwise not found in the scholarly literature.<sup>10 15</sup> Therefore, the researcher will engage international networks who have interest in VR for MHSUs such as the Occupational Therapy African Regional Group and the World Federation for Mental Health. Also, subsequent to this scoping review, the researcher will engage local stakeholders who will include MHSUs, their family members and occupational therapists providing VR to MHSUs with chronic mental illness, to apply the scoping review findings to the local context.

### Patient and public involvement

No patients will be involved.

## DISCUSSION

It is envisaged that through this scoping review the first author will gather and examine the nature and extent of available literature on VR of MHSUs in low-income to upper-middle-income countries. This will be a critical step that lays the foundation for the proceeding steps in the development of a VR framework for MHSUs in the Namibian context. A VR practice framework for MHSUs with chronic mental illness will be the main outcome of the first author's PhD study. Therefore, the scoping review findings will potentially inform the development of data collection tools that will be used during stakeholder consultations in phase two of the study. Thematic areas to be covered will include, but not limited to VR intervention types, duration of the intervention, intervention principles and strategies, as well as outcomes of the interventions. More so, scoping review findings will be published in a peer-reviewed journal and presented at local and international conferences. In addition to the expected contribution to scholarly literature, the findings will guide future research in the field of mental health and VR.

### Strength and limitations

Methodological rigour is the key strength of the proposed scoping review. This scoping review protocol was developed using the latest evidence in scoping review methodology. The evidence used include JBI,<sup>14</sup> PRISMA extension for scoping reviews<sup>13</sup> and a scoping review

framework proposed by Arksey and O'Malley.<sup>10</sup> Regular peer debriefing with the second and third authors will enhance credibility and hence trustworthiness of the study. More so, the scoping review protocol will be submitted for registration and publication, therefore, it will be exposed to rigorous peer review process. On the other hand, key limitation to this scoping review is the fact that non-English sources will be excluded mainly because of lack of funding for this project.

## DISSEMINATION AND ETHICS

This scoping review will be the first step in the development of a VR framework for MHSUs with chronic mental illness in Namibia. It is anticipated that the scoping review findings will provide a summary of VR strategies in comparable contexts to Namibia. The researcher aims to submit written scoping review findings for possible publication by an international peer-reviewed journal. In addition, the findings will be presented at local and international scientific congresses and conferences. Ethical clearance for this study will not be required as secondary data will be used.

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**Contributors** Three authors were involved in conceptualising, drafting and editing this protocol in preparation for scoping review. The first author, MC, drafted the protocol script as part of his doctoral studies. Second and third authors, LvN and HMvB, respectively, helped with protocol development and will continue with screening of sources and data extraction.

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