

BMJ Open Workplace-based occupational therapy for mental health in Africa: a scoping review protocol

Munira Hoosain , Nicola Ann Plastow

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ABSTRACT

Introduction Although mental health at work is a pressing and growing concern, mental healthcare accounts for less than 2% of global healthcare, with marked inequality across continents. Africa has the smallest proportion of mental health service providers, and the highest rate of out-of-pocket expenditure for mental health service users. Poor mental health at work results in costs to workers, employers and the economy. This review aims to collaborate with stakeholders to identify literature on workplace-based occupational therapy interventions supporting the mental health of workers in Africa.

Methods and analysis We will search Medline (PubMed), EBSCOhost (Academic Search Premier, AfricaWide Information, CINAHL, Health Source: Nursing/Academic), Scopus, Web of Science, Sabinet, Cochrane and OTSeeker for qualitative and quantitative primary research studies. Grey literature will be searched via Sabinet and ProQuest. No language or date restrictions will be applied. Title and abstract screening as well as full-text screening will be done independently by two reviewers. Data extracted will include information about the articles, characteristics of studies and interventions, and findings. Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews guidelines will be used for reporting results. Three groups of stakeholders will be consulted during the review process: service users/workers, employers and service providers/occupational therapists.

Ethics and dissemination This scoping review does not require ethics approval. Findings of the review will be disseminated through stakeholder engagements, peer-reviewed publications and conference presentations.

INTRODUCTION

Mental health problems are the leading cause of absenteeism from work globally, and are associated with direct, indirect and intangible costs to workers and their employers.¹ These include healthcare costs, higher staff turnover and emotional strain. The global COVID-19 pandemic has led to an alarming increase in the number of adults reporting symptoms of anxiety and depression.² Some are even suggesting a mental health pandemic to follow.²

Mental health is not only restricted to the management or absence of psychiatric illness,

Strengths and limitations of this study

- This review protocol follows the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews and Joanna Briggs Institute guidelines for scoping reviews.
- Article selection will be conducted independently by two reviewers, both at title and abstract selection stage and at full-text review stage.
- Grey literature and articles of all languages will be included, with no date limitations.
- Stakeholders will be consulted at review design, production and dissemination stages.
- This review is limited to evidence from Africa only.

but rather refers to ‘a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community’ (p6).³ The WHO developed the Mental Health Action Plan 2013–2020³ to address the world’s growing mental health concerns. Strategies included developing community-based mental health services and implementing mental health prevention and promotion programmes.³

Mental healthcare is a growing and pressing need, both internationally and on the African continent. According to the WHO Mental Health Atlas 2017,⁴ the median global mental healthcare expenditure per capita is US\$2.5, while general government healthcare expenditure averages US\$141 per capita. Mental healthcare expenditure thus accounts for less than 2% of total healthcare expenditure internationally. Marked inequality between regions is compounding this problem: while Europe spends US\$21.7 per capita on mental healthcare, Africa spends around US\$0.1 per capita on the same.⁴ The report further notes that Africa and South East Asia have the highest rates of out-of-pocket expenditure for mental health services, indicating less financial support and increased burden for mental



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Occupational Therapy, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, Western Cape, South Africa

Correspondence to
Mrs Munira Hoosain;
munira@sun.ac.za



health service users in these areas.⁴ Africa also has the smallest proportion of mental health workers: 0.9 mental health workers per 100 000 population, compared with the global median of 9, and 50 in Europe.⁴ Mental health promotion and prevention continue to be a challenge in Africa, with less than 50% of countries reporting at least two functioning promotion/prevention programmes, compared with more than 70% in all other WHO regions outside of the African region.⁴

The importance of mental health at work has long since been recognised by both WHO and the International Labour Organization.⁵ Work environments can either have positive effects on mental health¹; or contribute to poor mental health through job stress, conflict with peers and supervisors at work, non-supportive work cultures and work overload.⁵ Poor mental health at work can result in a multitude of issues for both workers, employers and the economy.¹ These can include work absenteeism, reduced work performance, strained relationships at work, loss of motivation and behavioural problems; as well as productivity losses, loss of human capital and reduction in gross domestic product.^{1,5}

Considering that workers often spend the majority of their waking hours at work, the workplace provides a unique and potentially underutilised setting for interventions supporting health. Public health interventions are often most effective when situated in the environments where people spend most of their time.⁶ The WHO global strategy on health, environment and climate change recognises workplaces as an important setting for prevention and management of non-communicable diseases, such as mental health disorders.⁷ However, workplace programmes account for only 7% of functional international mental health promotion/prevention programmes.⁴ A recent Cochrane systematic review on interventions for return to work among people with depression found a combination of work-directed and clinical interventions probably reduces the number of days off sick, but also that further research is needed to identify the combination of interventions that works best.⁸

Occupational therapists are ideally placed to offer work-directed interventions to support mental health. Occupational therapists are skilled at enabling people and communities to participate in activities of their choice, using evidence-based interventions.⁹ The role of occupational therapy is well recognised in both mental health⁹ and work-related practice,¹⁰ and occupational therapists are recognised service providers in the WHO Mental Health Atlas 2017.⁴ However, there are very few occupational therapists working in mental health internationally; less than 0.25 per 100 000 people.³ In the workplace, occupational therapy interventions focus on the impact of health and wellness on an employee's ability to meet the demands of their job; and can include collaboration with workers and employers towards health promotion, workplace modification, improving access and recommending or providing assistive devices, and case management.¹⁰

There is a growing need for organisational workplace-based mental health programmes, which may require occupational therapists to focus on group or population-based programmes that consider both the needs of the workers and employers.¹¹

Several reviews have attempted to highlight and evaluate the evidence on workplace-based mental health interventions from other professions,^{12–20} but to our knowledge none have focused on synthesising evidence about occupational therapy from the African continent. Jansen van Vuuren, Okyere and Aldersey's scoping review about the role of occupational therapy in Africa highlighted unique contextual considerations in this region.²¹ These related to the difference in mental healthcare service provision, poverty and associated malnutrition and low education levels, violence and political instability, mental health stigma, wide variety of cultures and languages, and community-centredness.²¹

This scoping review thus aims to identify literature on workplace-based occupational therapy interventions supporting the mental health of workers in Africa. The objectives of the review are:

1. To provide a detailed overview of all studies about workplace-based interventions supporting mental health conducted by occupational therapists in Africa.
2. To identify trends and gaps in the types of interventions, practitioners involved, mental health conditions, types of work, geographical location, anticipated outcomes and effectiveness of interventions.
3. To identify barriers and facilitators in implementing these interventions on the African continent.

METHODS AND ANALYSIS

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses guideline for reporting on scoping reviews (PRISMA-ScR)²² and the Joanna Briggs Institute (JBI) guideline for conducting scoping reviews²³ will be used to design and report on this review.

Patient and public involvement

The involvement of stakeholders in reviews has been suggested as a potential method of optimising the real-world impact and increasing uptake of review findings, particularly in reviews with a rehabilitation focus.²⁴ Kayes *et al* recommend that researchers engage with stakeholders within review design, production and dissemination stages.²⁴ In line with this recommendation and the ACTIVE framework for stakeholder involvement in systematic reviews,²⁵ we plan to consult with three groups of stakeholders at the design, production and dissemination stages of the review. At review design stage, we consulted with a group of 63 occupational therapists situated in Africa with an interest in workplace-based interventions for mental health, as well as a group of 10–15 managers and supervisors at a large South African factory where occupational therapy services are provided. Stakeholders were asked whether they were aware of any interventions

in the field (workplace-based occupational therapy for mental health in Africa), whether the scoping review should focus on occupational therapy interventions only or interventions offered by any service provider, whether the review should focus on Africa only or all low to middle income countries, and how broadly mental health should be defined in the scoping review. Occupational therapists were also asked for suggestions of keywords that could be included in the literature search. Recommendations from these two groups of stakeholders were integrated into the review design. While we planned to also consult with a group of service users (factory workers who had previously participated in workplace-based occupational therapy) at the review design stage, this was not possible after a key gatekeeper resigned. We plan to consult with all three groups of stakeholders at the production and dissemination stages of the scoping review. These future engagements may include consultation about the analysis of data (eg, how to group studies) and discussion about the value and application of the review findings within the stakeholders' contexts.

Inclusion criteria

In accordance with the JBI guideline on scoping reviews, the review parameters were determined using the 'PCC' framework.²³ This framework considers participants included in research, the concept of interest, and the context in which research was completed.

Participants

Studies involving interventions with any working population will be included. This includes formal and informal employment. Child labour will not be excluded. Participants must be actively engaged in work, preparing for work or returning to work.

Concept

All research highlighting any interventions supporting worker mental health, offered by occupational therapists, including intervention mapping, effectiveness studies, rehabilitative or preventative studies. Interventions offered in a multidisciplinary team that includes an occupational therapist will be included. Interventions must be at least partly based at a workplace. Studies based at onsite clinics, for example, occupational health centres based at

workplaces, will be included. Return to work interventions will be included, provided these are at least partly workplace based. Diagnosed and undiagnosed mental health conditions will be included.

Context

Studies conducted in any African country at any type of workplace will be included.

Types of studies

Qualitative, quantitative and mixed methods primary research will be considered in order to get a broad overview of existing knowledge in the field. Theses and dissertations will be included, along with published conference proceedings. Protocol papers will be excluded where no findings are published.

Exclusion criteria

Studies that do not describe or evaluate an intervention, including opinion articles, commentaries and editorials.

Search strategy

A search strategy has been designed with the help of an expert librarian at Stellenbosch University. A variety of search terms connected by Boolean operators, using truncation, Medical Subject Heading (MeSH) terms, synonyms, lay and medical terminology and variant spellings will be used (see [table 1](#)). Several databases will be searched, including Medline (PubMed), EBSCOhost (Academic Search Premier, AfricaWide Information, CINAHL, Health Source: Nursing/Academic), Scopus, Web of Science, Sabinet, Cochrane and OTSeeker. Grey literature will be searched via Sabinet and ProQuest. No language or date restrictions will be applied. The researchers will also personally source articles through key contributors to the field, for example, through networks such as the Occupational Therapy Africa Regional Group (OTARG). The African countries included within the search terms are all members of the World Federation of Occupational Therapists.

Study selection

Articles will be screened by title and abstract independently by two reviewers²³ using the online software platform, Covidence. Search and review dates will be recorded. The full text

Table 1 Search strategy

Concept	Alternative words
Mental health	"Mental disorder*" OR burnout OR stress OR psychosocial OR wellbeing OR well-being OR wellness OR recovery OR "substance abuse" OR "alcohol abuse" OR "drug abuse" OR "post traumatic stress disorder" OR "post-traumatic stress disorder" OR PTSD OR depression OR anxiety OR schizophrenia OR suicide
Occupational therapy	"occupational therap*" OR rehabilitation OR prevention OR promotion OR habilitation OR assessment OR "supported employment" OR "return-to-work" or "return to work" OR treatment OR intervention OR effectiveness OR effect OR counselling OR "work ability" OR mindfulness OR "nature-based"
Workplace	"workplace based" OR "workplace-based" OR organisational OR organizational
Africa	Africa OR Botswana OR Ghana OR Kenya OR Madagascar OR Malawi OR Mauritius OR Morocco OR Namibia OR Nigeria OR Rwanda OR Seychelles OR "South Africa" OR Tanzania OR Tunisia OR Uganda OR Zambia OR Zimbabwe

**Table 2** Data extraction framework

Bibliometric information	Characteristics of the studies	Characteristics of the interventions	Findings
Title	Study design	Type of practitioner(s) offering the intervention	Outcomes assessed
Author(s)	Study aim/research question	Frequency	Assessment instruments
Affiliation of author(s)	Study population (Using the PROGRESS-Plus framework) ³²	Duration	Results of intervention
Year of publication	Sample size	Treatment modalities/techniques	Facilitators and barriers
Source/Journal	Health conditions	Location	Service users' experiences/perspectives
Country		Utility/feasibility of intervention	
		Theoretical/conceptual framework used for intervention	

of potentially suitable articles will be retrieved and assessed using the inclusion criteria. This stage will be conducted independently by the same two reviewers. Reasons for exclusion at this stage will be recorded. The references of included articles, as well as relevant systematic, scoping and literature reviews, will be screened for additional articles (pearling). Disagreements between reviewers will be resolved through discussion and consensus, and if necessary through a third reviewer. Articles in languages other than English will be translated using the Stellenbosch University Language Centre. The results of title and abstract screening, full text selection and pearling will be recorded in a PRISMA flow diagram.²²

Data extraction

Data will be extracted by two reviewers, with random accuracy checks, and recorded in purpose-built spreadsheets on Covidence. Data will be collected on the items outlined in table 2.

Data analysis, synthesis and presentation

Methodological quality of individual studies will not be assessed, in keeping with scoping review methodology.²³ However, study design will be recorded using the Australian National Health and Medical Research Council (NHMRC) hierarchy of evidence.²⁶

Data will be mapped by geographical location or type of intervention, as appropriate. Results will be charted diagrammatically as well as in text, with bar charts or graphs as appropriate. Key findings will be highlighted, along with main focus areas and gaps in the research. The findings will be presented in a narrative summary, in line with the objectives of this review. Depending on the type of research identified, the scoping review may be followed by a systematic review and meta-analysis of effectiveness studies, or a qualitative research synthesis of the findings from qualitative studies. It is anticipated that this scoping review will be completed by November 2022.

DISCUSSION (ETHICS AND DISSEMINATION)

This scoping review focusses specifically on mental health interventions situated within the workplace. Workplaces

provide the opportunity for service provision to large numbers of people with mental health problems, while limiting the risk of stigma, discrimination and absenteeism. Occupational therapy has its roots in mental health and is able to provide a client-centred, holistic approach to intervention.²⁷ Occupational therapy uniquely considers the interface between the person, their activities or occupation and the environment and is thus well placed to provide mental health services within the workplace.²⁸ Work rehabilitation is already an established field of occupational therapy with substantial evidence of effectiveness.^{29–31} There is a need to extend these services to include mental health interventions. This review will identify evidence specific to mental health interventions within the workplace in the African context.

Ethics approval is not required for this scoping review, as it involves secondary analysis of primary research. Stakeholder engagements are used to inform the review design and share the results of the review, rather than as a source of data, and thus do not constitute primary research or require ethical approval.

Results of the review will be shared in stakeholder meetings, at conferences and through publication in a peer-reviewed journal. The results will also be used to plan and implement workplace-based interventions for mental health that are contextually relevant and evidence-based within Africa.

Contributors Both authors contributed to the conceptualisation of this protocol and drafting of the manuscript.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

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ORCID iD

Munira Hoosain <http://orcid.org/0000-0003-4664-4832>

REFERENCES

- 1 Wall T, Cooper CL, Brough P, eds. *The SAGE Handbook of Organizational Wellbeing*. United Kingdom: SAGE Publications, 2021.
- 2 Panchal N, Kamal R, Orgera K, et al. *The implications of COVID-19 for mental health and substance use*. Kaiser family foundation, 2020.
- 3 World Health Organization. Mental health action plan 2013-2020, 2013. Available: <https://www.who.int/publications/i/item/9789241506021>
- 4 World Health Organization. Mental health atlas 2017, 2018. Available: <https://www.who.int/publications/i/item/mental-health-atlas-2017>
- 5 Harnois G, Gabriel P. World Health Organization & International Labour Organisation. Mental health and work: impact, issues and good practices. World Health Organization, 2000. Available: <https://apps.who.int/iris/handle/10665/42346>
- 6 Goetzl RZ, Roemer EC, Holiungue C, et al. Mental health in the workplace: a call to action proceedings from the mental health in the Workplace-Public health Summit. *J Occup Environ Med* 2018;60:322.
- 7 World Health Organization. Global strategy on health, environment and climate change: the transformation needed to improve lives and well-being sustainably through healthy environments. Geneva: World Health Organization, 2020. Available: https://www.who.int/phe/publications/WHO-STRATEGY-LAY5_fin_red.pdf
- 8 Nieuwenhuijsen K, Verbeek JH, Neumeyer-Gromen A, et al. Interventions to improve return to work in depressed people. *Cochrane Database Syst Rev* 2020;10:CD006237.
- 9 World Federation of Occupational Therapists Position Statement. Occupational therapy and mental health, 2019. Available: <https://wfot.org/resources/occupational-therapy-and-mental-health>
- 10 World Federation of Occupational Therapists Position Statement. Occupational therapy in work-related practice, 2016. Available: <https://www.wfot.org/resources/occupational-therapy-in-work-related-practice>
- 11 Thompson AN, Fugard MI, Kirsh B. Organizational workplace mental health: an emerging role for occupational therapy. *Occup Ther Ment Health* 2021;37:240-63.
- 12 Pomaki G, Franche R-L, Murray E, et al. Workplace-Based work disability prevention interventions for workers with common mental health conditions: a review of the literature. *J Occup Rehabil* 2012;22:182-95.
- 13 Gray P, Senabe S, Naicker N, et al. Workplace-Based organizational interventions promoting mental health and happiness among healthcare workers: a realist review. *Int J Environ Res Public Health* 2019;16:4396.
- 14 Proper KI, van Oostrom SH. The effectiveness of workplace health promotion interventions on physical and mental health outcomes - a systematic review of reviews. *Scand J Work Environ Health* 2019;45:546-59.
- 15 Heckenberg RA, Eddy P, Kent S, et al. Do workplace-based mindfulness meditation programs improve physiological indices of stress? A systematic review and meta-analysis. *J Psychosom Res* 2018;114:62-71.
- 16 Cullen KL, Irvin E, Collie A, et al. Effectiveness of workplace interventions in return-to-work for musculoskeletal, pain-related and mental health conditions: an update of the evidence and messages for practitioners. *J Occup Rehabil* 2018;28:1-15.
- 17 Furlan AD, Gnam WH, Carnide N, et al. Systematic review of intervention practices for depression in the workplace. *J Occup Rehabil* 2012;22:312-21.
- 18 Tan L, Wang M-J, Modini M, et al. Preventing the development of depression at work: a systematic review and meta-analysis of universal interventions in the workplace. *BMC Med* 2014;12:1.
- 19 Lee YJ, Kim EH. A systematic review of workplace interventions for the mental health of workers. *J Korean Acad Psychiatr Ment Health Nurs* 2020;29:155-67.
- 20 Gritzka S, MacIntyre TE, Dörfel D, et al. The effects of workplace nature-based interventions on the mental health and well-being of employees: a systematic review. *Front Psychiatry* 2020;11:323.
- 21 Jansen van Vuuren J, Okyere C, Aldersey H. The role of occupational therapy in Africa: a scoping review. *S Afr J Occup Ther* 2020;50:3-21.
- 22 Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med* 2018;169:467-73.
- 23 Peters MDJ, Godfrey C, Mclnerney P. Chapter 11: Scoping Reviews. In: Aromataris E, Munn Z, eds. *JBI manual for evidence synthesis*. JBI, 2020. <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-20-12>
- 24 Kayes NM, Martin RA, Bright FA, et al. Optimizing the real-world impact of rehabilitation reviews: increasing the relevance and usability of systematic reviews in rehabilitation. *Eur J Phys Rehabil Med* 2019;55:331-41.
- 25 Pollock A, Campbell P, Struthers C, et al. Development of the active framework to describe stakeholder involvement in systematic reviews. *J Health Serv Res Policy* 2019;24:245-55.
- 26 Merlin T, Weston A, Tooher R. Extending an evidence hierarchy to include topics other than treatment: revising the Australian 'levels of evidence'. *BMC Med Res Methodol* 2009;9:1-8.
- 27 Kielhofner G. *Conceptual foundations of occupational therapy practice*. FA Davis, 2009.
- 28 Law M, Cooper B, Strong S, et al. The person-environment-occupation model: a transactive approach to occupational performance. *Canadian Journal of Occupational Therapy* 1996;63:9-23.
- 29 Désiron HAM, de Rijk A, Van Hoof E, et al. Occupational therapy and return to work: a systematic literature review. *BMC Public Health* 2011;11:1-4.
- 30 Snodgrass J. Effective occupational therapy interventions in the rehabilitation of individuals with work-related low back injuries and illnesses: a systematic review. *Am J Occup Ther* 2011;65:37-43.
- 31 Amini D. Occupational therapy interventions for work-related injuries and conditions of the forearm, wrist, and hand: a systematic review. *Am J Occup Ther* 2011;65:29-36.
- 32 Oliver S, Kavanagh J, Caird J, et al. *Health promotion, inequalities and young people's health: a systematic review of research*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, 2008.