OCCUPATIONAL THERAPY INTERVENTIONS FOR COMMUNITY RE-INTEGRATION OF MENTAL HEALTH CARE USERS WITH SEVERE MENTAL ILLNESS IN LOW- AND MIDDLE-INCOME COUNTRIES: A SCOPING REVIEW

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DECLARATION

I, Lozinyanga Mbali Mabuza, hereby declare that the work on which this dissertation/thesis is based is my original work (except where acknowledgments indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

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ABSTRACT

Objectives: To describe occupational therapy interventions for the community re-integration of mental health care users (MHCUs) and the factors that influence this process in low- and middle-income countries (LMICs)

Introduction: Mental health issues affect a large portion of the global population, with severe mental illness (SMI) contributing significantly to the global disease burden particularly in LMICs where access to care is limited. Community re-integration for MHCUs is a serious challenge, often leading to the revolving door phenomenon. Community-based mental health care models aim to improve patient outcomes and support re-integration. Occupational therapy plays a significant role in this recovery process; however, the evidence is scattered, with no existing summary of literature for LMICs.

Inclusion criteria: This scoping review included studies from 2002 to 2023 that reported occupational therapy interventions for community re-integration of previously institutionalised MHCUs with severe mental illness. The studies were selected from LMICs and included various research designs, theoretical articles, and grey literature.

Methods: A search strategy was developed with a subject librarian and PubMed, Scopus, EBSCOHost (CINAHL, Africa-Wide Information, APA PsycArticles, and APA PsycInfo), OATD.org, and WorldCat were searched. The search was conducted from January to February 2023. Two reviewers independently screened eligible studies using the Rayyan web application. The data were extracted using a modified JBI data-charting tool and organised in a table using two organising categories. Data were coded by similar factors, summarised, and reported descriptively.

Results: Of the 287 articles identified in the searches, 10 met the inclusion criteria. Sources were from South Africa (5 sources), India (2 sources), China (1 source) and Brazil (1 source), and were mostly qualitative and based in community practice sites. Nine distinct occupational therapy interventions were identified – actuality, community living skills and support, counselling, home visits, life skills, leisure, psychoeducation, self-care, and vocational

rehabilitation. The six contributing factors included community-based rehabilitation principles, psychosocial strategies, assessment and outcome measures, the concept of recovery, occupational therapy-led programmes and elements of the interventions.

Conclusion: Interventions that aligned with occupational therapy principles that were culturally adapted were particularly effective in facilitating MHCUs' re-integration in LMICs Adapting outcome measures and re-integration indicators to the local context is crucial.

Keywords: Community Re-integration, Interventions, Mental Health Care Users, Occupational Therapy, Scoping Review, Severe Mental Illness, Low-and-Middle Income Countries (LMICs).

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DEFINITIONS OF KEY TERMS

Community integration: The ability of a person with a serious mental disorder to live, work and enjoy their free time and day-to-day activities within a community setting as part of the recovery journey (Gamieldien et al., 2021).

Mental health care user (MHCU): "A person receiving care, treatment and rehabilitation services or using a health service at a health establishment aimed at enhancing the mental health status of this person. This includes a user, state patient and mentally ill offender and where the person concerned is below the age of 18 years or is incapable of taking decisions" (South African National Department of Health, 2013, p. 7).

Occupational therapy: "A health profession concerned with promoting health and well-being through occupation. The primary goal of occupational therapy is to enable participation in everyday life." (World Federation of Occupational Therapists, 2012, p.4).

Occupational therapy intervention: "Intervention that focuses on person-oriented programmes designed to facilitate the performance of everyday tasks and adaptation of settings in which the person, group or population receiving occupational therapy works, lives and socialises." (World Federation of Occupational Therapists, 2024).

Primary Health Care: "Essential health care made accessible at a cost a country and community can afford, with methods that are practical, scientifically sound and socially acceptable (WHO, 1978). This approach is organised to reduce exclusion and social disparities in health, is people-centred, intersectoral, collaborative, and promotes the participation of all stakeholders." (South African National Department of Health, 2013, p. 8).

Psychosocial rehabilitation: "Mental health services that bring together approaches from the rehabilitation and the mental health fields, combining pharmacological treatment, skills training, and psychological and social support to clients and families in order to improve their lives and functional capacities"(South African National Department of Health, 2023, p. 11).

Serious mental illness (SMI) is defined as a "mental, behavioural, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities." (National Institute of Mental Health, 2024).

THE RESEARCHER'S POSITIONALITY AND ASSUMPTIONS

The researcher is a black Swati female who was raised in the northern suburbs of Johannesburg. Her interest in the field of occupational therapy mental health interventions for communities, particularly within black communities, was sparked during her third year of study when she encountered various intervention methods aimed at addressing mental illness. These approaches seemed disconnected from her own socio-cultural context as a black woman and aspiring practitioner. During her community service year in district health services, her concerns were validated through patient feedback regarding the challenges of

implementing treatment within their context. Notably, while facilitating groups for a specific group of MHCUs, she observed a lack of vocational opportunities and minimal social support from their families. This observation resonated with findings by Petersen et al. (2009), which identified the absence of vocational opportunities, limited resources, inadequate human resources, and insufficient psychosocial support as key barriers to effective re-integration of MHCUs. These experiences deepened the researcher's curiosity about how MHCUs perceive occupational therapy mental health interventions and their subsequent impact on community re-integration.

Wanting to delve deeper into how occupational therapy interventions contribute to the community integration of MHCUs, the researcher crafted a master's proposal aimed at conducting a primary study focusing on the experiences of MHCUs with serious mental illnesses regarding occupational therapy interventions and their impact on community living. However, the onset of the Covid-19 pandemic imposed significant constraints on research methodologies, prompting a shift in the study's design to a scoping review. The process of formulating the proposal afforded the researcher a heightened awareness of the scarcity of literature addressing community re-integration within occupational therapy, as well as the inherent complexities of integrating community re-integration into practice.

Central to the researcher's inquiry was the assumption that the theoretical framework and practices of occupational therapy predominantly reflect Western and European perspectives, which may not seamlessly align with the Southern context, particularly for black communities. This assumption underscored the challenge of translating interventions learned during her undergraduate studies into socio-cultural practice contexts. Subsequently, the researcher posited that identifying successful interventions in analogous contexts to the research setting could inform future occupational therapy practices and education in South Africa. Additionally, she hypothesised that interventions emphasising interdependence rather than independence for clients could enhance community re-integration by capitalising on collective occupations prevalent in their context, as suggested by Ramugondo and Kronenberg (2015).

The researcher anticipated that the findings of this review would elucidate the factors conducive to the community re-integration process of MHCUs in low- and middle-income countries (LMICs), thereby informing the development of future community mental health programmes. Furthermore, she expected that the insights garnered from this scoping review would contribute to addressing the paucity of research, knowledge, and practical modalities pertaining to community re-integration programmes for MHCUs.

INTRODUCTION

Mental health problems affect the majority of the world's population, with an estimated one in four people experiencing some form of mental illness in their lifetime (WHO, 2021). According to the World Health Organization (WHO), mental health conditions contribute to a substantial portion of the global disease burden, with an estimated 450 million people currently suffering from such disorders worldwide (WHO, 2021). This burden is particularly high in low- and middle-income countries, with limited resources and access to basic mental health services posing additional challenges (Rathod et al., 2017).

In an effort to decrease the high prevalence of patient burden on psychiatric hospitals, increase quality of life, and maintain the human dignity of all chronic mental health care users (MHCUs), the concept of de-institutionalisation was adopted across mental health care organisations (Grob, 1991; Shin, Sharac.& Mauery(2013);Thornicraft & Tansella, 2004; WHO, 2001). De-institutionalisation is defined as "the practice of caring for individuals in their community of choice, rather than at institutions" (Galheigo, 2011, p 62). This initiative includes enhancing accessibility to care, involving stakeholders, utilising specialist services at community level, monitoring and evaluating services, addressing housing needs, improving financing mechanisms, fostering intersectoral collaboration, and implementing psychosocial rehabilitation strategies (National Department of Health, 2013; South African Government, 2002; WHO, 2013).

Mental health care treatment for MHCUs often begins with hospital admission, where they are temporarily removed from their community environments. This approach is prevalent in some countries due to stigma and cultural beliefs that lead individuals to seek mental health services primarily during crises, necessitating comprehensive re-integration efforts upon

discharge (Kleinman, 1988; Patel et al., 2010). However, in countries with more open attitudes towards mental health, there are often alternative services and supports available before hospitalisation, which can facilitate more effective community re-integration (González-Torres et al., 2017; Thornicroft, 2006). Amongst the many challenges faced by individuals living with mental health conditions, community re-integration stands out as a crucial aspect of their recovery journey, particularly in LMICs where resources and support systems may be limited.

Community re-integration refers to mental health care users moving out of patient roles towards independence and roles allowing them to live, work and enjoy their free time and , activities within a community setting as part of the recovery journey (Bond et al., 2004; Gamieldien et al., 2022). It involves providing MHCUs the resources and support necessary to successfully participate in occupations that are meaningful to them (Gallagher, Muldoon &Pettigrew, 2015). According to Cooke & Howe (2003), there are four elements that contribute to community re-integration: assimilation (conformity, orientation, acceptance), social support (relationships), occupation (leisure and productivity), and independent living (satisfaction with living arrangements). Community re-integration serves as a crucial factor in minimising relapses and readmissions among MHCUs (Lund et al., 2010), and has been recognized as a key predictor of their overall quality of life (Stumbo & Ross, 2015). This re-integration process fosters empowerment and social inclusion, further enhancing the well-being of MHCUs (Read, 2009). However, stigma, discrimination, lack of social support, and limited access to resources can impede re-integration in LMICs, leading to negative outcomes and increased vulnerability for individuals with mental illness (Mascayano, Armijo & Yang, 2015). However, if community re-integration does not happen when it is supposed to, then the revolving door phenomenon will exist in mental health services.

The Revolving Door of Mental Health Care Users Globally

Mental health care services globally face a persistent challenge known as the "revolving door" phenomenon. This term illustrates the cycle where individuals are discharged from psychiatric care, briefly stabilise, then relapse, often leading to repeated hospital admissions (WHO, 2001). Several factors contribute to this revolving door phenomenon, including limited mental health programmes that fail to equip individuals with necessary skills and resources,

and insufficient training for community health workers (Silaule & Casteleijn, 2021). For example, despite the implementation of progressive measures such as the Mental Health Care Act of 2002 in South Africa, which aims to promote de-institutionalisation, many individuals with chronic mental illness still face significant challenges when trying to re-integrate into the community. In South Africa specifically, the Life Esidimeni incident in 2016, resulting in 144 deaths due to inadequate post-discharge support, starkly underscored the system's deficiencies (Silaule & Casteleijn, 2021). Moreover, gaps persist in collaboration with traditional medicine and other stakeholders. Existing interventions often prioritise mental health awareness over concrete solutions, exacerbating the divide between policy and practice (Anjorin & Hassan Wada, 2022).

Occupational therapy is therefore a promising solution to these challenges. Unlike conventional approaches, occupational therapy adopts a client-centred approach, focusing on meeting the individual's occupational needs (WFOT, 2012). Occupational therapists play a crucial role in supporting individuals with mental illness to re-integrate into meaningful community activities, thereby fostering independence and purpose (WFOT, 2012). Despite its potential, the role of occupational therapists is often underutilised and insufficiently understood within the global mental health systems of LMICs (Smith et al., 2023; Jones & Patel, 2024). Occupational Therapy is essential for achieving successful community integration, recognising the profound impact of mental health on various aspects of life. However, the body of evidence is scattered across a range of sources, which means there is not a single source of evidence on these interventions that can be consulted for best practice guidance for LMICs.

Current interventions used to facilitate community re-integration

In LMICs, intervention for people with serious mental illness (SMI) at community level is evolving to address various challenges and improve outcomes for individuals. Historically, mental health care in LMICs has been predominantly hospital-based, often resulting in institutionalisation and isolation from community support systems (Patel, 2022). However, recent efforts have focused on shifting towards community-based mental health care models that prioritise accessibility, holistic care, and integration into society (WHO & UNAIDS, 2008). The existing community-based mental health care models in LMICs are task-shifting and

training (Patel et al., 2011), integration with Primary Health Care (PHC), Community-Based Rehabilitation (CBR) (WHO, 2010), psychoeducation and support groups (Lund et al., 2010) and the use of technology: mHealth applications and telemedicine (Naslund et al., 2017). However, LMICs face challenges due to stigma, discrimination and resource constraints (Thornicroft et al., 2009; Eaton et al., 2011). Policy and advocacy efforts are crucial in addressing these abovementioned challenges (WHO, 2013). By leveraging existing resources, integrating mental health into primary care, and addressing stigma, the quality of life and social inclusion of people living with SMI can be enhanced. Continued research, advocacy, and international collaboration are essential for further advancing mental health care in these settings.

By way of example, the current health system in Brazil (SUS) is reasonably robust and integrated directly into the health system. The mental health system comprises five levels of care within its service structure, involving multiple stakeholders such as federal, state, and municipal governments, foundations supported by public authorities, and the private sector. (Marchionatti et al., 2023). Principles of community-based rehabilitation and psychosocial rehabilitation were incorporated into the interventions used in the health care system and are in line with the definitions of social and community integration. Their legislation and regulatory acts determined how these principles should operate at different levels, details of funding and population participation (Marchionatti et al., 2023). Social integration can be defined as "an individual's enacted and perceived engagement with social ties" (Fuller-Iglesias & Rajbhandari, 2016) .Community integration is defined as the ability of a person with a serious mental disorder to live, work and enjoy their free time and day-to-day activities within a community setting as part of the recovery journey (Gamieldien et al., 2021). In 2010, Dr Aaron Motsoaledi, the South African Minister of Health, suggested that insights from the SUS could be used to enhance South Africa's primary health care system, particularly at the community level (Binge, 2010).

However, despite the intentions of the Mental Health Care Act (MHCA) of 2002 to promote deinstitutionalisation, current community-based mental health care in South Africa still shows a disconnect between these goals and actual practice, as recent studies continue to uncover persistent challenges (Kincaid et al., 2020).This is based on multiple reasons including budget

constraints in mental health care, particularly at community level, insufficient information systems, lack of adequate information systems, lack of development of community-based services appropriate to the severity of the mental health condition, inadequate facilities for psychosocial rehabilitation, reduction in inpatient beds for MHCUs and limited involvement of service users and their families (Botha et al., 2020). The inverse reaction of what the policy initially intended to achieve has occurred, as premature discharges of MHCUs with SMI have resulted in high readmission rates, revolving door patterns of care, and high-frequency users (Botha et al., 2020).

Occupational Therapy: A Unique Approach to Re-integration

Beyond simply addressing medical or physical limitations, occupational therapy offers a distinct and valuable approach to supporting community re-integration for individuals with mental health conditions. This uniqueness stems from its core principles and methods. Occupational therapy emphasises engaging individuals in activities that hold personal significance and value (WFOT, 2023). This could involve daily living tasks, social interactions, volunteer work, or recreational pursuits. By focusing on occupations that align with individual goals and interests, occupational therapy fosters motivation, engagement, and a sense of purpose, key factors in successful re-integration (Silaule & Casteleijn, 2021). Occupations refer "to the everyday activities that people do as individuals, in families and with communities to occupy time and bring meaning and purpose to life. Occupations include things people need to, want to and are expected to do" (WFOT, 2012).

Occupational therapists, drawing on their expertise in Occupational Science, are uniquely positioned to advocate for occupational justice, ensuring equitable access to engagement and opportunities for individuals with mental health conditions. While strides have been made towards de-institutionalisation, significant challenges such as discrimination, stigma, unequal resource allocation, and human resource shortages persist (Thornicroft et al., 2017). However, a critical knowledge gap remains regarding effective strategies for community re-integration globally, particularly concerning occupational therapy's role in primary mental health care. The absence of comprehensive guidelines and insufficient collaboration among stakeholders further hinders progress in this crucial area.

Occupational therapy interventions are crafted collaboratively, acknowledging the individual's distinct requirements, strengths, and cultural milieu (Muñoz, 2007). This personalised methodology ensures the relevance, cultural acumen, and flexibility of interventions within LMIC contexts. Occupational therapy interventions transcend mere symptom alleviation, targeting enhanced functional capability across physical, cognitive, social, and emotional realms. This comprehensive framework enables individuals to cultivate coping mechanisms, navigate their surroundings, and engage in autonomous daily functioning (Muñoz, 2007).

In contrast to interventions reliant upon specialised equipment or facilities, occupational therapy capitalises on pre-existing resources within communities. These encompass familial support structures, grassroots organisations, and communal engagements (Heydon et al., 2023). Such an approach champions sustainability, economic feasibility, and societal inclusion, all pivotal considerations in resource-limited settings within low- and middle-income countries (LMICs). Moreover, occupational therapy interventions are underpinned by evidence-based methodologies, ensuring both their efficacy and safety. Nonetheless, occupational therapy equally acknowledges the significance of cultural sensitivity and adaptability to cater to distinct contextual exigencies and individual requisites (Muñoz, 2007).

Occupational therapy addresses the unique challenges and realities faced in these contexts (Rathod et al., 2017). Employing a client-centred approach allows occupational therapists to tailor interventions to local resources and contexts effectively. For instance, group support sessions can be conducted in community spaces, and home-based activities can be adapted using readily available materials (Rathod et al., 2017). This adaptation not only reduces costs but also utilises existing community supports such as family networks and local organisations, enhancing the sustainability and effectiveness of interventions.

Furthermore, occupational therapy emphasises empowerment, providing individuals with the skills and knowledge to navigate challenging circumstances independently (Kohrt et al., 2018). In LMICs, where poverty, unemployment, and limited access to education are pervasive challenges affecting mental health (Patel, 2018; WHO, 2013; World Bank, 2020), this empowerment is crucial for fostering resilience and promoting independent living. By addressing social and functional aspects of life, occupational therapy promotes meaningful

engagement in activities that contribute to social inclusion, economic independence, and overall well-being (Rathod et al., 2017).

The holistic approach of occupational therapy not only targets clinical symptoms but also considers the broader social contexts in which individuals live (WFOT, 2023). Working collaboratively with families, community organisations, and other stakeholders, occupational therapists contribute to creating environments that support successful community re-integration. Given the resource constraints in LMICs, occupational therapy interventions are particularly valuable for their cost-effectiveness and focus on developing individual capacities within existing health care systems (Rodger, Fitzgerald, & Davila, 2005). This aligns with the need for sustainable health care solutions that can be integrated into diverse and often under-resourced settings (Rathod et al., 2017).

Rationale

Occupational therapy's recognition and development of community re-integration interventions for mental health care users (MHCUs) have evolved significantly over time. Research indicates that this process began in the latter half of the 20th century and has continued to advance into the 21st century as the field has increasingly acknowledged the importance of community integration for mental health recovery (Christiansen & Townsend, 2004; Craig & Howe, 2017; Gibson,1957; Hasselkus, 1996; Kielhofner, 2008; Wilcock, 1993). Despite the growing body of evidence supporting these interventions, occupational therapy services often face challenges in effectively implementing community reintegration strategies in practice (Christiansen & Townsend, 2004; Hasselkus, 1996).

Furthermore, as previously noted, the lack of a single comprehensive source summarising the published literature on these interventions highlights the need for a synthesis that outlines their effectiveness, implementation, and the factors influencing their success or failure. A scoping review was conducted to identify the existing knowledge in the literature on occupational therapy interventions aimed at facilitating community re-integration for MHCUs in LMICs over the past 21 years (2002-2023). The review also explored how these contextual factors influence the implementation and effectiveness of occupational therapy interventions.

Significance of the study

Summarising, synthesising and disseminating research evidence, to inform practitioners on occupational therapy interventions that are used for community re-integration of MHCUs, may be useful for future learning, defining the boundaries and responsibilities of the scope of practice and providing valuable insights for policy makers. The review will solidify our role as holistic practitioners who are not only concerned with biological impacts of illness and disability, but rather with the social impacts. This study could contribute towards informing occupational therapy practice, enabling the profession to provide client-centred therapy (WFOT, 2012) especially in diverse contexts, hence the review of literature from other LMICs. Additionally, this study may be relevant in informing occupational therapists on the contributing factors that may be useful when facilitating community re-integration in practice, as well as identifying research gaps that can advance knowledge in the field. Lastly, the recent release of the World Health Organization's Rehabilitation 2030 strategy underscores the timeliness of this scoping review. The Rehabilitation 2030 strategy aligns with the objectives of this scoping review by emphasising the importance of evaluating and enhancing rehabilitation interventions, including those for community re-integration of mental health care users (WHO, 2023).

Aim

The scoping review aims to identify and synthesise evidence on occupational therapy interventions designed to facilitate community re-integration for MHCUs with severe mental illnesses in LMICs, as published over the past two decades.

Objectives

1. To describe the types of occupational therapy interventions used for community re-integration of MHCUs.
2. To identity factors that contribute to community re-integration of MHCUs with SMI and compare these across LMICs.
3. To identify gaps in existing knowledge on occupational therapy interventions for community re-integration of MHCUs in LMICs.

METHODS

Protocol and registration

The protocol developed for this systematic scoping review (see Appendix I) was not published or registered due to university timeline restrictions. Approval of the protocol was obtained from the University of Cape Town's Human Research Ethics Committee on 28 September 2022 HREC/REF:604/2022 (see Appendix II).

Study design

A scoping review methodology was used, which is known for its effectiveness in mapping relevant literature in terms of time, origin, location, and source (Peters et al., 2020). Peters et al. (2017) underscore the value of scoping reviews in evidence-based practice, as they comprehensively explore broad topics, analyse gaps in research knowledge, report on the types of evidence informing field practice, and examine areas not thoroughly reviewed. Thus, this methodology was suited to meeting the objectives of this research.

Review framework and reporting guideline

The scoping review was informed by the methodological framework of Arksey and O'Malley (2005) and the updated methodological guidance on conducting a scoping review by Peters et al. (2020). The methodological framework and the updated version highlight similar stages for conducting a scoping review. These six stages are presented below in Figure 1 and will be described further in the following sections of this dissertation. The PRISMA-ScR checklist (Tricco et al., 2018) was used as a guideline to report the review (see Appendix III).

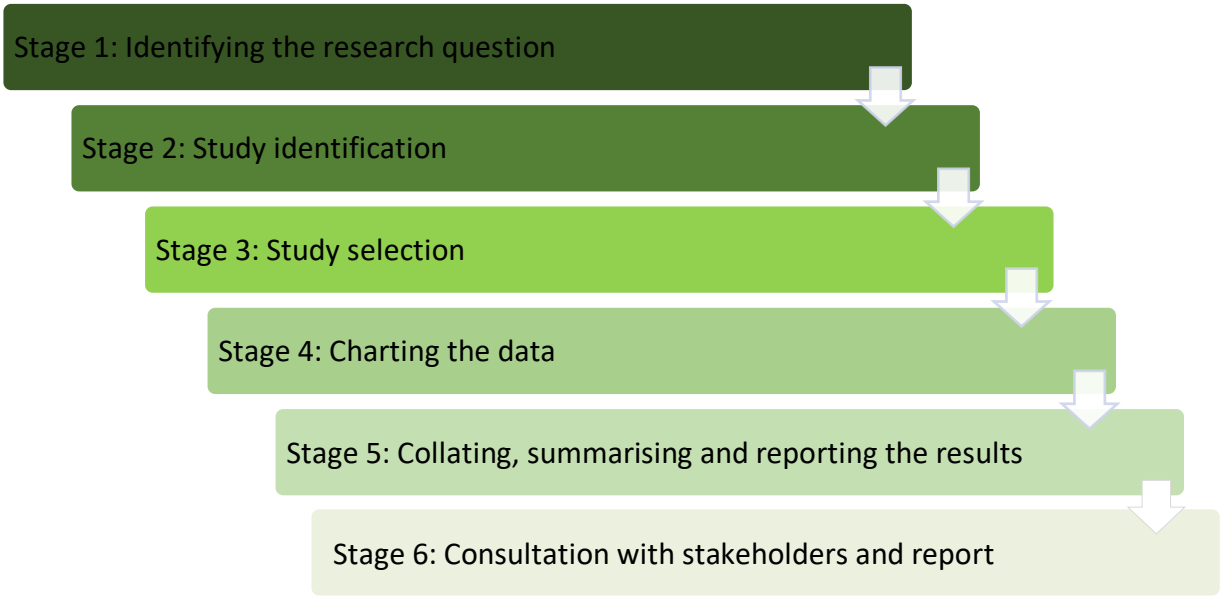

Figure 1*: Methodological framework* (Arksey & O'Malley, 2005)

Stage 1: Identifying the research question

The research question for this review was framed using the PCC (Participant, Concept, Context) mnemonic (Peters et al., 2020) (see Table 1) to ensure clarity and precision. This mnemonic guided the identification of the target population, the core concept under investigation, and the specific context in which the concept was applied. The research question for the review was framed as follows:

What research has been published over the past 21 years (2002-2023) on occupational therapy interventions to facilitate community re-integration for MHCUs with SMI in LMICs?

Stage 2: Identifying the relevant studies

Table 1: PCC Mnemonic

PCC Mnemonic	
P – Population	Mental Health Care Users with severe mental illness.
C – Concept	Occupational therapy interventions for community re-integration.
C – Context	Low- and middle-income countries.

Population

The review focuses on mental health care users with severe mental illness as the population. Mental health care users were defined as "persons receiving care, treatment and rehabilitation services or using a health service at health establishments aimed at enhancing the mental health status of a user, state patient and mentally ill prisoner" (South African Government, 2002, p.10). Severe mental illness can be defined as a "mental, behavioural, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities" (National Institute of Mental Health, 2024).

Concept

The study focused on community re-integration as conceptualised through occupational therapy interventions. Community integration in this scoping review was conceptualised as the ability of a person with a serious mental disorder to live, work and enjoy their free time and day-to-day activities within a community setting as part of the recovery journey (Gamieldien et al., 2021).

Context

The scoping review focused on occupational therapy interventions that facilitate community re-integration in low- and middle-income countries.

Eligibility criteria

Studies published in the years 2002-2023 were included. The year 2001 was considered as a starting point, as this was the year that the WHO's "Mental Health: New Understanding, New Hope" report outlined comprehensive strategies for mental health care, advocating for community-based care systems and services (WHO, 2001). It was therefore deduced that research published from that year onwards would incorporate the community re-integration of MHCUs in occupational therapy literature. A summary of the inclusion criteria is provided in Table 2 below.

Table 2: Inclusion criteria

Inclusion criteria
Studies published from year 2002 to 2023**.**
Published articles with any type of research design, published scientific articles (theoretical) and grey literature (theses and dissertations).
Studies conducted in low- and middle-income countries.
Literature focusing on mental health care users with diagnoses that include severe mental illness.
Studies including previously psychiatrically institutionalised mental health care users.
Studies that explicitly mention mental health care users, occupational therapy interventions and community re-integration.

Types of study sources

Both published articles (any type of study design and theoretical scientific articles) and grey literature (theses and dissertations) were included to increase the body of knowledge to be reviewed and to reduce bias; some studies may not yet have been formally published.

Search strategy

A search strategy was developed alongside a subject expert librarian at the Bongani Mayosi Health Sciences library at the University of Cape Town. A preliminary search strategy was developed to identify what literature was available and to determine whether previous scoping reviews had been conducted on the research topic.

Through an iterative process, a broad search strategy and search terms, including MeSH terms (see Table 3), were developed through online consultations with the same subject librarian from the University of Cape Town Bongani Mayosi Health Sciences library.

Table 3: General search strategy

Search Terms
Topic "Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR MHCU OR "mental health service users") **AND Topic** "Occupational therapy" **AND Topic** Community re-integration OR community re-integration OR community integration OR community rehabilitation OR community recovery

The following databases were searched: PubMed, Scopus and EBSCOhost (CINAHL, Africa-Wide Information, APA PsycArticles and APA PsycInfo). The search terms were adapted in January 2023 according to the search fields, Boolean and proximity operators, and pre-set limiters or filters varied across the different databases (see Appendix IV). The subject librarian and two-supervisors re-ran the search on EBSCOHost and PubMed using the specified search strategies to confirm the replication of the search and ensure no articles were missed. Grey literature, specifically dissertations and theses, were searched in February 2023 via the well-known grey literature database OATD.org and WorldCat. ProQuest Dissertations & Theses,

another renowned grey literature database, was not used as the researcher did not have access through the University of Cape Town. The search on WorldCat consisted of already identified dissertations and theses that were conducted in high-income countries, and thus did not meet the inclusion criteria. Following the search, all identified citations were first imported into *EndNote 20 (Clarivate Analytics, PA, USA)* and duplicates removed. From there the citations were saved as Research Information Systems (RIS) files and exported into the Rayyan web application (https://www.rayyan.ai/) for screening.

Stage 3: Selection of sources of evidence

Rayyan is an online tool specifically designed to support researchers in their systematic reviews, literature reviews, and knowledge synthesis projects, by focusing on simplifying the process of screening and selecting studies thus saving significant time and effort in the review process. Rayyan also has a duplicate removal feature, which was used to further remove duplicates not identified on EndNote. The review software allows the researcher to apply customised reasoning tabs for inclusion and exclusion criteria, which was helpful in tracking the eligibility process and identifying conflicts between the reviewers in the collaborative review process. (Arksey & O'Malley, 2005; Peters et al., 2020). After duplicates were removed, the researcher and a research assistant who had recently completed a scoping review, screened the identified articles by title and abstract. After duplicates were removed, the researcher and a research assistant who had recently completed a scoping review, screened the identified articles by title and abstract. Each reviewer independently screened all articles using the eligibility criteria and the 'include' or 'exclude' features in Rayyan. Thereafter, the blinding feature was removed revealing conflicts of 4.12% between the reviewers' decisions which had been flagged by the review software. These conflicts were then discussed between the reviewers and resolved unanimously via a Zoom meeting. Following this process, one of the supervisors was invited to the Rayyan review software to review the screened abstracts and titles against the inclusion criteria to verify that the screening process was carried out correctly. The researcher and the research assistant then screened the remaining articles by full-text against the eligibility criteria using Rayyan. The eligible full-text studies were then downloaded from the respective journals and stored in a file on the researcher's personal

laptop and backup drive. The same process used for the abstract screening was followed for full-text screening.

Data extraction process

The data extraction involved the use of the JBI data charting tool (see Appendix V) and a table to capture the extracted data. To verify the feasibility and functionality of the data extraction process and the adopted tool, a pilot test was conducted on three of the included studies. This pilot test aimed to validate the success of the data extraction process for this review. The data was extracted independently by the researcher. This was then verified by one of the supervisors to ensure the researcher had followed the correct process. Detailed information on the specific data extraction tools and their utilisation is provided below.

Capturing the data using the JBI data charting tool

The modified JBI data-charting tool developed by Peters et al. (2017) was used to extract the characteristics of the studies included in this review. This tool was chosen for its effectiveness in gathering relevant data on the characteristics of the included studies. The tool, presented as a Microsoft Word Table, consists of six columns, namely: author and year of publication, study aims/objectives, study design, study population, practice setting, and country of origin (see Appendix V).

Capturing of qualitative data

The researcher independently conducted the qualitative data extraction for objectives 1 and 2, organising the data into two categories.

1. Types of occupational therapy interventions used for community re-integration of MHCUs.
2. Factors that contribute to community re-integration of MHCUs with SMI.

The researcher reviewed the full-text of the selected articles, extracting every mention of occupational therapy interventions and every mention of factors contributing to community re-integration of MHCUs, and organised them into separate columns in a Microsoft Word table. The qualitative data was then organised and summarised into another Microsoft Word table (see Appendix VI). The recorded data was reviewed by one supervisor to ensure no relevant data was overlooked.

Synthesis of results

The extracted data has been elaborated and summarised in two tables [study characteristics of included articles and types of occupational therapy interventions]. The researcher further synthesized the data by using the four occupational performance areas from the MoCA (de Witt, 2014) to categorize the occupational therapy interventions. Thereafter, every instance that mentioned contributing factors was colour coded according to their similarities, and then grouped together. This was then described in a detailed narrative in the results section.

Types of community re-integration occupational therapy interventions

The first objective of the study was to describe the various occupational therapy interventions that facilitate community re-integration. The interventions were categorised using the Model of Creative Ability (MoCA) (de Witt, 2014) four occupational performance areas - personal management, social ability, work ability and constructive use of free time. An inductive process was used as the researcher did not know what would emerge from the findings, so they decided to use the model after looking at the extracted data. As the model's performances areas were best suited to organise the information. The MoCA framework was selected as it is useful for occupational therapists working with large groups of people in mental health settings and it caters for diversity in large groups of people as it meets their occupational performance abilities and needs (Crouch & Alers, 2014). Furthermore, the MoCA is able to identify common functional limitations experienced by people with SMI, including constructive time use and social ability – areas that are not addressed by any other occupational therapy model. The theoretical framework focuses on enhancing individuals' engagement in meaningful occupations through creative expression. Rooted in the belief that engagement in purposeful activities promotes well-being and functional independence, this model emphasises the therapeutic use of self-expression, creativity, and occupational engagement to foster rehabilitation and recovery. In the context of community re-integration for individuals with mental health conditions, the MoCA provides a structured approach to assess and develop creative abilities, thereby supporting individuals in reclaiming their roles and responsibilities within their communities. By facilitating self-expression and meaningful participation in daily life activities, the MoCA aims to enhance individuals' quality of life and

promote their integration back into community settings. Research has shown the model's effectiveness in promoting independence and social inclusion among diverse populations with mental health challenges (de Witt, 2014). Its application in community-based rehabilitation settings underscores its relevance in addressing the holistic needs of individuals recovering from mental illness, thereby promoting their successful re-integration into society. The different occupational performance areas are described below:

1. **Personal management** refers to the ability to care for 'self' according to societal norms and cultural background, as well as acquiring skills for self-care.
2. **Social ability** entails social skills, relationship formation, norms governing social behaviour.
3. **Work ability** involves initiating projects and demonstrates ability to carry them through to completion, ability to develop new ideas, manage self, resources and workload, work according to norms and being realistic about performance.
4. **Constructive use of free time** entails balanced, constructive, recreational use of free time in a socially acceptable manner with the goal of attaining pleasure.

(Ramafikeng, 2010).

Factors that contribute to the community re-integration of MHCUs

The second objective of the study was to identify factors that informed occupational therapy interventions and some of the factors that made these interventions successful in that they contribute to community re-integration of MHCUs. All of the factors were identified that informed occupational therapy interventions were open coded in each of the studies. Then from those codes were built up into similar categories in order to consolidate the data. The categories that emerged were built up into types organised into Table 4 and further elaborated in a narrative. The raw data from the qualitative extraction tool was open coded by the identified factors that inform occupational therapy intervention and illustrated in a table (see Appendix VII).

Table 4: Organising categories of contributing factors to community re-integration of MHCUs

Organising categories	Factors
Community-Based Rehabilitation (CBR) Principles	CBR principles included: multidisciplinary approach, accessibility, holistic care, and participation.
Psychosocial Rehabilitation Strategies (PSR)	PSR's eight strategies are: case management or relapse prevention action plan symptom control, psychoeducation, life skills training, rehabilitation technology, social support through accessing resources, awareness raising for public mental health literacy, education & de-stigmatisation and advocacy (Gamieldien, 2017)
The Concept of Recovery	Factors included the key element of hope and MHCUs co-constructing their personal plans with MDTs.
Routine use of Assessments and Outcome Measures	Assessments and outcome measures included: gaining collateral information, use of functional activities and standardised assessments
Occupational Therapy-led Programmes	Factors specific to Occupational Therapy-led programmes or intervention programmes that are solely occupational therapy in design that were significant when compared to other programmes.
Elements of the Programme	Elements of the programme refer to intervention design, implementation, presentation, to be facilitators in the re-entry process.

RESULTS

Stage 4: Charting the data

Selection of sources of evidence

The search identified a total of 287 studies – 267 through the selected databases and 20 dissertations and theses, from research-based grey literature sources. One hundred and seventy-two sources remained after removing duplicates. These were then screened by title and abstract and 143 articles were excluded, leaving 29 articles for full-text article screening. After the full-text screening was complete, ten articles met the inclusion criteria and 19 studies were excluded. Refer to the PRISMA flow diagram (Figure 2) for summarised reasons for exclusion.

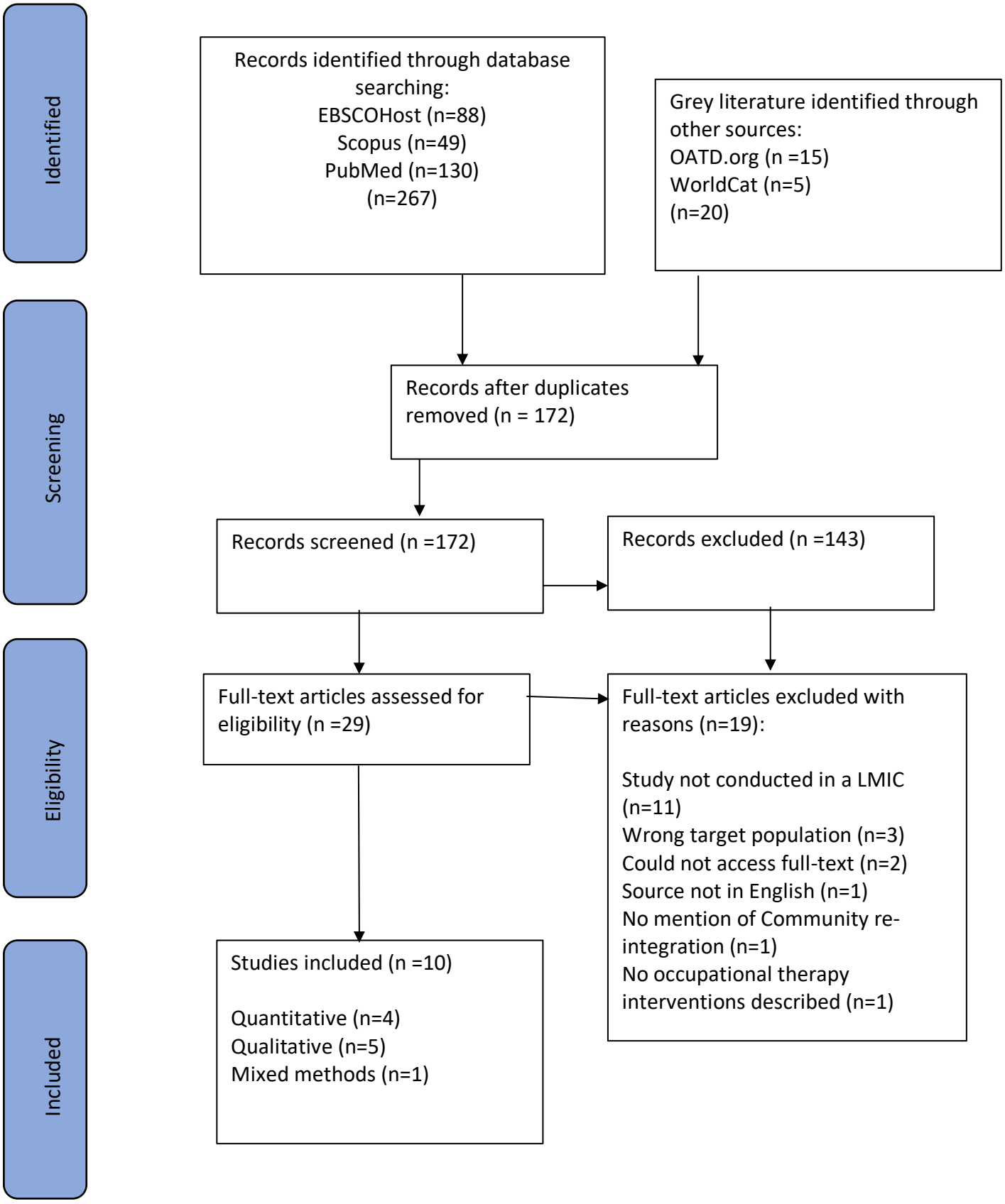

Figure 2: PRISMA flow diagram

Study Characteristics

The characteristics of the studies included in the review are collated in Table 5. Of the ten studies in the review all were primary studies. Five studies used qualitative designs (Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Rezaie & Phillips, 2020; Salles & Matsukura, 2016; Tsatsi & Plastow, 2021), four used quantitative designs (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Luo et al., 2019; Silaule & Casteleijn, 2021) and one study used mixed methods design (Joag et al., 2020). In eight studies, the populations were only MHCUs (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Gamieldien, 2015; Joag et al., 2020; Luo et al., 2019; Rezaie & Phillips, 2020; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021). One study had a population of MHCUs and members from the MHCUs social networks (Salles & Matsukura, 2016) and one had a population of service providers and service managers working with people with SMI (Gamieldien, Galvaan, Myers & Sorsdahl, 2021); even though this was not the identified population it was useful in understanding principles that facilitate the recovery process of MHCUs. Six studies were situated within community-based practice sites (Arahanthabailu et al., 2022; Gamieldien, 2015; Joag et al., 2020; Luo et al., 2019; Salles & Matsukura, 2016; Tsatsi & Plastow, 2021), and four studies were conducted in a mental health institution or facility (Engelbrecht et al., 2018; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Rezaie & Phillips, 2020; Silaule & Casteleijn, 2021). The included studies were conducted in South Africa (n=5) (Engelbrecht et al., 2018; Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021), India (n=2) (Arahanthabailu et al., 2022; Joag et al., 2020), China (n=1) (Luo et al., 2019) Iran (n=1) (Rezaie & Phillips, 2020) and Brazil (n=1) (Salles & Matsukura, 2016).

Table 5: Study characteristics of included articles (n=10)

Author (year)	Country	Population (sample size)	Practice setting	Study design	Study aims/objectives
Arahanthabailu et al. (2020)	India (South)	Schizophrenia outpatients (n=6)	Home visits in community	Retrospective file review	To evaluate the effectiveness of modified ACT in a South Indian setting and evaluate the perspectives of patients and caregivers who participated in the programme.
Engelbrecht et al. (2018)	South Africa	Inpatient MHCUs (n=119)	Psychiatric Hospital Day treatment centre	Retrospective pre-test/post-test quasi-experiment	To determine whether attendance at an OT-led day treatment centre for MHCUs affects the use of inpatient services in South Africa.
Gamieldien (2015)	South Africa	Male MHSUs(n=5)	Residential-based rehabilitation facility	Instrumental case study design	To describe the contribution of participation in a residential-based rehabilitation programme on the community integration of men with serious mental disorders.
Gamieldien, Galvaan, Myers & Sorsdahl (2021)	South Africa	Service providers and service managers for people with SMI (n=17)	Public mental health and NPO sectors	Qualitative descriptive study	To understand service providers' views on recovery from SMI
Joag et al. (2020)	India	Outpatients (n=215)	Community-based setting	Mixed methods approach: quasi-experimental, RCT and qualitative-interviews.	To identify factors important for larger-scale implementation of evidenced community-based intervention across an entire district in India.
Luo et al. (2019)	China	Schizophrenia outpatients (n=60)	Two urban districts of Changsha Hunan province	RCT	To assess the effectiveness of an ACT programme for people with severe schizophrenia.

Rezaie & Phillips (2020)	Iran	Women with SMI (n=42)	2 wards in the inpatient unit at a hospital.	Qualitative approach	To determine the unique post-discharge needs of Iranian women diagnosed with SMI.
Author (year)	**Country**	**Population (sample size)**	**Practice setting**	**Study design**	**Study aims/objectives**
Salles & Matsukura (2016)	Brazil	17 MHCU outpatients and 12 members of their social networks (n=29)	At home or the CAPS	Qualitative research, semi-structured interview and discourse analysis	To understand and analyse how CAPS contribute to the possibilities of occupational engagement of users, from the perspective of enabling them to participate in the society in which they live.
Silaule & Casteleijn (2021)	South Africa	MHCUs (n=64)	Acute Mental Health Care Unit in a hospital	Descriptive, longitudinal design with quantitative, quasi-experimental features	To evaluate the change in activity participation of the mental health care users attending an occupational therapy programme
Tsatsi & Plastow (2021)	South Africa	HwH residents (n=11)	HwH in a hospital in one province	Four-phase Participatory Action Research	To improve the functioning of a HwH so that it better meets occupational needs of the resident MHCUs.

Abbreviations:
ACT- Assertive Community Treatment; CAPS-Psychosocial care centres; CBT- Cognitive Behavioural Therapy; CBR- Community-based Rehabilitation CBPR-Community-Based Psychiatric Rehabilitation; F/U- follow-up; HwH-Halfway House; IMR- Illness Management and Recovery; mhGAP- Mental Health Gap Action Programme; MDT- Multidisciplinary Team; MHCUs- Mental Health Care Users; MHSU- mental health service user; OT- Occupational Therapy; PSR- Psychosocial rehabilitation; RCT-Randomised Control Trial; SMI- severe mental illness; TAU- Treatment as Usual; QoL-Quality of life.

Stage 5: Collating, summarising and reporting the results

Types of occupational therapy community re-integration interventions

Seven types of programmes were identified in the reviewed literature and will be described below. Interventions described in the studies were predominantly group therapy or sessions with elements of individual sessions incorporated into the programme (Arahanthabaliu et al., 2020; Englebrecht,2018; Gamieldien,2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Joag et.al, 2020; Rezaie&Phillips,2020; Salles & Matsukura,2016; Silaule & Casteleijn, 2021, Tsatsi & Plastow, 2021). The most common type of interventions that were offered in individual sessions were counselling and crisis management (Luo et al., 2019; Rezaie&Phillips,2020; Salles & Matsukura,2016). The intervention types identified in the studies included in the review are collated in Table 6. It should be noted that when extracting the data from the literature, interventions that were not part of the occupational therapy scope were omitted, such as pharmacological administration and management. Each programme included various occupational therapy interventions, which have been classified using the Model of Creative Ability's occupational performance areas (de Witt, 2014) later in this chapter.

All ten studies described the contextual setting of their programmes as follows: three studies used occupational therapy-led and occupation-based programmes situated in hospital settings (Engelbrecht et al., 2018; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021), while seven were community-based programmes (Arahanthabailu et al., 2020; Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Joag et al., 2020; Luo et al., 2019; Rezaie & Phillips, 2020; Salles & Matsukura, 2016). There were similarities amongst community-based interventions used, such as Assertive Community Teams (ACTs) (Luo et al., 2019) and culturally adapted ACTs (Arahanthabaliu et al., 2020; Joag et al., 2020), in that they consisted of similar elements such as multidisciplinary teams, services rendered and contextual placement of the team in the community. It was found that amongst the studies, programmes in different LMIC contexts had similar interventions in their programme designs but named the programmes differently suggesting that they were culturally adapted to fit the context. For example, two studies from the same country (South Africa) had similar features in their intervention programmes in terms of how the MHCUs were assigned living space, however

they had named their programmes differently; one is a Gateway residential-based rehabilitation facility (Gamieldien, 2015) and the other is a hospital halfway house (Tsatsi & Plastow, 2021).

Table 6: Types of occupational therapy community re-integration interventions for mental health care users.

MOCA Performance Area									
	Personal Management				Social Ability			Work Ability	Constructive Use of Free Time
Author (Year)	**Counselling**	**Psycho-education**	**Self-care (ADLS)**	**Home visits**	**Community Living skills and support**	**Life skills**	**Actuality**	**Vocational rehabilitation**	**Leisure/ recreational**
Arahanthabailu et al. (2020)		X		X	X			X	
Engelbrecht et al. (2018)	X	X	X			X	X	X	X
Gamieldien (2015)		X	X		X	X			X
Gamieldien, Galvaan, Myers & Sorsdahl, (2021)					X	X			X
Joag et al. (2020)	X	X	X		X	X			
Luo et al. (2019)	X	X		X	X				
Rezaie & Phillips (2020)			X			X		X	
Salles & Matsukura (2016)	X			X	X	X		X	X
Silaule &Casteleijn (2021)		X	X		X	X	X	X	X
Tsatsi & Plastow (2021)			X		X			X	X
Total	**4**	**6**	**6**	**3**	**8**	**7**	**2**	**6**	**6**

As mentioned above, the MoCA conceptualises occupations under four occupational performance areas (Van der Reyden & Sherwood, 2019). All studies included at least one intervention in these categories. These results will be presented in more detail below.

Personal management

Personal management entails caring for oneself, caring for others as well as conducting personal affairs in accordance with societal and cultural norms (Van der Reyden & Sherwood, 2019). Six studies reported self-care and psychoeducation as the most common interventions used (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Gamieldien, 2015; Joag et al., 2020; Luo et al., 2019; Rezaie & Phillips, 2020; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021). What was unique is that even though most of the studies were community-based, only three used home visits as an intervention (Arahanthabailu et al., 2022; Luo et al., 2019; Salles & Matsukura, 2016). Counselling sessions were seen as more of an optional intervention in programmes and offered as individual sessions; four studies used this intervention (Arahanthabailu et al., 2022; Joag et al., 2020; Luo et al., 2019; Salles & Matsukura, 2016). One study did not include any interventions in this area (Gamieldien, Galvaan, Myers & Sorsdahl, 2021), which may be a barrier to successful community re-integration of MHCUs because personal management equips MHCUs with community living skills (Van der Reyden & Sherwood, 2019).

Social ability

Van der Reyden and Sherwood (2019) conceptualise social ability as the ability to communicate, interact, and behave in ways that align with social and cultural norms. This encompasses active engagement in community activities that facilitate successful integration within the community. All studies reported at least one intervention in this area. The most common intervention included community living skills and support (n=8), followed by life skills (n=7) (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Joag et al., 2020; Luo et al., 2019; Rezaie & Phillips, 2020; Salles & Matsukura, 2016; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021). Only two of the studies used actuality in their interventions (Engelbrecht et al., 2018; Silaule

& Casteleijn, 2021); examples of actuality in intervention are orientation groups and current affairs discussions.

Work ability

This performance area speaks to the ability to be productive (Van der Reyden & Sherwood, 2019). Six studies reported using vocational rehabilitation as intervention in their programmes (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Rezaie & Phillips, 2020; Salles & Matsukura, 2016; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021). Although the interventions varied from task-based to socio-emotional vocational skills, predominantly task-based interventions were used (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Rezaie & Phillips, 2020; Salles Matsukura, 2016; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021)

Constructive use of free time

When used optimally, constructive use of free time is the ability to recreationally meet needs that are not addressed in the other occupational performance areas, such as play, social needs, recreation and engagement in personal interests (Van der Reyden & Sherwood, 2019). Six studies used these types of interventions (Engelbrecht et al., 2018; Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Salles Matsukura, 2016; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021) with the most common interventions being leisure, sports and arts and crafts (Engelbrecht et al., 2018; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Salles Matsukura, 2016; Silaule & Casteleijn, 2021; Tsatsi & Plastow, 2021). Music was used in two studies (Engelbrecht et al., 2018; Salles Matsukura, 2016). The least common interventions, each reported in only one study, were relaxation techniques (Joag et al., 2020) and self-constructed board games (Tsatsi & Plastow, 2021).

Factors that informed interventions that facilitate community re-integration of MHCUs

In this study, contributing factors were defined as the factors or reasons that encourage or enable community re-integration of MHCUs with SMI. The contributing factors, which are community-based rehabilitation, psychosocial rehabilitation, the concept of recovery,

assessments and outcome measures, occupational therapy-led programmes and elements of the interventions, are summarised as a narrative below.

Community-Based Rehabilitation Principles

Community-Based Rehabilitation (CBR) is "a strategy within general community development for the rehabilitation, equalisation of opportunities, poverty reduction and social inclusion of people with disabilities" (WHO, 2010). This definition is inclusive of people with mental disorders and impairments. The principles of CBR – equality, social justice, solidarity, integration, and dignity – underpin human rights legislation (Gamieldien, 2015). Due to the expansion of CBR into a more inclusive multisectoral development approach, a matrix was created in 2004. This matrix serves as a standardised framework for CBR programmes, encompassing five essential components: health, education, livelihood, social, and empowerment (WHO, 2010). While the first four components emphasise the multisectoral nature of CBR, the empowerment component focuses on enabling people with disabilities to assert their human rights, ensuring access to the other areas for improved quality of life. Further research is required on the perspectives of individuals with mental health regarding their social and structural environments, and how these factors impact their social inclusion and access to opportunities (Gamieldien, 2015). The greatest emphasis of CBR is holistic care, which entails a multidisciplinary team (MDT) approach involving mental health professionals and other experts offering a range of services, including vocational training and social skills development. The principles of CBR that will be elaborated on further are accessibility, holistic care, and participation, as they were most prominent in the selected studies (Arahanthabaliu et al., 2020; Englebrecht,2018; Gamieldien,2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Luo et al., 2019; Rezaie&Phillips,2020; Salles & Matsukura,2016; Silaule & Casteleijn, 2021, Tsatsi & Plastow, 2021).

Six studies identified an MDT approach in their interventions as a contributing factor (Arahanthabailu et al., 2020; Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Joag et al., 2020; Luo et al., 2019; Rezaie & Phillips, 2020). Interventions were tailored to individual needs to help individuals with mental illnesses develop essential skills, regain independence, and re-integrate into society. The use of ACT teams was reported to reduce hospitalisation rates and homelessness, and increase medication adherence, functioning and

recovery, and community mental health services with improved cost efficacy for schizophrenic patients (Arahanthabailu et al., 2022). Similarly, Luo et al. (2019) revealed that a culturally-adapted ACT program had been both feasible and highly effective for reducing relapses and re-hospitalisations, increasing employment among MHCUs, and improving caregivers' quality of life. Accessibility is based on removing communication, attitudinal, physical and technological barriers entirely. It creates an entry point for an inclusive society, making it essential for CBR to work (Antero, Bautista & Berbosidad, 2018). This was facilitated through social benefits and grants, transport, food parcels, community resources and the physical context in which they were receiving the interventions in their communities (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Joag et al., 2020; Gamieldien, Galvaan, Myers & Sorsdahl, 2021).

The principle of participation was not only limited to actual participation in community-based psychosocial rehabilitation programmes and projects, but included choices in how the MHCUs received, planned, evaluated and managed their interventions in partnership with their community (Antero, Bautista & Berbosidad, 2018). Another factor in one study was that the clients had the exposure to practice autonomy in terms of the occupations they engaged in (Salles & Matsukura, 2016). CAPS were one of the interventions identified that offered choices in the meaningful occupations MHCUs could engage in (Salles & Matsukura, 2016).

Psychosocial Rehabilitation Strategies

Psychosocial rehabilitation (PSR) posits eight strategies that contribute to the community re-integration of MHCUs, namely: case management or relapse prevention action plan, symptom control, psychoeducation, life skills training, rehabilitation technology, social support through accessing resources, awareness raising for public mental health literacy, education & de-stigmatisation and advocacy (Gamieldien, 2017). These strategies will be unpacked further below.

Case management and relapse prevention action plans entail crisis care and advance directives (Gamieldien, 2017). Referral systems were attributed as a factor in three studies (Arahanthabailu et al., 2018; Gamieldien, 2015; Joag et al., 2020). Referral systems included home-based carers, specialised health care professionals and other MDT members

(Arahanthabailu et al., 2018; Gamieldien, 2015; Joag et al., 2020). Engelbrecht et al. (2018) state that referral to vocational programmes ensures continuity of MHCUs skills and occupations. Relapse prevention was reported in two studies (Arahanthabailu et al., 2018; Gamieldien, 2015). Relapse prevention interventions are reported to show improvements in drug adherence, number of hospitalisations for psychotic relapse and symptoms in schizophrenic patients (Arahanthabailu et al., 2018). The strategy of symptom control through medication was not extracted in the reviewed studies, as dispensing of medication does not fall within the scope of Occupational Therapy practice.

Psychoeducation is a strategy used to increase illness knowledge of MHCUs and their carers (Gamieldien, 2017) to prevent stigma and to improve treatment compliance. Six studies reported use of psychoeducation as an intervention in this review (Arahanthabailu et al., 2022; Engelbrecht et al., 2018; Gamieldien, 2015; Joag et al., 2020; Luo et al., 2019; Silaule & Casteleijn, 2021). This was achieved through disseminating information to carers and MHCUs, not only illness-related but inclusive of other health related topics and home programmes (Rezaie & Phillips, 2020; Siluale & Casteleijn, 2021).

Life skills training was another common strategy used in seven studies (Engelbrecht et al., 2018; Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Joag et al., 2020; Rezaie & Phillips, 2020; Salles & Matsukura, 2016; Silaule & Casteleijn, 2021). Life skills in occupational therapy encompass the essential abilities and competencies required for individuals to effectively perform activities of daily living, manage their home environments, participate in community life, and engage in meaningful leisure pursuits (AOTA, 2014; WFOT, 2012). Occupational therapists collaborate with clients to develop and enhance these skills, aiming to promote independence, improve quality of life, and support meaningful participation in daily life activities (AOTA, 2014; WFOT, 2012). Life skills training facilitates independent living of MHCUs as the skills imparted improves communication, social engagement and interaction (Gamieldien, Galvaan, Myers & Sorsdahl, 2021). Fostering skills acquisition was a post-discharge need identified by the participants in Rezaie & Phillips' (2020) study.

Rehabilitation technology entails vocational rehabilitation; supported or transitional employment; open labour market and income generation (Gamieldien, 2017). Vocational rehabilitation was an intervention commonly used in the reviewed studies as mentioned above. Participants in Tsatsi and Plastow's (2021) study reported learning different skills that they found useful for community integration, which met their 'occupational need of accomplishment' (Doble & Santha, 2008) when engaging in occupations within an enabling physical environment. Another factor identified was that future work experiences of MHCUs were well aligned with their previous job experiences (Tsatsi & Plastow, 2021). Another strategy of PSR is awareness raising for public mental health literacy, education and de-stigmatisation. Community awareness was a strategy used, which aided in improving social, occupational and family functioning for participants in the Amityata programme (Joag et al., 2015). Advocacy was the final strategy of PSR which was not a contributing factor highlighted in any of the studies in the review.

Social support was achieved by accessing resources such as housing, leisure, education, respite care for family, and access to social networks (Gamieldien, 2017). Social networks were found to be the most common contributing factor across the studies in the review (Arahanthabailu et al., 2018; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Joag et al., 2020; Rezaie & Phillips, 2020; Salles & Matsukura, 2016; Siluale &Casteleijn, 2021). Social networks did not only consist of family members or caregivers of the MHCUs, but also included members of the community who volunteered or trained to partake in community-based interventions, and health care professionals (Rezaie & Phillips, 2020). Arahanthabailu et al. (2018) and Joag et al. (2020) reported that direct involvement in the intervention by community members, family members and support systems, was a contributing factor to re-integration of MHCUs. Some of the ways these social networks were utilised included collateral input, the involvement of family members in the MHCUs' re-integration programmes, home programmes, and the development of a social network through exposure to the programme facilitated by the Occupational Spin-Off Model (Salles & Matsukura, 2016; Siluale & Casteleijn, 2021).

Concept of Recovery

Only three of the studies addressed the use of recovery principles or approaches in the interventions designed to facilitate community re-integration (Gamieldien, 2015; Gamieldien, Galvaan, Myers & Sorsdahl, 2021; Luo et al., 2019). As there are recovery-based values that overlap with the other factors reported in the results chapter, particularly in PSR (such as person orientation, client involvement and partnerships) (Farkas, 2007), the researcher will only focus on the principle of hope to avoid repetition of factors. Gamieldien, Galvaan, Myers and Sorsdahl (2021) found that engaging in the rehabilitation programme instilled hope for the MHCUs involved. Gamieldien (2015) reported that MHCUs' perspectives on community integration suggest they will be more prepared for the complexities of living in the outside world, provided that the key elements of the residential-based rehabilitation programme enable MHCUs to co-construct their personal recovery plans with the MDT.

Routine use of Assessments and Outcome Measures

The quantitative studies in the review attributed the use of assessments and outcome measures as a facilitator of community re-integration. Assessments included: gaining collateral information, use of practical activities (ADLs and crafts), Activity Participation Outcome Measure (APOM), Social and Occupational Functioning Assessment Scale (SOFAS), and Global disability score on Indian Disability Evaluation and Assessment Scale (IDEAS) (Arahanthabailu et al., 2022; Silaule & Casteleijn, 2021). The Silaule and Casteleijn (2021) study revealed the importance of measuring change in activity participation in order to shape clinical practice, ensure meaningful intervention, and successful integration of MHCUs in their communities.

Occupational Therapy-led Programmes

The included studies highlighted factors specific to Occupational Therapy-led programmes that were significant in ensuring successful community re-integration, compared to other programmes. These factors included client-centredness, exclusively occupational therapy programmes, programmes designed, managed and run by occupational therapists, and the use of meaningful services in their interventions. Results from a study demonstrated that an occupational therapy-led day treatment centre could effectively decrease the reliance on inpatient mental health services in South Africa (Engelbrecht et al., 2018). Tsatsi and Plastow

(2021) identified comprehensive occupational therapy programmes as a contributing factor, as they included self-care (ADLs), vocational rehabilitation projects (work training, placements in formal and informal work and income generating programmes), leisure activities and communal activities (watching TV together, eating in dining room and playing self-constructed board games). Engelbrecht et al. (2018) strongly believe that the occupational therapists' emphasis on a client-centred approach in their interventions played an integral part in ensuring the 'goodness of fit' for the client in the chosen occupations. Having a programme designed, managed and run by occupational therapists is said to broaden the opportunities for engagement and promotes health and well-being (Engelbrecht et al., 2018).

Elements of the Interventions

Three studies (Arahanthabailu et al.,2020; Luo et al., 2019; Salles & Matsukura, 2021) attributed the design, implementation and presentation elements of the intervention as key facilitators in the re-entry process. Arahanthabailu et al. (2020) identified programmes with low running costs to be a contributing factor, as standard community mental health interventions in LMICs tend to lack the necessary financial support or skilled human resources to provide comprehensive care for patients at high risk of relapse. Findings from the study by Luo et al. (2019) support this as they found free treatment for MHCUs feasible for affordability. The provision of cultural adaptations was also highlighted as a contributing factor (Luo et al., 2019). Additionally, MHCUs experienced treatment as respectful and specifically focused on providing quality-of-life-driven services effective in their recovery process (Luo et al., 2019). Groupwork was also identified as a factor for facilitating engagement, learning, and sharing of experiences, thus providing service users with support (Salles & Matsukura, 2021).

Stage 6: Consultation with stakeholders

This stage is optional, and the researcher chose not to include the stage as the focus of the objectives was reviewing literature. Furthermore, the research question is not concerned with identifying alternative approaches to the research problem.

DISCUSSION

This scoping review identified studies describing the types of occupational therapy interventions available for community re-integration of MHCUs in LMICs, with the intention of informing future research, policy and occupational therapy practice. Six factors that facilitate the community re-integration of MHCUs were also identified. These factors were found to be predominantly epistemic as they were based on existing strategies and technologies, namely CBR, the concept of recovery and PSR. After completing the screening process, it was evident that scholarly sources on community re-integration in occupational therapy interventions tend to focus on quantitative study designs that are concerned with development and validation of outcome measures. A total of nine different occupational therapy interventions were identified in the included studies and categorised under the MoCA's four occupational performance areas. The most common types of occupational therapy interventions included psychoeducation (n=6), self-care [ADLS] (n=6), community living skills and support (n=8), life skills (n=7), vocational rehabilitation (n=6) and leisure/recreational (n=6). Few studies had been conducted specifically on occupational therapy interventions that facilitate community re-integration of MHCUs over the last two decades, as only ten of the 287 studies identified in the database search met the inclusion criteria.

While it is important to conduct research on the efficacy of mental health outpatient services in occupational therapy, delving into the interventions for community re-integration in occupational therapy practice may offer valuable insights for developing contextualised interventions to equip therapists with the necessary knowledge and skills to meet the occupational needs of their clients. This is important in addressing the revolving door phenomenon of existing chronic MHCUs and ensuring appropriate and culturally relevant service provision to MHCUs in LMICs. The characteristics of the studies and the fact that information was only available from five countries makes generalisation to LMICs limited.

Community re-integration

As mentioned above, community re-integration refers to mental health care users moving out of patient roles towards independence and adult roles, allowing them to live, work and enjoy

their free time and day-to-day activities within a community setting as part of the recovery journey (Bond et al., 2004; Gamieldien et al., 2021). The definition of community re-integration by Bond et al. (2004, p. 570) is "helping consumers to move out of patient roles, treatment centres, segregated housing arrangements, and work enclaves, and enabling them to move towards independence, illness self-management and normal adult roles in community settings. This perspective is very Western as it focuses on independence which may not be applicable or a valued outcome of community re-integration for MHCUs in LMICs" (Salyers et al., 2004). Breaking down the concept of 'community re-integration' into its two separate terms allows us to see the perspective from which the terms were framed, as well as determine whether or not it leads to the success or failure of these interventions. Community refers to "a group of people living in the same locality under the same government, having common interests, viewed as forming a distinct segment of society, having similarity or identity in community of interest, and sharing a common understanding, who reveal themselves by using the same language, manners, customs and law which is their tradition" (WHO, 2003). Re-integration is defined as "the return and acceptance of a disabled person as a participating member of the community" (WHO, 2003). Sociologists Fuller-Iglesias and Rajbhandari (2016) define the term social integration as "an individual's enacted and perceived engagement with social ties". This definition contrasts with that of Bond et al. (2004) who frame the concept of community re-integration as a social responsibility and process rather than the individual's experience and responsibility. Gamieldien et al. (2021) define community re-integration from an occupational therapy perspective as the ability of a person with a serious mental disorder to live, work and enjoy their free time and day-to-day activities within a community setting as part of the recovery journey. This more holistic perspective considers the bio-psycho-social being, which using the concept of recovery, is understood as a continuous process shaped by ongoing interactions between an individual and their environment (Arendse, 2022). The methods by which occupational therapy interventions support the community re-integration of individuals with mental health conditions into their communities, as well as the factors that contribute to them being re-integrated into their communities will be unpacked further on in the chapter.

Types of community re-integration interventions in occupational therapy practice

The most successful programmes described in the studies reviewed are Assertive Community Teams (ACT) programmes and culturally adapted ACT programmes (n=3). These interventions could be common due to their ability to cater to the needs of the MHCUs and the relevance to them whether it be the language it is delivered in, selection of the resources or the appropriateness of the intervention. Findings from the studies done in Brazil, China and India (Arahanthabailu et al., 2022; Luo et al., 2019; Salles & Matsukura, 2016) have found the use of culturally ACT programmes to be a successful intervention for re-integration. These ACT programmes were made culturally relevant by including family support, considering user uniqueness and complexity, developed programmes in cooperation with various projects and resources that exist in the context (Salles & Matsukura, 2016), and having the programme tailored to local needs (Arahanthabailu et al., 2022). These adaptations were similar in Brazil, China and India; this is probably due to the fact that they took an existing intervention ACT and adapted it to their context and the MHCUs. This suggests that this could be a feasible intervention option across different LMICs. ACT team interventions can flexibly adapt to under-resourced settings, maintaining long-term reductions in inpatient usage, as they remain cost-effective and feasible in developing countries. They also integrate seamlessly into existing services and are tailored to community needs and available resources (Botha et al., 2014). In the United Kingdom, ACTs are proving to be addressing the gap in terms of follow-up of MHCUs, resolving the abovementioned revolving door phenomena in chronic MHCUs. Culturally adapted or modified ACTs should continue to be used as the blueprint of programmes in LMICs, facilitating community re-integration, as they have proven to be successful and relevant to MHCUs.

The least common interventions used were home visits (n=4) and actuality (n=2). With regard to home visits, this can be attributed to the fact that community-based treatment is meant to be received in proximity to where MHCUs reside or in their homes. While some contexts like Brazil, India and China have achieved this and have facilitated successful re-integration, contexts like South Africa are still struggling to implement these programmes, probably because their levels of care are not as organised and resources are limited. South Africa's health care system faces challenges such as shortages of health care workers, uneven distribution of resources, and infrastructure constraints (Silaule & Casteleijn, 2021). These

factors can limit the availability and effectiveness of home-based services, while cultural beliefs and practices may influence perceptions of health care services delivered at home, affecting acceptance and adherence to treatment plans (Pillay, 2015). The explanations are probable and do justify why home visits are not accepted in contexts like South Africa with its diverse cultures and practices. In terms of actuality groups, this could indicate a need to prioritise resources and other skills, or it could suggest that certain activities are not considered meaningful occupations for some MHCUs. There may be concerns about managing risks associated with real-world activities, such as safety, privacy, and potential triggers for participants with mental health conditions (Carpenter-Song et al., 2010). Actuality groups require significant resources, including staffing, time, and logistical support, which may be challenging for health care systems with limited resources (Carpenter-Song et al., 2010).

Underlying factors that facilitate the community re-integration of MHCUs

The factors identified and described from the literature reviewed are community-based rehabilitation principles, psychosocial rehabilitation strategies, the concept of recovery, assessment and outcome measures, occupational therapy-led programmes, and specific programme elements.

CBR principles such as MDT approaches, accessibility, and participation are commonly utilised, reflecting their alignment with CBR's emphasis on inclusivity and community integration (WHO, 2010). These principles are implemented similarly across various contexts, probably due to the limited availability of health care professionals relative to the MHCUs and the general population in LMICs. By focusing on participation, accessibility, and choice, these programmes aim to provide holistic care to MHCUs within their communities (Silaule & Casteleijn, 2021).

It is crucial to embed these CBR principles into community re-integration initiatives to enhance their effectiveness (Silaule & Casteleijn, 2021). However, challenges persist, particularly regarding social accessibility and welfare benefits. For instance, despite the benefits of deinstitutionalisation in terms of community-based care and family involvement,

replicating social welfare benefits can be challenging due to limited resources and high dependency rates on social grants. In countries like South Africa, 47% of the population is dependent on the social grant which is currently R2090.00 per month (Patel, 2023). This underscores the need for innovative research and economically viable strategies to ensure that MHCUs receive adequate social support. In conclusion, the alignment of CBR principles with deinstitutionalisation efforts highlights their potential to facilitate successful community re-integration and support for MHCUs. However, addressing social accessibility and welfare remains a critical area for further exploration and development in mental health care strategies in LMICs.

Referral systems, psychoeducation, life skills training and social support were the most common PSR strategies used. Some programmes were even able to use psychoeducation as a tool to increase social support for MHCUs. For example, Luo at al. (2019) provided psychoeducation for caregivers and patients, which increased the quality of life from the caregivers' perspective and yielded symptom reduction for MHCUs in the study. However, there may be barriers when implementing strategies like psychoeducation and social support simultaneously, as the understanding of the illness or diagnosis leads to how service users are treated in the context. An example of this could be the misperception of schizophrenia vs spiritual callings in the South African cultures, despite the available knowledge on culture bound syndromes. The perception of schizophrenia as a spiritual or supernatural phenomenon can influence help-seeking behaviours. Individuals and families may delay or avoid seeking biomedical treatment in favour of traditional or spiritual interventions, which may not effectively address the underlying neurobiological causes of the illness (Patel, 2017). This shows that the treatment of MHCUs in an African context is not solely informed by Western perspectives, knowledge or practices. Understanding the illness within social networks is imperative, as it not only reduces stigma but also shares the responsibility of integrating individuals and supporting their well-being with the community. Understanding mental illness is a fundamental step towards reducing stigma by promoting empathy, challenging stereotypes, encouraging help-seeking behaviour, fostering supportive communities, and advocating for systemic changes that improve the lives of individuals living with mental health conditions (Corrigan et al., 2014; Pescosolido et al., 2010).

Findings from the review expose a need for multisectoral collaboration as an imperative for facilitating the community re-integration of MHCUs. Killaspy et al. (2022) underscore this necessity by highlighting the intricate nature of social interventions within the mental health domain, emphasising that their successful implementation hinges on commitment and investment from stakeholders across various levels. Their review indicates that interventions involving multiple stakeholders, such as community members and ACT teams, are effective in enhancing re-integration efforts. In the South African context, the predominant reliance on psychiatric institutions for mental health services severely limits accessibility to a broader population (Engelbrecht et al., 2018). Therefore, expanding the scope of stakeholders involved in re-integration programmes beyond traditional health care settings is crucial. This approach not only broadens the support network available to MHCUs but also facilitates the development of community-based services that are essential for promoting long-term recovery and social inclusion. By advocating for multisectoral collaboration, the researcher contends that contexts similar to South Africa can overcome the current limitations in mental health service delivery and effectively meet the diverse needs of MHCUs in their journey towards meaningful community integration.

Recovery is “a theoretical framework of mental health, created on the belief that people can recover from mental illness, and that the service delivery system must be constructed based on this knowledge” (Anthony, 2000, p. 159). Unlike the biomedical approach, recovery is considered a journey rather than an intervention or strategy; it makes illness personal rather than clinical. Lin et al. (2013) reported that a modified Illness Management Recovery (IMR) programme has been found to enhance key aspects of managing MHCUs illness, attitudes toward medication, and reducing negative symptoms, with lasting benefits. The researcher concurs with this conclusion, as recovery principles emphasise instilling hope, recognising the non-linear nature of the journey, and acknowledging that recovery can occur even without professional intervention (Kelly, Lamont& Brunero, 2010).

Lin et al. (2013) found that IMR's emphasis on assisting individuals in creating their own path to recovery and setting goals aligned with that path, can inspire hope and empower self-determination during challenging times. The chronic nature of SMI may become daunting and burdensome to MHCUs at any point; this may also decrease their compliance with all forms

of treatment and their motivation. Reframing their illness as personal recovery rather than clinical recovery may shift their attitudes and assumptions towards treatment. Recovery in occupational therapy emphasizes person-centred care, where the individual's preferences, values, and strengths guide the therapeutic process. Therapists collaborate with clients to identify goals and develop interventions that promote empowerment and self-determination (AOTA, 2020). Given the abovementioned findings and reasons, the concept of recovery should be strongly considered as an overarching framework that informs community re-integration interventions for MHCUs.

The assessments discussed in the review evaluated the readiness and functional levels of MHCUs for re-integrating into their communities. Arahanthabailu et al. (2022) highlight the context-specific IDEAS assessment tailored for India. The IDEAS scale not only has good psychometric properties, it can also indicate whether or not an MHCU is eligible for a disability grant in India. This suggests a need for the development of similar country-specific tools in future research. For example, such tools would offer a more accurate indicator for South Africa, given its widespread reliance on disability grants as previously mentioned. Silaule and Casteleijn (2021) emphasise the importance of routine outcome monitoring (ROM) in collaboration with occupational therapists and families to establish supportive daily routines that foster community engagement. Their findings underscore the significance of increasing participation choices for MHCUs within resource-constrained settings.

The identified measures of community re-integration success, such as hospitalisation rates, employment status, symptom reduction, and overall functioning improvement (Arahanthabailu et al., 2022; Luo et al., 2019), prompt reflection on Western perspectives regarding re-employment rates as the sole indicator of successful re-integration. This perspective may overlook the complexities of livelihood and survival, especially in countries like South Africa, where high unemployment rates prevail (South African Government, 2023). Ramafikeng and Van Niekerk (2014) presented the concept of livelihood creation as a more inclusive strategy, encompassing meaningful occupations that sustain livelihoods within communities rather than just the concept of work. Livelihood creation involves activities like assisting in community events, bartering, or performing labour in exchange for resources, thus integrating meaningful occupation with survival (Salles & Matsukura, 2016). This

reframing acknowledges individuals' contributions within their communities beyond formal employment metrics, fostering inclusion and community support for those with severe mental illness. As community occupational therapists, this approach challenges us to redefine productivity in ways that respect and support individuals' roles and contributions within their social contexts.

Occupational therapy-led programmes that utilise client-centred approaches and comprehensive occupational therapy practices were reported as facilitators of community re-integration. These programmes encourage social participation for MHCUs, as they allow MHCUs to participate in their valued social roles. Occupational therapists assist individuals in re-integrating into their communities, workplaces, and social environments. This focus on community participation and social inclusion supports long-term recovery and reduces the risk of relapse (AOTA, 2020). The success of these programmes is attributed to engagement in meaningful activities as a means of treating pathology (Engelbrecht et al., 2018), and the use of meaningful services in the programmes was also a facilitating factor. Occupational therapists in a treatment team should consider the roles MHCUs assumed before onset of illness or prior to long-term admissions when making programme considerations, more especially the cultural roles MHCUs assume in their communities. If the cultural understanding of illness is poorly informed it leads to the treatment not facilitating integration or meeting the needs of MHCUs. Doble and Santha (2008) argue that addressing these occupational needs is pivotal for enhancing individuals' experiences of health and well-being, suggesting a holistic approach that encompasses all aspects of daily life. Being unwell for prolonged periods removes individuals from their roles and responsibilities. Occupational therapists are experts in addressing these concerns, as they are not only concerned with biological impacts of illness and disability, but rather with the social impacts (AOTA, 2020).

The use of an interactive approach in the design of the programme was a contributing factor reducing negative symptoms of schizophrenia and increasing social functioning (Luo et al., 2019). This was achieved by involving community members and the MHCUs support network to be a part of the programme, and also providing them with support (psychoeducation, counselling). Including support networks and caregivers in this manner will most likely reduce caregiver fatigue, reduce stigma and equip them with the necessary skills to prevent future

re-admissions. This could be helpful in creating a continuum of care between the different levels of our psychiatric health systems. On the other hand, Siluale & Casteleijn (2021) attribute the family's reluctance and disengagement in the care of MHCUs to a lack of support from health systems in developing the essential caregiving skills. It is probable that their reluctance stems from the chronic nature of MHCUs' illness. However, it may also be due to feeling overwhelmed and lacking adequate support to both understand the illness and process its impact on themselves and the people they are caring for. It could also be belief systems that position a persona with a mental illness as having a curse and therefore should be avoided.

In conclusion, this scoping review has identified a range of existing occupational interventions that are supported by evidence for their role in facilitating community re-integration in LMICs. However, there are still gaps in addressing the needs of MHCUs, particularly regarding the cultural appropriateness and relevance of the strategies used. These include factors such as the social roles assumed by MHCUs, the types of vocational rehabilitation strategies employed, and the understanding of illness versus culturally bound syndromes in the given context. Several factors that facilitate re-integration of these service users have been identified and unpacked which may be useful in informing practice in LMICs**.**

Study Strengths and Limitations

The research utilised a scoping review methodology that was updated along with an effective computer software package to establish a rigorous approach for selecting, extracting, and gathering evidence. The blinding feature on the Rayyan website contributes to strengthening the methodological rigour and reliability of systematic reviews and other research synthesis efforts by promoting unbiased and objective decision-making throughout the review process. Three reviewers were engaged in the study selection process to ensure the inclusion and exclusion criteria were applied rigorously, while two were involved in the data extraction process, ensuring accuracy of the data selected. The review process maintained transparency through adherence to the PRISMA-ScR checklist for reporting.

A limitation in extracting the characteristics of three studies included in the review: the study design was not explicitly reported in the literature and had to be deduced by the writer.

Findings from this scoping review may be strengthened by refining the inclusion criteria; the use of published literature and grey literature (theses and dissertations) may have increased the number of studies relevant to the study. The strength of grey literature is that it includes practical insights and real-world applications, making it particularly relevant for policy-makers, practitioners, and professionals in various fields (Paez, 2017). It enhances the comprehensiveness of research reviews, provides valuable insights into various aspects of a topic (Adams et al., 2016), and has the ability to complement traditional scholarly sources. (Higgins &Green, 2011). The inclusion of only English language literature may have led to the exclusion of studies in other languages that may have been relevant to this scoping review. As such, this review may not represent all the research evidence available on the types of occupational therapy interventions, and the factors that facilitate the community re-integration of MHCUs, especially in LMICs that may not use English as their first language; one study was excluded as a result.

CONCLUSION

Among the many challenges faced by mental health care users, community re-integration continues to be a persistent problem that perpetuates the revolving door phenomenon. The ten studies in this scoping review included nine occupational therapy interventions that may be useful in facilitating the community re-integration process of MHCUs in LMICs and six factors that facilitate the implementation of these interventions. These interventions include community living skills and support, life skills, leisure or recreation, psychoeducation, self-care and vocational rehabilitation.

The review found that adapting existing outcome measures and reintegration indicators to better reflect the specific context of mental health care, such as incorporating work-related goals and metrics, can significantly enhance vocational opportunities for individuals. By aligning these measures with the needs and goals of MHCUs, interventions can be more effectively tailored to support their successful integration into the workforce. Providing meaningful services in interventions not only aligns with the scope of occupational therapy but is also crucial for facilitating the re-integration process of MHCUs. Furthermore, culturally

adapting the identified interventions to ensure they are appropriate and relevant to MHCUs from LMIC contexts is needed to successfully re-integrate them back into their communities.

Recommendations

Several recommendations to guide policy development, occupational therapy education and practice to enhance community re-integration of MHCUs in LMICs can be made from the findings of this scoping review. Occupational therapists strive to develop more effective, culturally relevant, and sustainable interventions that promote the recovery and social inclusion of individuals with mental health conditions in their communities. Occupational therapists should advocate to prioritise addressing these systemic challenges through education, Continuous Professional Development (CPD) activities, policy reform, resource mobilisation, and innovative service delivery models that enhance accessibility, affordability, and sustainability of mental health services in LMICs.

While the review identified a total of nine different occupational therapy interventions categorised under four occupational performance areas, the majority of studies focused on quantitative designs and outcome measures. Future research should expand beyond outcome validation to include qualitative studies that explore the contextual factors influencing the effectiveness of these interventions.

Future researchers and occupational therapy practitioners should prioritise developing interventions that are culturally appropriate and responsive to the needs, values, and practices of MHCUs in LMICs. This may involve collaborating closely with local communities, incorporating indigenous knowledge systems, and adapting evidence-based practices to fit within existing community resources and norms. Additional research should focus on investigating the barriers hindering the implementation of occupational therapy interventions aimed at facilitating community re-integration. This would provide deeper insights into this phenomenon for future practice. Occupational therapists should explore the use of collective occupations in their intervention efforts to facilitate community re-integration. Future occupational therapy interventions should adopt recovery-oriented frameworks that prioritise person-centred care and support individuals in reclaiming their

social roles and responsibilities within their communities. Aligning global mental health perspectives and promoting resilience and long-term sustainability in community are key to successful re-integration efforts. Lastly, future research should explore the need for the development and validation of context-specific assessment tools and outcome measures that capture the multifaceted nature of community re-integration for MHCUs.

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APPENDICES

Appendix I- Scoping Review protocol

Occupational therapy interventions for community re-integration of mental health care users in low- and middle-income countries: a scoping review

INTRODUCTION

Background to the study

The revolving door phenomenon in mental health persists in the public health sector, despite the transformational efforts of Mental Health Care Act no.17, of 2002 of South Africa (South African Government, 2002), to de-institutionalize all chronic mental health care users. De-institutionalisation is defined as "the practice of caring for individuals in their community of choice, rather than at institutions" (Galheigo, 2011, p 62). In South Africa this is done through community re-integration via Primary Health Care facilities in attempts to achieve social justice by protecting the human dignity of these mental health care users. However, there are many challenges in the public health system that prevent community re-integration from being successful. This was evident in the Life Esidemeni tragedy that occurred in 2016 where 144 mental health care users lost their lives after being transferred from institutions to Non-Governmental Organizations that were not equipped to care for them . This incident has revealed that it is due to limited psychosocial programs and training of community health workers (and no collaboration between traditional healers and the public health sector). Although psychosocial approaches, prevention and promotion are being practiced, it is awareness focused and not solution focused (Petersen et al., 2009), this indicates a mismatch between the policy and treatment in the service model. Mental health care users with serious mental illness in South Africa are currently using their community's health facilities to access services as stipulated by the Mental health Care Act (MHCA) no.17, of 2002 of South Africa. There is a gap in how community re-integration is being achieved and sustainability of the outpatient mental health programme is carried out.

The scoping review is important in highlighting the current gaps in literature in the mental health field. This study is useful for Occupational therapy in South Africa because, Occupational therapy intervention is concerned with meeting the occupational needs of its clients using a client -centred approach; we use day-to-day occupations to facilitate clients'

re-entry into their environments after mental impairment or disability (WFOT , 2012). In South Africa occupational therapy posts are few or unfilled, placing a burden on our community level health systems. This along with the role of an Occupational Therapy within mental health services at primary level being misunderstood and undefined, impacts the services provided to MCHUs who have been de-institutionalized as the Mental Health Care Act of South Africa stipulates. The study aims to collate literature from Low to Middle Income Countries (LMICs) to inform therapists about possible occupational therapy interventions that may be used in South Africa. Findings of the research would be important in consolidating evidence that contributes to the existing body of knowledge in the occupational therapy practice in mental health, which will be influential to future learning and fleshing out scope of practice, to contribute new information to inform the provision of more effective services to this population and directing the focus for future research in this area.

Background to the problem

In an effort to: decrease the high prevalence of patient's burden on psychiatric hospitals, improve the quality of life and maintain the human dignity of all chronic Mental Health Care Users (MHCUs) the concept of de-institutionalisation was adopted across mental health care organisations (World Health Organization Mental Health Action Plan 2013; Mental Health Care Act of South Africa (MHCA) (2002); and National Mental Health Policy Framework and Strategic Plan (2013-2020) (NMHPF& SP). The efforts of the NMHPF & SP include: accessibility to care, inclusion of stake holders, use of specialist services at Primary Health Care (PHC) level, monitoring and evaluating, housing, financing, intersectoral collaboration and psychosocial rehabilitation.

The World Federation of Occupational Therapists (WFOT) (2019), in their position statement on mental health stressed that globally mental health problems greatly affect participation in school, productivity, social and leisure areas that are all essential for the inclusion and contribution to the socio-economic status of families and the community. In South Africa the MHCA stipulated that this be achieved utilizing Primary Health Care facilities, allowing them to easily integrate into their communities, as an act of upholding these patients' human rights and achieving social justice South African Government (2002). Community integration is the ability of a person to live, work and enjoy his or her free time and day-to-day occupations

within a community setting (Radomski & Latham, 2008, p.80). Occupational Therapy uses individual and community approach interventions to encourage community inclusion and participation (WFOT,2019), these approaches develop social skills vital to community re-integration for MHCUs.

While it is acknowledged that de-institutionalisation has helped in integrating MHCUs in our communities and afforded health care providers the opportunity to understand MHCUs complexities within their context, there is a treatment gap posed by: discrimination, stigma, inequitable resource distribution and the limited number of human resources (Gamieldien, 2015). Occupational therapists have expertise through their knowledge in Occupational Science, which allows them to advocate for occupational justice, equal access for engagement and opportunities for mental health care users including their families and carers (WFOT, 2019). Achieving occupational justice is strongly aligned with social justice which is in line with the aims of de-institutionalisation, making the profession valuable to community mental health teams.

Although the MHCA has indicated that all primary level facilities have mental health units to facilitate community re-integration of all chronic MHCUs (South African Government, 2002) ,and the NMHPF& SP aims to promote mental health and reduce untreated disorders, there is limited knowledge on how to practically achieve this (South African National Department of Health, 2023). To date there is limited knowledge on occupational therapy programmes in primary mental health care within South Africa and there are gaps in policy which do not provide guidelines on programmes to best re-integrate MHCUs. Based on my professional experience, current service provision does not include stakeholders and community members which is not in line with the primary health care approach; this may hinder the community re-integration of the MHCUs.

According to Petersen et al. (2009), what is missing is a structed plan to achieve effective re-integration of MHCUS is: vocational opportunities, adequate resources and human resources and psychosocial support. Research shows that there is a huge inequity between the provinces in the distribution of mental health resources and services (National Department of Health-South Africa , 2013). In the United Kingdom, Assertive Community Teams are proving to be addressing the gap in terms of follow up of these MHCUs, resolving the

abovementioned revolving door phenomena and ensuring they are cared for and rehabilitated (Cooke & Howe, 2003), it is also noted that these existing community teams are based in the United Kingdom which also makes case for the importance of this research in LMICs. However, in these existing community mental health teams occupational therapists are struggling to justify the importance of their role and contribution (Petitican and Bryant, 2007). The gaps in current research knowledge highlighted above justifies the need to conduct a scoping review. Scoping reviews bring value to evidence-based practice by examining a broad topic to identity and analyse gaps in the research knowledge base, report on the type of evidence that addresses and informs practice in the field or to examine an area that has not been comprehensively reviewed (Peters et al., 2015).

Occupational therapy is concerned with the effects of illness or impairment on the functioning of individuals/groups and/or communities, being able to enable and re-integrate these MHCUs will restore meaning and purpose into their lives in their context. The review will solidify our role as holistic practitioners who are not only concerned with biological impacts of illness and disability, but rather with the social impacts. The study will inform occupational therapy practice in order for the profession to provide client-centred (WFOT, 2012) therapy especially in different contexts, hence a review of literature from other low- and middle-income countries.

Aims and objectives

The scoping review aims to identify, collate and appraise research conducted in the last two decades (2002-2022) on interventions occupational therapy adopts to facilitate community re-integration for mental health care users (MHCUs) with severe mental illnesses in low- and middle-income countries (LMICs). In line with this aim, the objectives are:

- To identity the factors that contribute to community re-integration of MHCUs with severe mental illnesses and compare these across countries.
- To describe the different types of occupational therapy intervention available for community re-integration of MHCUs and to summarise the evidence according to the relevant hierarchy.
- To identify and analyse gaps in existing knowledge on occupational therapy intervention for community living MHCUs in LMICs

Methodology

The methodology that will be used for the research is a scoping review. As scoping reviews are known to be particularly useful in mapping a body of literature together relevant to time, origin, location and source (Peters et al., 2015). Furthermore, they are also useful in adding value to evidence-based practice by identifying gaps in research knowledge base and informing practice in the field (Petersen et al., 2015). This methodology was informed by Peters et al. (2015) scoping review methodology paper and Arksey and O'Malley's (2005) methodological framework. Although Peters et al. (2015) and Arksey and O'Malley's (2005) guidelines are considered seminal work, subsequent publications have added to these documents (Munn et al., 2018). Arksey and O'Malley (2005) provided a methodological framework to conducting a scoping review using six stages namely: (1) identification of the research question, (2) identification of relevant studies, (3) study selection, (4) charting the data, (5) collating, summarizing and reporting of results and (6) consultation with stakeholders and report. The sixth stage is optional and although it is said to enhance the study (Arksey and O'Malley ,2005), the researcher has chosen not to do so due to time and cost constraints. Furthermore, the research question is not concerned with identifying alternative approaches to the research problem and there are limited stakeholders or existing service providers to consult with in the current research context, as mentioned above.

Stage 1: Identifying the research question

Arksey and O'Malley (2005) suggest that a wide approach is adopted in developing and refining research questions, to ensure that the likelihood of missing relevant articles is reduced through the selection of search terms. As well as ensuring that the references generated provide diversified coverage of literature in the field of interest have been gained. (Arksey and O'Malley, 2005)

In line with the aim outlined above, the broad research question is:

What research has been published in the last two decades (2002-2022) on interventions occupational therapy adopts to facilitate community re-integration for mental health care users (MHCUs) with severe mental illnesses in low- and middle-income countries (LMICs)?

Sub-questions:

1) What types of community re-integration strategies for mental health care users with are described in literature.

2)What factors contribute to the community re-integration of mental health care users with severe mental illness?

3)What are the current gaps in existing knowledge on occupational therapy intervention for community living of mental health care users in low-to middle income countries?

Stage 2: Study identification

A comprehensive search of the following databases will be conducted using an iterative process in consultation with a subject librarian from the Bongani Mayosi Health Sciences Library: PubMed and EBSCO Host (including Academic search Premier, CINAHL, Africa Wide Information, Heath Source nursing/ academic edition, Medline, APA PsycArticles, APA Psych Info). The terms listed in Table 1, will be searched independently and then combined with AND. If too many articles are identified, then the keyword LMICs and synonyms will be used to narrow the search. The reference lists will be scanned to identity articles that may have been missed and peer reviewed publications and grey literature will be used (Including WHOMinDbank, Grey Literature Report, Global Index Medicus, OpenUCT, AHRQ and Mednar). Identified articles will be imported into Endnote for screening and the duplicates will be removed.

Table 1 Search terms strategy

Keyword	Alternative
Mental Health Care Users	Serve mental illness OR Mental illness OR Mental disorders OR Psychiatric patients OR serious mental disorders
Community re-integration	Community re-integration OR community re-integration OR programmes OR strategies OR continuity of patient care OR Mental health services OR Community mental health services or Recovery OR Psychiatric rehabilitation OR Mental health intervention

AND Occupational therapy	Occupational therapy OR Occupational therapy intervention OR Occupational therapy Programmes
Low- and Middle-Income Countries	“Deprived Countries” OR "Deprived Population" OR "Deprived Populations" OR "Developing Countries" OR "Developing Country" OR "Developing Economies" OR "Developing Economy" OR "Developing Nation" OR "Developing Nations" OR "Developing Population" OR "Developing Populations" OR "Developing World" OR "LAMI Countries" OR "LAMI Country" OR "Less Developed Countries" OR "Less Developed Country" OR "Less Developed Economies" OR "Less Developed Nation" OR "Less Developed Nations" OR "Less Developed World" OR "Lesser Developed Countries" OR "Lesser Developed Nations" OR LMIC OR LMICS OR Low GDP OR "Low GNP" OR "Low Gross Domestic" OR "Low Gross National" OR "Low Income Countries" OR "Low Income Country" OR "Low Income Economies" OR "Low Income Economy" OR "Low Income Nations" OR "Low Income Population" OR "Low Income Populations" OR "Lower GDP" OR "lower gross domestic" OR "Lower Income Countries" OR "Lower Income Country" OR "Lower Income Nations" OR "Lower Income Population" OR "Lower Income Populations" OR "Middle Income Countries" OR "Middle Income Country" OR "Middle Income Economies" OR "Middle Income Nation" OR "Middle Income Nations" OR "Middle Income Population" OR "Middle Income Populations" OR "Poor Countries" OR "Poor Country" OR "Poor Economies" OR "Poor Economy" OR "Poor Nation" OR "Poor Nations" OR "Poor Population" OR "Poor Populations" OR "poor world" OR "Poorer Countries" OR "Poorer Economies" OR "Poorer Economy" OR "Poorer Nations" OR "Poorer Population" OR "Poorer Populations" OR "Third World" OR "Transitional Countries" OR "Transitional Country" OR "Transitional Economies" OR "Transitional Economy" OR "Under Developed Countries" OR "Under Developed Country" OR "under developed nations" OR "Under Developed World" OR "Under Served Population" OR "Under Served Populations" OR "Underdeveloped Countries" OR "Underdeveloped Country" OR "underdeveloped economies" OR "underdeveloped nations" OR "underdeveloped population" OR "Underdeveloped World" OR "Underserved Countries" OR "Underserved Nations" OR "Underserved Population" OR "Underserved Populations" **OR** Afghanistan OR Albania OR Algeria OR “American Samoa” OR Angola OR Armenia OR Azerbaijan OR Bangladesh OR Belarus OR Byelarus OR Belorussia OR Belize OR Benin OR Bhutan OR Bolivia OR Bosnia OR Botswana OR Brazil OR Bulgaria OR Burma OR “Burkina Faso” OR Burundi OR “Cabo

	Verde" OR "Cape Verde" OR Cambodia OR Cameroon OR "Central African Republic" OR Chad OR China OR Colombia OR Comoros OR Comores OR Comoro OR Congo OR "Costa Rica" OR "Côte d'Ivoire" OR Cuba OR "Democratic People's Republic of Korea" OR Djibouti OR Dominica OR "Dominican Republic" OR Ecuador OR Egypt OR "El Salvador" OR Eritrea OR Ethiopia OR "Equatorial Guinea" OR Fiji OR Gabon OR Gambia OR Gaza OR "Georgia Republic" OR Georgia OR Ghana OR Grenada OR Grenadines OR Guatemala OR Guinea OR "Guinea Bissau" OR Guyana OR Haiti OR Herzegovina OR Hercegovina OR Honduras OR India OR Indonesia OR Iran OR Iraq OR "Ivory Coast" OR Jamaica OR Jordan OR Kazakhstan OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyz OR Kirghizia OR Kirghiz OR Kyrgyzstan OR "Lao PDR" OR Laos OR Lebanon OR Lesotho OR Liberia OR Libya OR Macedonia OR Madagascar OR Malawi OR Malay OR Malaya OR Malaysia OR Maldives OR Mali OR "Marshall Islands" OR Mauritania OR Mauritius OR Mexico OR Micronesia OR Moldova OR Mongolia OR Montenegro OR Morocco OR Mozambique OR Myanmar OR Namibia OR Nepal OR Nicaragua OR Niger OR Nigeria OR Pakistan OR Palau OR "Papua New Guinea" OR Paraguay OR Peru OR Philippines OR Principe OR Romania OR Rwanda OR Ruanda OR Samoa OR "Sao Tome" OR Senegal OR Serbia OR "Sierra Leone" OR "Solomon Islands" OR Somalia OR "South Africa" OR "South Sudan" OR "Sri Lanka" OR "St Lucia" OR "St Vincent" OR Sudan OR Surinam OR Suriname OR Swaziland OR Syria OR "Syrian Arab Republic" OR Tajikistan OR Tadzhikistan OR Tajikistan OR Tadzhik OR Tanzania OR Thailand OR Timor OR Togo OR Tonga OR Tunisia OR Turkey OR Turkmen OR Turkmenistan OR Tuvalu OR Uganda OR Ukraine OR Uzbek OR Uzbekistan OR Vanuatu OR Venezuela OR Vietnam OR "West Bank" OR Yemen OR Zambia OR Zimbabwe

Stage 3: Study selection

The inclusion criteria listed in Table 2 will apply. The year 2002 was chosen as a starting point as this was the year that the Mental Health Care Act no.17 stipulated the de-institutionalisation of MHCUs (South African Government, 2002). Independent screening of identified literature, first by title and abstract and then on full text, will take place between the author and a research assistant. They will then meet and discuss discrepancies and reach consensus on which literature meets the inclusion criteria. The PRISMA-P flow diagram will be used to capture this process. Where discrepancies cannot be resolved a third reviewer (one of the supervisors) will be asked to assist in reaching a decision.

Table 2 Inclusion criteria

Criteria for inclusion
• Published between 2002 and 2022

- Published articles of (any type of research design and scientific articles (theoretical) and grey literature.
- Studies that have been conducted in LMICs will be included.
- Literature focusing on the population of interest, which is adults who are mental health care users in LMICs will be included. These users are to have diagnoses that include Severe Mental illness OR Mental illness OR Mental disorders OR Psychiatric patients OR serious mental disorders
- MHCUs who have previously been psychiatrically institutionalised.
- Explicit mention of mental health care users and community re-integration

Stage 4: Charting data

The following data will then be extracted into an Excel spreadsheet: authors, year, country, population (diagnosis; age; type of admission, re-integration strategy or programme), study design, intervention or strategies, types of outcomes, factors contributing to community re-integration. The articles will be categorised according to the Australian NHMRC hierarchy of evidence (Australian Government National Health and Medical Research Council, 2009) . Lastly, the data will be analysed descriptively.

Stage 5 collating, summarizing and reporting the results

The data will be summarised descriptively and gaps in the current evidence base will be highlighted. Critical appraisal will not be done as this was not deemed necessary for the research question. Peters et al. (2020) do not recommend critical appraisal in scoping reviews, as they assert that the aim is to map the available evidence rather than provided a synthesized and clinically meaningful answer to a question, unless it is specific to the nature of the aim of the scoping review; which in this study it is not.

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Appendix II- HREC Approval Letter

UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee

Room 45, E-52 Old Main Building
Groote Schuur Hospital
Observatory 7925
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28 September 2022

HREC/REF: 604/2022

A/Prof H Buchanan
Department of Health & Rehab Sciences
F-45 OMB
Email: Helen.buchanan@uct.ac.za
Student: MBZLOZ002@myuct.ac.za

Dear A/Prof Buchanan

PROJECT TITLE: OCCUPATIONAL THERAPY INTERVENTIONS FOR COMMUNITY RE-INTEGRATION OF MENTAL HEALTH CARE USERS IN LOW- AND MIDDLE-INCOME COUNTRIES: A SCOPING REVIEW

Thank you for submitting your request to the Faculty of Health Sciences Human Research Ethics Committee.

The HREC note that the proposed study is a scoping review.

As the scoping review involves published literature available through publicly accessible electronic databases, research ethics review and approval is not required.

This is in accordance with Section 1.1.8 of the Department of Health's Ethics in Health Research: Principles, Processes and Structures (South African Department of Health, 2015), which states: *"Research that relies exclusively on publicly available information or accessible through legislation or regulation usually need not undergo formal ethics review. This does not mean that ethical considerations are irrelevant to the research."*

The HREC acknowledges that the student- Lozinyanga Mabuza, is also involved in this project.

Yours sincerely

PROFESSOR MARC BLOCKMAN
CHAIRPERSON, FACULTY OF HEALTH SCIENCES HUMAN RESEARCH ETHICS COMMITTEE

Appendix III- PRISMA-ScR Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	yes
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	yes
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	yes.
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	yes
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	yes
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	yes
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	yes
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	yes
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	yes
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	yes
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	yes
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	yes
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	yes
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with	yes

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
		reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	yes
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	Yes
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	Yes
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	yes
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	Yes
Limitations	20	Discuss the limitations of the scoping review process.	yes.
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	yes
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	yes.

Appendix IV: Database Search Strategy

Database	Search String	Limiters Applied	No. of entries
EBSCOhost-(Africa-wide, Psych-info, CINAHL and Psych-articles)	("Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR MHCU OR "mental health service users") AND "occupational therapy" AND (community re-integration OR community reintegration OR community integration OR community rehabilitation OR community recovery).	Yrs 2002-2023	14
EBSCOhost-(Africa-wide, Psych-info, CINAHL and Psych-articles)	("Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR MHCU OR "mental health service users") AND ["occupational therapy" AND (rehabilitation OR recovery OR integration OR reintegration OR re-integration) AND "Community"]	Yrs 2002-2023	85
PubMed	(((((Severe Mental illness OR severe mental illnesses OR severe mental disorder OR severe mental disorders OR severe mental disease OR severe mental diseases OR severe psychiatric illness OR severe psychiatric illnesses OR severe psychiatric disorder OR severe psychiatric disorders OR severe psychiatric disease OR severe psychiatric diseases OR mental health care users OR MHCU OR mental health service users)) OR ("Mental Disorders"[Mesh])) AND ((occupational therapy) OR ("Occupational Therapy"[Mesh]))) AND (((community re-integration OR community reintegration OR community integration OR community rehabilitation OR community recovery) OR ("Community Integration"[Mesh])) OR ("Community Mental Health Services"[Mesh])) AND (2002:2023[pdat])) AND ((Low to middle income countries OR LMIC OR LMICs))	Yrs 2002-2023	15
PubMed	(((((community) AND (rehabilitation OR recovery OR integration OR reintegration OR re-integration)) OR ("Community Integration"[Mesh])) OR ("Community Mental Health Services"[Mesh])) AND ((occupational therapy) OR ("Occupational Therapy"[Mesh]))) AND (((Severe Mental illness OR severe mental illnesses OR severe mental disorder OR severe mental disorders OR severe mental disease OR severe mental diseases OR severe psychiatric illness OR severe psychiatric illnesses OR	Yrs 2002-2023	16

	severe psychiatric disorder OR severe psychiatric disorders OR severe psychiatric disease OR severe psychiatric diseases OR mental health care users OR MHCU OR mental health service users)) OR ("Mental Disorders"[Mesh])) AND (2002:2023[pdat])) AND ((Low to middle income countries OR LMIC OR LMICs))		
Scopus	("Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR mhcu OR "mental health service users") ("occupational therapy")) AND (community AND re-integration OR community AND reintegration OR community AND integration OR community AND rehabilitation OR community AND recovery)))	Yrs 2002-2023	14
Scopus	((TITLE-ABS-KEY (community)) AND (TITLE-ABS-KEY ((rehabilitation OR recovery OR integration OR reintegration OR re-integration)))) AND (TITLE-ABS-KEY ("occupational therapy")) AND (TITLE-ABS-KEY (("Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR mhcu OR "mental health service users")))	Yrs 2002-2023	35
OATD.org	("Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR MHCU OR "mental health service users") AND "occupational therapy" AND (community re-integration OR community reintegration OR community integration OR community rehabilitation OR community recovery).	English only Yrs between 2002-2023	15
WorldCat	("Severe Mental illness*" OR "severe mental disorder*" OR "severe mental disease*" OR "severe psychiatric illness*" OR "severe psychiatric disorder*" OR "severe psychiatric disease*" OR "mental health care users" OR MHCU OR "mental health service users") AND ["occupational therapy" AND (rehabilitation OR recovery OR integration OR reintegration OR re-integration) AND “Community”] parameters/format(thesis/dissertation)	Yrs between 2002-2023 Format: Thesis Dissertation	5

Appendix V: Modified JBI Charting Tool

AUTHOR (YEAR OF PUBLICATION)	COUNTRY OF ORIGIN	POPULA-TION	PRACTICE SETTING	STUDY DESIGN	STUDY AIMS/OBJECTIVES	INTERVEN-TION TYPE	OUTCOME

Appendix. VI: Qualitative Data Extraction Table

Author (year)	Types of community re-integration interventions	Factors contributing to community re-integration
Arahanthabaliu et al. (2020)	• Home visits • **Need-based psychosocial intervention:** Adherence therapy, relapse prevention program, crisis intervention, supportive therapy for caregivers, stigma reduction program, vocational rehabilitation, facilitation of access to welfare benefit, mobilizing to assist the care of the patient and enhancing support system	• Program with a low running costs • Family and support system involvement • MDT approach • Referral systems • Crisis and relapse management • Accessibility of community resources to assist patient care • Assessment and re-assessment of SOFAS and IDEAS
Engelbrecht et. al (2018)	**Type of groups** • Actuality; current affairs • Arts and crafts (quantity and variety dependent) • Life skills (budgeting, anger management, communication skills, assertiveness training, personal hygiene, food preparation skills, child care skills, balanced lifestyle, day–night routine, planning process, problem-solving process, stress management and goal setting) • Gardening later termed "work" • Psycho-education; knowing your illness, medication and side effects, discussing general medical conditions like HIV prevention, identifying and reporting child abuse. • Drumming • Individual sessions (at Day centre) • Nutritional; healthy balanced diet, food preparation methods, economic food options and portion size.	• Principles of the PSR in the design of the program. • Providing meals and transportation, and access disability grant. • Continuity of and familiarity with centre and staff knowledge, contributes to engagement with services. • Meeting of needs creating a sense of belonging • Voluntary participation and attendance to the participants choice facilitated gradual weaning off from the centre. • Development of social support network through exposure to program. Facilitated by Occupational Spin off Model • Meaningful services-OT based program meant engagement meaningful activities as means to treat pathology. • OT programme designed, run and managed by OTs broadens opportunity of engagement and promotes health and well-being. • Client-centred approach- goodness of fit. • Referral to vocational programmes ensures continuity of participant's skills and occupations
Gamieldien (2015)	• Psycho-education and treatment adherence • Development of self-care and daily living skills • Exploration of creativity • Social and community integration skills	• Programme design draws from PSR interventions and concept of recovery. • Re-admission • Use of ACT teams • Relapse prevention

		• Referral; Multidisciplinary teams including home-based carers
Gamieldien, Galvaan, Myers & Sorsdahl, (2021)	• Family support sessions and involvement • Supported living options • Life skills type projects: cooking, relaxation • Leisure activities like sport, art and crafts. • Providing users with clothes, food and transport money • Skills development.	• Collaborative and MDT approach • Use of social networks • Skills development to improve communication, social engagement and interaction. • Programme instils hope for MHCUs. • Providing social support
Joag et al. (2020)	• 6 Counselling sessions • Relaxation techniques • Symptom monitoring and management • Psychoeducation • Life skills • Raise community awareness • Facilitate process of applying and securing social benefits.	• Community members direct involvement • Referral systems; specialised health care professionals • Community awareness • Access to social benefits and use of social networks.
Luo et al. (2019)	**TAU** • Home visits; • Non-specific counselling (topic or framework) • Pharmacological management • F/U telephone call **ACT services individually tailored** included; Clinical assessments and crisis intervention (e.g. timely responses and home visits), psychosocial assistance, supportive counselling, and (201	• Recovery principles (Salyers and Tsemberis,2007) • Free treatment programme, affordability. • Holistic and MDT approach • Cultural adaptation of the ACT approach- included family support and psychoeducation for caregivers and patients. • Treatment was respectful and focused on quality of life driven services. • Enhanced community integration, rehabilitation and de-stigmatisation. • Interactive contributing factors; reducing negative symptoms of schizophrenia, re-employment and increased social functioning.
Rezaie & Phillips (2020)	Individual and group occupational therapy: • Social skills • Work skills • Self-management skills	• Support consisted of family, social and health • system subcategories. • Skill acquisition • Providing information distinguished between illness-related information • and women's health information • Multidisciplinary approach

Salles & Matsukura (2016)	• Home visits • Therapeutic workshops, • Individual sessions • Workshop consisting of different activities; leisure, music, sports, festivities and several forms of arts and crafts. • Work related projects: recycling, bread-making, and a second-hand store and one workshop that proposed to produce a magazine	• PSR strategies used in programme design • Collateral input and social networks of MHCUs • Autonomy in exposure to occupations to engage in. • Creating possibilities for participation. • Groupwork facilitates engagement, learning and sharing of experiences allows them to receive support
Silaule & Casteleijn (2021)	Therapeutic groups; MHCUs allocated to appropriate groups based on different levels of creative ability. • Self-care (ADLs) • Social/recreational • Exercise • Life skills groups and projects • Work and insight group • Income-generating projects (gardening, car wash and tuckshop) • Reality orientation • Administration of Home programmes to individuals pre-discharge	• Activity participation in their home context and OT programme. • Use of Routine Outcome Measures to evaluate effectiveness of intervention. • Assessment entailed use of practical activities (ADLs and Crafts) and collateral information. • Involvement of family in re-integration programmes (home programmes)
Tsatsi & Plastow (2021)	• Self-care (ADLs) • Vocational rehabilitation projects (work training, placements in formal and informal work and income generating programmes) • Leisure activities • Communal activities (watching TV together, eating in dining room and playing self-constructed board games	• Engagement in occupations of their choice • Future work experiences well aligned with previous job experiences

Appendix VII coded raw data extraction of factors contributing to the community-reintegration of MHCUS

Author (year)	Factors contributing to community re-integration
Arahanthabaliu et al. (2020)	• Program with a low running cost financial aspects • Family and support system involvement • MDT approach • Referral systems • Relapse management • Accessibility to community resources that assist patient care • Assessment and re-assessment of SOFAS and IDEAS
Engelbrecht et. al (2018)	• PSR strategies used in design of program. • Access to disability grants, meals and transportation. • Continuity of and familiarity with centre and staff knowledge, contributes to engagement with services. • Meeting of client needs creating a sense of belonging • Voluntary participation and attendance to the participants choice, facilitated gradual weaning off from the centre. • Development of social support networks through exposure to program. Facilitated by Occupational Spin-Off Model • Meaningful services-OT based program meant engagement meaningful activities as means to treat pathology. • OT programme designed, run and managed by OTs broadens opportunity of engagement and promotes health and well-being. • Client-centred approach- goodness of fit. • Referral to vocational programmes ensures continuity of participant's skills and occupations
Gamieldien (2015)	• Programme design draws from PSR interventions and concept of recovery. • Use of ACT teams • Relapse prevention • Referral; Multidisciplinary teams including home-based carers
Gamieldien, Galvaan, Myers & Sorsdahl, (2021)	• Collaborative approach-MDT • Use of social networks • Skills development to improve communication, social engagement and interaction. • Programme instils hope for MHCUs. • Providing social support
Joag et al. (2020)	• Community members direct involvement • Referral systems; through the use of specialised health care professionals

	• Community awareness • Access to social benefits and use of social networks.
Luo et al. (2019)	• Recovery principles (Salyers and Tsemberis,2007) • Free treatment programme, affordability. • Holistic approach- MDT • Cultural adaptation of the ACT approach- included family support and psychoeducation for caregivers and patients. • Treatment was respectful and focused on quality of life driven services. • Enhanced community integration, rehabilitation and de-stigmatisation. • Interactive contributing factors ; reducing negative symptoms of schizophrenia, re-employment and increased social functioning.
Rezaie & Phillips (2020)	• Support consisted of family, social and health • Skills acquisition • Providing information distinguished between illness-related information and women's health information • Multidisciplinary approach
Salles & Matsukura (2016)	• PSR strategies used in programme design • Collateral input and social networks of MHCUs • Autonomy in exposure to occupations to engage in. • Creating possibilities for participation. • Groupwork facilitates engagement, learning and sharing of experiences allows them to receive support
Siluale &Casteleijn (2021)	• Activity participation in their home context and OT programme. • Use of Routine Outcome Measures to evaluate effectiveness of intervention. • Assessment entailed use of practical activities (ADLs and Crafts) and collateral information. • Involvement of family in re-integration programmes (home programmes)
Tsatsi & Plastow (2021)	• Engagement in occupations of their choice • Comprehensive occupational therapy programme • Future work experiences well aligned with previous job experiences
Key **Assessment and outcome measures, CBR principles Elements in the programme OT-led programmes, PSR strategies Recovery**	