ABSTRACT

Purpose: The South African National Health System, funded by National Health Insurance, aims to ensure universal access to quality healthcare for all South Africans. The aim of this scoping review was to explore barriers and facilitators experienced by persons with disabilities when accessing rehabilitation services in public healthcare facilities in South Africa. For this scoping review, disability was seen as defined in the International Classification of Functioning, Disability and Health (ICF), and access was understood to include availability, accessibility, acceptability, and affordability of rehabilitation.

Method: Sources were included if they were published between 2012 and 2021, in English, and contained primary research undertaken in South Africa pertaining to accessibility to public healthcare facilities for rehabilitation by persons with disabilities. Following Joanna Briggs Institute guidelines, the search included CINAHL, EBSCOhost, Scopus, Web of Science, PubMed, Science Direct, SciELO, and Google Scholar. Rayyan was used to screen sources for eligibility. Ineligible sources were removed, based on titles and abstracts, and the eligibility of remaining sources was confirmed in the full texts review. Although 70 sources were identified and screened, only 19 were found to be eligible for inclusion. Data was extracted on Microsoft Excel and Word templates. Analysis and synthesis were done using Microsoft Excel and Taguette.

Results: The findings showed that the most prominent barrier restricting the access of persons with disability to rehabilitation was affordability. Other barriers were availability and acceptability of services. Physical access to rehabilitation
was affected by inaccessible transport and community mobility, social and community barriers. The facilitators that were most prevalent were personal attitudes, family and friends - societal and community - and governmental support.

**Conclusion and Implications:** This scoping review confirmed that access to rehabilitation services in public healthcare facilities in South Africa is a multifaceted issue, which requires a multisectoral approach to achieve sustainable and effective solutions. Intersectoral and interprofessional approaches by public healthcare rehabilitation service providers and stakeholders are necessary to improve access to services.

Better reliance on facilitators that are already in place should improve access to rehabilitation services. This includes improved collaboration with community leaders, family members and users of disability services.

**Key words:** affordability, acceptability, availability, interprofessional rehabilitation services, public healthcare, barriers, facilitators to rehabilitation

**INTRODUCTION**

According to the World Health Organisation (WHO), achievement of the highest attainable standard of health is a fundamental right of every human being (Meier, 2017). In its report on disability (WHO, 2011) the WHO clearly indicates that this includes persons with disabilities. Disability is understood to be an *umbrella term for impairments, activity limitations, and participation restrictions*, (denoting) the *negative aspects of the interaction between an individual* (International Classification of Functioning, Disability and Health (ICF), 2001). Towards realisation of this right to health, the availability, accessibility, acceptability and affordability of healthcare require consideration (Evans, Hsu, Boerma, 2013). In South Africa such access to healthcare is enshrined in the Constitution (The Constitution of the Republic of South Africa, 1996) and envisioned by the National Health System (National Department of Health, 2017) which endeavours to ensure universal access to quality healthcare for all South African citizens and residents irrespective of their personal and socio-economic status. There are, however, challenges in the materialisation of these ideals. Availability of health workers, with the competencies and skill-mix to match the health needs of the population, is especially problematic in South African public healthcare facilities, despite governmental strategies to counter this (Maphumulo & Bhengu, 2019). Access to
healthcare is affected by inequitable distribution of health facilities, inaccessible transport and infrastructure (van Biljon & van Niekerk, 2021). The acceptability of services, evidenced by the extent to which people are willing to use available healthcare services, is influenced by the biographics of providers and users of health services (Ned, Cloet & Mji., 2017), social, and cultural barriers (Neille & Penn, 2015). The affordability of available healthcare has been shown to be a main driver of healthcare inequality in South Africa (Gordon, Booysen & Mbonigaba., 2020)). Even with high levels of acceptability of health services, the availability and affordability remained low, especially for vulnerable subgroups (Burger & Christian., 2020). Persons with disability using rehabilitation services within public healthcare are one such vulnerable group.

A literature review (Chiluba, 2019) confirmed that persons with disability from low-income countries faced more barriers to healthcare than the average population; these findings were supported by a national cross-sectional multistage cluster sample survey (N=1738) done in Afghanistan (Trani, Bakhshi, Noor, Lopez & Mashkoor., 2010) and a survey (N=773) exploring access to healthcare for persons with disability in rural South Africa (Vergunst, Swart, Hem, Eide, Mannan, MacLachlan, Mji, & Braathen., 2017). Despite aspirations that health should be universally accessible and despite the country’s progressive policies, this is not the case for many sections of South African society. The National Health Act was promulgated in 2003 (National Health Act 61 of 2003, 2003) and in 2012 the implementation phase of the National Health Insurance (NHI) commenced, with the focus on Health System Strengthening (HSS) initiatives. In 2019, the NHI was tabled in Parliament for the final opportunity for amendment and contribution. Myezwa & van Niekerk (2013) considered the implications of these HSS initiatives for rehabilitation professionals, their service delivery and the impact on rehabilitation service users. They urged that rehabilitation professionals be proactive and research aspects that impact on the equitability of their service delivery.

Examining the access of service users to rehabilitation services offered by rehabilitation professionals is one such effort. The authors of this article attempted to explore how rehabilitation service users get to service providers that offer rehabilitation services in public healthcare facilities. For this scoping review, rehabilitation services were seen as those offered by rehabilitation service providers within the professions of occupational therapy, medical orthotics and prosthetics, arts therapy including drama, music, art and movement,
physiotherapy, podiatry and biokinetics, speech and hearing and audiology, and optometry. A specific focus was on rehabilitation services offered to outpatients and/or community-dwelling service users.

Objective
The aim of the scoping review was to explore barriers and facilitators to accessing rehabilitation services within public healthcare in South Africa. Access was understood to comprise availability, accessibility, acceptability, and affordability. The review sought to answer the question: What are the barriers and facilitators persons with disabilities experience as rehabilitation service users in South Africa’s public healthcare?

METHOD

Study Design
The review was undertaken between 29th March 2021 and 1st April 2021. The authors comprised five Stellenbosch University final year occupational therapy students and two supervisors. The review was conducted according to the Joanna Briggs Institute (JBI) methodological framework for scoping reviews (Peters, M.D.J., Godfrey, C., McInerney, P., Baldini Soares, C., Khalil, H. and Parker, 2017). Mendeley Reference Manager (2020), a no-cost web and desktop reference management application, was used to import, de-duplicate, organise, and export articles. Rayyan (Rayyan Sytems, 2020), a no-cost web application designed for reviews and knowledge synthesis projects, was used to screen articles. Microsoft Excel and Taguette (Rampin, Rampin & DeMott., 2020), a no-cost and open-source qualitative research tool, were used to analyse and synthesise findings.

Search Strategy, Screening, and Selection
The search string comprised “persons with disabilities” or “PWD” or “people with disabilities”, “access rehabilitation services”, “public health care”, “poverty and healthcare” and “South Africa”; with date limiters set to identify sources from January 2012 (the year in which the NHS policy was adopted) to March 2021. The following databases were searched through Stellenbosch University Library:

Eligibility criteria:
Reported primary research, undertaken in South Africa, and published in English peer-reviewed journals, between 2012 and 2021.

Using the PCC (Population/Concept/Context) mnemonic the following criteria were formulated:

- **Population** - Persons with disability who are public healthcare rehabilitation services users in South Africa, inclusive of all types of disabilities, gender, race, and age groups.

- **Concept** - Access to rehabilitation services as offered in occupational therapy, medical orthotics and prosthetics; arts therapy including drama, music, art and movement; physiotherapy, podiatry and biokinetics, speech and hearing and audiology, and optometry. All barriers faced when accessing public healthcare include transport and community mobility, physical accessibility issues, financial, educational, geographic, personal, and social perceptions. All facilitators employed to overcome these.

- **Context** - Access to rehabilitation services offered at a public healthcare facility in South Africa, primary healthcare clinics, community health clinics, secondary, tertiary or quaternary hospitals and rehabilitation hospitals in rural and urban areas.

The identified articles were uploaded into Mendeley, duplicates were removed, and the availability of full texts confirmed. Full texts were loaded into Rayyan. Six authors screened the sources. First, the titles and abstracts of all sources were screened by blinded reviewers to identify the ones that were provisionally eligible; next, blinded full text screening ensued to confirm eligibility. Conflicts that arose were resolved by means of regular group discussions. The results of the searches and selection process are reported in Figure 1 as a PRISMA-ScR flow chart (Tricco, Lillie, Zarin, O’Brien, Colquhoun Levac, Moher, Peters, Horsley, Weeks, Hemple, Akl, Chang, McGowan, Stewart, Harling, Aldcroft, Wilson, Garrity, Lewin, Godfrey, MacDonald, Langlois, Soares-Weiser, Moriarty, Clifford, Tuncalp & Straus, 2018).

**Data Extraction, Analysis, and Synthesis**
Data was extracted and charted using data extraction templates.

Quantitative data was extracted into an Excel sheet template with the following
Qualitative data was extracted in Taguette and is shown in Table 1.

Table 1: Qualitative Data Extraction Template

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple factorial barriers</td>
<td>Positive effect, experience, or evidence of rehabilitation services</td>
</tr>
<tr>
<td>The interplay of multiple factors that escalate to become a barrier to get to rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Physical environmental barriers</td>
<td>Societal and community support and strategies allowing ability to attend rehabilitation</td>
</tr>
<tr>
<td>Geographical, geological, environmental aspects that affect ability to get to rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Crime barriers</td>
<td>Financial strategies</td>
</tr>
<tr>
<td>Transport barriers</td>
<td>Personal and attitudinal strategies</td>
</tr>
<tr>
<td>The unavailability of transport, poor quality of transport, unreliability of transport</td>
<td></td>
</tr>
<tr>
<td>Rehabilitation service barriers</td>
<td>Insight and educational strategies</td>
</tr>
<tr>
<td>No or poor-quality rehabilitation services, unavailability of rehabilitation services, communication and language barriers</td>
<td></td>
</tr>
<tr>
<td>Disability-related barriers</td>
<td>Transport strategy</td>
</tr>
<tr>
<td>When a disability or lack of ability to manage it affects access to rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Societal community barriers</td>
<td>Rehabilitation services strategies</td>
</tr>
<tr>
<td>Social attitudes or community conditions affect ability to get to rehabilitation</td>
<td></td>
</tr>
</tbody>
</table>
Personal and attitudinal barriers  
Insight/educational/knowledge barriers  
Attitudinal barriers are pervasive negative perceptions and value systems that focus on a person’s disability rather than their ability and other valued characteristics. Attitudinal barriers may be present in societies, communities or in specific individuals.

<table>
<thead>
<tr>
<th>Physical environmental strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial barriers</td>
</tr>
<tr>
<td>Disability-related strategy</td>
</tr>
<tr>
<td>Political barriers</td>
</tr>
<tr>
<td>Political strategies</td>
</tr>
</tbody>
</table>

Both data extraction templates were developed for the review through an iterative group discussion process and refined during a process of collective screening of the first three sources; thereafter five authors extracted all data and met on a weekly basis to discuss progress and resolve problems. The quality of the published research was not critically appraised. As the review question could be answered by both qualitative and quantitative data, a convergent integrated approach to the analysis and synthesis was used. Focusing on the review question and objectives, the extracted and analysed data was inductively coded through group discussion on relevance and value of the evidence for rehabilitation practice in South Africa. The most salient codes were identified and narratively summarised under the two pre-determined themes of barriers and facilitators.

**Ethics Approval**

No ethical clearance was required for the scoping review.

**RESULTS**

**Study Selection**

Of the 70 articles yielded in the search, 19 were identified to be relevant. Figure 1 shows a PRISMA Scoping Review flow chart detailing the search and screening processes.
Table 2 shows the 19 articles included in the review, presented in alphabetical order based on the name of the first author. The authors are from different professions and affiliations, mostly in healthcare, and the articles were published in a variety of journals, most of them based in Africa.

Table 2: Articles included in the Scoping Review

<table>
<thead>
<tr>
<th>No.</th>
<th>Article Referenced</th>
</tr>
</thead>
</table>
| 2  | de Klerk S, Eloff L, Naudé Z, Boon A, Carelse M, Steward M, Minal Z.  
Non-attendance of occupational and physiotherapy appointments at Western Cape Rehabilitation Centre: A description of associated factors.  
| 3  | Grut L, Mji G, Braathen SH, Ingstad B.  
Accessing community health services: challenges faced by poor people with disabilities in a rural community in South Africa.  
| 4  | Hussey M, MacLachlan M, Mji G.  
Barriers to the implementation of the health and rehabilitation articles of the United Nations convention on the rights of persons with disabilities in South Africa.  
| 5  | Joosub N.  
How local context influences access to neuropsychological rehabilitation after acquired brain injury in South Africa.  
| 6  | Kritzinger J, Schneider M, Swartz L, Braathen SH.  
Experiences of patients and service providers with out-patient rehabilitation services in a rehabilitation centre in the Western Cape Province.  
| 8  | Maddocks S, Moodley K, Hanass-Hancock J, Cobbing S, Chetty V.  
Children living with HIV-related disabilities in a resource-poor community in South Africa: caregiver perceptions of caring and rehabilitation.  
| 9  | Mlenzana N, Eide A, Frantz J.  
The Profile and Experiences of Service Providers with Rehabilitation Services in the Western Cape.  
| 10 | Moodley J, Ross E.  
Inequities in health outcomes and access to health care in South Africa: a comparison between persons with and without disabilities.  
<table>
<thead>
<tr>
<th></th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
</tr>
</thead>
</table>
**Study Extracted Criteria**

Table 3 provides a summary of the data that was extracted to elucidate the barriers and facilitators that impacted access to rehabilitation, and the recommendations and conclusions made in articles that were included in the review.

**Table 3: Extracted Barriers, Facilitators, and Conclusions that affect Persons with Disabilities**

<table>
<thead>
<tr>
<th>Article No. and 1st Author</th>
<th>Barriers to access Rehabilitation</th>
<th>Facilitators to access Rehabilitation</th>
<th>Recommendations made by Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cobbing et al</td>
<td>• Societal community stigma • Lack of knowledge of condition and intervention • Disability and structural related restrictions • Financial and transport • Multiple factorial barriers</td>
<td>• Positive rehabilitation experience • Personal attitudes / mental strength</td>
<td>Develop and implement home-based rehabilitation interventions. Rehabilitation professionals should keep up to date with recent literature and practical training courses.</td>
</tr>
<tr>
<td>2. de Klerk et al</td>
<td>• Time of the year / month / week and weather • Dependant responsibilities. The more dependants the lower the attendance rate • Low socio-economic category • Type of diagnoses and impairment</td>
<td>• Being married</td>
<td>Further studies are needed to assist in implementing solutions to reduce high rates of non-attendance.</td>
</tr>
<tr>
<td>3. Grut et al</td>
<td>• Lived poverty and resource-poor area • Poor perspective of the health services • Lack of availability of rehabilitation service • Lack of knowledge of rehabilitation • Out of reach healthcare services • Poor infrastructure and transport • Complexity and multiple factorial interaction of social, cultural, and political barriers</td>
<td>• Decentralised healthcare facilities • Multi-professional rehabilitation services</td>
<td>Access should transcend a medical institution focus. Health service models that integrate the skills of health professionals with those of people with disability and their family. Such skills lie dormant at community level and need to be recognised and utilised.</td>
</tr>
</tbody>
</table>
| 4. Hussey et al | • Government officials’ lack of knowledge, stigma, and negative assumptions about people with disabilities  
• Lack of coordination between government departments  
• Poor funding of rehabilitation services  
• Persons with disabilities’ financial constraints  
• Overburdened health system  
• Inaccessible / non-existent transportation and infrastructure  
• Communicating with rehabilitation professionals  
• Multiple factorial barriers | • Financial assistance from the governmental grant system  
• Social and family assistance | Greater sensitisation around disability is needed. People with disabilities’ needs should be better integrated and mainstreamed into healthcare services. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Joosub</td>
<td>• Socio-economic disparities: Material exploitation and class inequality are an enduring legacy of fragmented healthcare systems and skewed geopolitical priorities</td>
<td>• The concept of Ubuntu, which emphasises interconnectedness, interdependence, and the importance of communal relationships</td>
</tr>
</tbody>
</table>
| | • Sociocultural influences: African traditional beliefs were excluded from the healthcare system. Indigenous healing and beliefs have been overshadowed by mainstream medical models  
• Discharge to underprepared communities: Family members and communities are underprepared and have a lack of adequate support and knowledge to deal with individual’s need for care | | Collaborate with existing leaders like traditional healers and religious clerics. Consider contextual influences to improve accessibility and relevance of rehabilitation and ensure effective utilisation of scarce healthcare resources. |
<table>
<thead>
<tr>
<th>Study (Code)</th>
<th>Key Findings</th>
<th>Solutions</th>
</tr>
</thead>
</table>
| 6. Kritzinger et al | - Communication difficulties at healthcare facilities  
- Persons with disabilities’ lack of independent thought, overprotectedness and non-questioning attitude  
- Lack of familial communication | None  
Broader provision of interpreting services.  
Assist deaf users to engage assertively with the health system. |
| 7. Kumurenzi et al | - Service providers lacked knowledge and skills in dealing with some disabilities  
- Transport to get to rehabilitation  
- Waiting time for rehabilitation session, the length of sessions and appointment schedules  
- Poor communication and provision of information at healthcare facilities | - Positive rehabilitation experiences  
- Society and community support  
Increase the capacity of service providers and provide transport services for persons with disabilities. |
| 8. Maddocks et al | - Financial constraints  
- Poor access to rehabilitation  
- Lack of support networks | - Societal, family, and spiritual support  
- Insight and knowledge  
- Political facilitators  
- Financial grants  
Changes in government policy guiding rehabilitation interventions are needed to improve the availability of resources. |
| 9. Mlenzana et al | - Accessibility within the centre  
- Language barriers  
- Shortage of rehabilitation professionals  
- Resources and budget challenges  
- Relevance of service provider skills  
- Transport challenges for persons with disabilities | - Family involvement and support  
- Societal and community support  
Reorganise rehabilitation services to improve accessibility to these services while maintaining service quality. |
<table>
<thead>
<tr>
<th>Study Reference</th>
<th>Identified Barriers</th>
<th>Proximate Support</th>
<th>Long-term Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moodley et al</td>
<td>Lack of knowledge of rehabilitation, Unavailability of services and inaccessibility of health facilities, Financial constraints, Ignorance regarding available services, Inadequate and inaccessible transport</td>
<td>None</td>
<td>Disability-friendly health care policies that address barriers. The planned National Health Insurance scheme is likely to benefit persons with disabilities.</td>
</tr>
<tr>
<td>Morris et al</td>
<td>Poverty, Inaccessible transport and infrastructure, Inter relational impact of factors, Crime and community unrest</td>
<td>Support from community, Knowledge of / insight into and education regarding rehabilitation</td>
<td>Provision of equitable, accessible, affordable, and evidence-based rehabilitation. Measuring social, economic, and educational return on investment from rehabilitation.</td>
</tr>
<tr>
<td>Mutwali et al</td>
<td>Variety of rehabilitation services are not always available, Poor physical access to and lack of transport and infrastructure, Lack of funds to get to rehabilitation, Long queues and waiting times for rehabilitation</td>
<td>Health facilities were within walking distance</td>
<td>Reduce poverty. Barriers, disparities, and inequities in current healthcare can be reduced through the roll-out of National Health Insurance.</td>
</tr>
<tr>
<td>Naidoo et al</td>
<td>Challenges utilising transport to the hospital, No referral or no knowledge of physiotherapy services at the nearest hospital, Poor bodily function was identified as a barrier, Personal insight, knowledge, and attitudinal barriers, Societal community barriers, Communication and language barriers</td>
<td>Self-motivation to improve, Positive experiences, Shorter waiting period, Family support</td>
<td>Therapists should foster good relationships with clients, educate, motivate, and encourage them. Early involvement and education of caregivers. A community-based approach to rehabilitation.</td>
</tr>
</tbody>
</table>
| 14. Ntamo et al | Lack of finances / funds  
Living a long distance from rehabilitation service  
Insensitive public transport system especially taxi drivers who refused to transport wheelchairs  
Rude attitudes from hospital staff | Money  
Multiple reasons to attend / go to a healthcare centre | Decentralisation of rehabilitation services to address unavailability at clinics and health care centres proximal to the clients’ residential areas. |
| --- | --- | --- | --- |
| 15. Scheffler et al | Transport barriers  
Societal community: attending a clinic robbed the users of confidentiality as their health status was publicly displayed  
Rehabilitation services: language barriers, long waiting times, users’ inability to plan / choose appointments and facilities to attend, short contact sessions, fragmentation of services, negative attitudes / behaviour of rehabilitation providers, lack of equipment and consumables and too few service providers, providers’ lack of disability-specific knowledge  
Financial barrier  
Physical environmental barriers  
Multiple factorial barriers | Rehabilitation service within a 3 km radius of users and mostly accessible by foot  
Rehabilitation providers were caring, positive, committed, and professional  
Users felt they were treated in an acceptable manner | Focus on how services are delivered to restore supply (services) and demand (user needs) balance and promote universal equitable rehabilitation access. Service delivery should include a client-centred approach with consideration of aspects such as choice, comprehensive individualised care, continuity of care, shared consultation and participative decision making, non-discrimination, as well as good communication with a focus on mutual respect and courtesy. |
| 16. Schierenbeck et al | - Lack of staff and properly trained staff  
- Lack of facilities  
- Lack of community services and prevention  
- Lack of affordable transport  
- Disability related barriers  
- Community, family and persons with disabilities’ insight, education, and knowledge barriers  
- Traditional cultural beliefs of the community, persons with disabilities and staff  
- Lack of cross-cultural understanding, communication and language barriers | - Insight and educational facilitators  
- Persons with disabilities’ personal and attitudinal facilitators | Monitor the implementation of the right to health and the experience and knowledge of service providers. |
|------------------------|-------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------|
| 17. Vergunst et al     | - Language and cultural difference between providers and users  
- Geographical barriers: transport, terrain, and distance  
- Healthcare institution and organisational barriers: inaccessible buildings, shortage of staff, long waiting period, difficult to get resources, shortage of stock and supplies  
- Attitudinal barriers within healthcare towards persons with disabilities, specifically negative attitudes toward individuals with psychosocial disabilities | - Societal and community support  
- Mobile health unit visits villages in the community: services reached the community rather than the community making the journey to the hospital | Stronger societal orientation towards social justice, poverty relief, and employment may improve attitudes to persons with disabilities. Seeing access to healthcare for rural South African persons with disabilities as a broader human rights issue. |
18. Visagie et al
• Service barriers: Challenges with referral and communication, limited therapy hours in the community, the lack of community-based rehabilitation and the challenges regarding provision of assistive devices
• Environmental barriers
• Caregivers and services users’ illiteracy and lack of knowledge of disability and rehabilitation

• Commitment shown by the primary caregivers served as a facilitator

Community-based rehabilitation and transdisciplinary teamwork supported by family members, community health workers and peer mentors.

19. Wegner et al
• Resistant to being treated by therapists from their own culture and race
• Lack of conviction about the efficacy of rehabilitation
• Staff shortages, lack of vehicles to do home and clinic visits
• Accessibility to and availability of public transport
• Public cultural beliefs regarding cause of disease, and that a person with disability was ‘bewitched’

None

Educate and prepare rehabilitation providers to be culturally aware, knowledgeable of, and competent to meet the needs of rehabilitation service users in rural contexts.

DISCUSSION
The review findings confirmed that access to rehabilitation for persons with disabilities in South Africa is complex (van Stormbroek & Buchanan, 2019) with multiple factors impacting it (Hussey, MacLachlan, & Mji., 2017); (Bright, Wallace & Kuper,., 2018)) which further complicates strategies and attempts to address the associated problems (Vergunst, Swartz & Mji, 2015). The same applies to factors that support and facilitate persons with disabilities’ access to rehabilitation (Scheffler, Visagie & Schneider, 2015). Concluding recommendations of the 19 included articles appealed for social justice (Vergunst, Swart & Mji., 2015) and two of the articles called for the implementation of South Africa’s planned national health initiatives (Moodley & Ross, 2015) (Mutwali & Ross, 2019) as a solution for the current healthcare inequity. Authors reported a shortage of research.
evidence and poor uniformity in reporting issues pertaining to accessibility to rehabilitation. Recommendations for further research to address issues relating to, and that could impact, accessibility to rehabilitation were made (De Klerk, Eloff, Naude, Boon, Carelse, Steward & Zaidi., 2019).

Barriers, facilitators, and the concluding recommendations were used as categories to summarise the results of the review. All four of the accessibility-to-healthcare components, namely availability, accessibility, affordability and acceptability, were reported on and emerged as barriers. Facilitators that enabled access to rehabilitation for persons with disabilities, and that originated organically from within low-resourced communities, warrant consideration as potentially sustainable, low-cost, and acceptable solutions that might address accessibility. Grut, Mji, Braathen and Ingstad(, 2012) reported such solutions as *skills that lie dormant at community level*, and urged readers to be cognisant of these. Considering these as evidence to inform rehabilitation accessibility problems would require interprofessional, intersectoral collaboration and further research.

**Barriers to Access Rehabilitation**

Affordability was the most reported barrier preventing access to rehabilitation; this finding also pertained to access to public healthcare (van Gaans & Dent, 2018) globally (Akter, Davies, Rich & Inder., 2019) In this review, persons with disability who accessed rehabilitation services within public healthcare had to do so within a broader context of poverty (Vergunst et al., 2015)), which affected not only themselves but also the communities they lived in. The cost of getting to rehabilitation services (Schierenbeck, Johansson, Andersson & van Rooyen., 2013) (Scheffler et al., 2015) was identified as a barrier in all the reviewed articles. The high cost of transport, relative to income, mostly pertained to minibus taxis; the lack of affordable public or private transport alternatives was consistently reported (Mlenzana, Eide & Frantz, 2014) . Persons with disabilities were forced to pay extra for mobility assistive devices such as wheelchairs (Grut et al., 2012) . In addition, long waiting hours for rehabilitation services (Mutwali & Ross, 2019) (on average half a day) (Grut et al., 2012) , often resulted in loss of income and the threat of potential loss of work. The long waiting times might have been exacerbated by policies that dictate designated facilities, where appointments are made with little or no consideration to personal circumstance and without a specific time in the day (Kumurenzi, Goliath, Mji, Mlenzana, Joseph, Stathum & Rhoda., 2015) (Scheffler et al., 2015).
The availability of rehabilitation services was especially problematic in rural contexts (Grut et al., 2012), (Vergunst et al., 2015), (Visagie & Swartz, 2016), (Naidoo & Ennion, 2019). However, even in better resourced urban settings certain rehabilitation services were not available (Kumurenzi et al., 2015). The reported barriers were staff shortages (Mlenzana et al., 2014) unavailability of rehabilitation (Moodley & Ross, 2015) and a limited range of rehabilitation services (Grut et al., 2012). The latter was due to various reasons: poor funding of rehabilitation (Hussey et al., 2017), lack of rehabilitation equipment and consumables (Vergunst et al., 2015), no vehicles for home or clinic visits (Wegner & Rhoda, 2015) and overburdened services (Hussey et al., 2017). Limitations in rehabilitation providers’ knowledge and experience (Cobbing et al., 2014) were reported in one source.

The physical inaccessibility of public transport (Mlenzana et al., 2014a) (Moodley & Ross, 2015) (Hussey et al., 2017), infrastructure (Morris et al., 2021), the outdoor environment (Mutwali & Ross, 2019) and even healthcare facilities (Grut et al., 2012), (Moodley & Ross, 2015), was also reported as a barrier. In some areas minibus taxis refused to transport wheelchairs (Ntamo, Buso & Longo-Mbenza, 2013). Walking or being pushed to healthcare facilities for rehabilitation was hampered by the unavailability of caregivers or accompanying persons (Grut et al., 2012) and geographical terrain, distance (Vergunst et al., 2015) and environmental factors (Scheffler et al., 2015) such as the weather. The time of day, week and year (De Klerk et al., 2019) were reported as barriers, an example being that appointments late in the day required service users to commute in the dark, thus exposing them to crime and dangers related to lack of sidewalks or lighting in public spaces.

The acceptability of rehabilitation services was affected by uniquely South African cultural (Vergunst et al., 2015) and belief (Wegner & Rhoda, 2015) systems causing barriers at user, provider and community levels (Schierenbeck et al., 2013). In some cases, rehabilitation service providers and general healthcare providers’ attitudes were perceived to be rude and unacceptable (Ntamo et al., 2013). In South Africa, health science graduates complete a compulsory year of community service after graduation and many of them are placed in rural settings where they deliver a variety of services and work largely unsupervised (Ned et al., 2017). The potential mismatch between levels of experience and responsibility could affect the rehabilitation experience of service users and providers. Stigmatisation experiences for persons with disabilities, from the general public (Cobbing et
al., 2014) and public healthcare officials (Hussey et al., 2017) when attending rehabilitation, were reported as barriers. Rehabilitation users’ frustration with long queues and waiting times to be seen by rehabilitation professionals (Kumurenzi et al., 2015) (Scheffler et al., 2015) (Vergunst et al., 2015) (Mutwali & Ross, 2019) affected service users’ attitudes towards rehabilitation.

Additional barriers were disability related (Schierenbeck et al., 2013) (Cobbing et al., 2014) and included becoming easily fatigued, experiencing pain or public embarrassment while travelling or waiting for appointments. Not understanding rehabilitation services provided, and what they can offer, was also noted as a barrier (Grut et al., 2012) (Cobbing et al., 2014) (Moodley & Ross, 2015) (Naidoo & Ennion, 2019). Ineffective management, bureaucracy and lack of knowledge within public healthcare affected referrals and/or access to rehabilitation for persons with disabilities (Kumurenzi et al., 2015) (Hussey et al., 2017). Language barriers between rehabilitation providers and users was a problem (Mlenzana et al., 2014) (Scheffler et al., 2015) (Hussey et al., 2017) (Naidoo & Ennion, 2019) specifically pertaining to cross-cultural understanding in rural contexts (Vergunst et al., 2015) and mental health rehabilitation (Schierenbeck et al., 2013).

**Facilitators to Access Rehabilitation**

Financial support offered by the government, mostly in the form of a disability or childcare grant, was reported to facilitate access to rehabilitation (Ntamo et al., 2013; (Maddocks, Moodley, Hanass-Hancock, Cobbing & Chetty, 2020). Disability grants reduced persons with disabilities’ feelings of being a burden on the family, as their grants were a source of income allowing them to support family members (Grut et al., 2012). Grants provided financial support, allowing persons with disabilities access to transport and rehabilitation; it also lifted their ‘status’ within families and communities as breadwinners (Mosoetsa, 2011). The South African social security grant system remains one of the few sources of social assistance for persons with disabilities within families living in poverty (McKenzie & Hanass-Hancock, 2017) and the single most effective poverty alleviator to date (Neves, Samson, van Niekerk, Hlatshwayo & du Toit, 2009).

A positive rehabilitation experience (Cobbing et al, 2013; Kumurenzi et al, 2015; Scheffler et al, 2015; Naidoo & Ennion, 2019) was also reported as a facilitator. Other facilitatory factors were decentralised healthcare facilities that offered multi-professional rehabilitation services (Grut et al, 2012; De Klerk et al, 2019), mobile health units that brought rehabilitation services to communities (instead
of vice versa) (Vergunst et al, 2015), and healthcare facilities that were within walking distance (Scheffler et al, 2015; Mutwali & Ross, 2019). Persons with disabilities having a positive attitude towards rehabilitation and recovery was reported as a facilitator (Schierenbeck et al, 2013; Cobbing et al, 2014; Scheffler et al, 2015) that increased rehabilitation attendance. Having several reasons to attend a healthcare facility increased the attendance for rehabilitation and the reason for this was predominantly based on cost-saving considerations (Ntamo et al, 2013).

The most reported and discussed facilitator was the support of immediate (De Klerk et al, 2019) and extended family (Mlenzana et al, 2014; Hussey et al, 2017; Naidoo & Ennion, 2019), society and community (Kumurenzi et al, 2015; Morris et al, 2021) and religious communities (Maddocks et al, 2020), thus reflecting the concept of Ubuntu, which emphasises inter-connectedness, interdependence, and the importance of communal relationships (Joosub, 2019) This Pan-African philosophical framework was suggested as a support system to be utilised within the context of other vulnerable population groups, such as the elderly (van Biljon & van Niekerk, 2021). Such acceptance of interdependence, which in some cases would amount to dependence on others, might be seen in a negative light elsewhere, for example in European contexts (Ludvigsson, Wiklund, Swahnberg, & Simmons, 2022) where it has been reported as a dystopian role (Wilson, 2019). Conversely, interdependence is venerated and encouraged in African societies, one example being Archbishop Desmond Tutu who referred to it as the essence of being human (Tutu & Tutu, 2010).

**Recommendations**

Strategies to provide equitable, accessible, affordable, and evidence-based rehabilitation (Morris et al, 2021) were recommended by authors of the articles included in this scoping review. These included interdisciplinary rehabilitation approaches (Visagie & Swartz, 2016), the integration of existing skills and strategies of communities, persons with disability and their families (Grut et al, 2012), and collaboration with leaders within communities, including traditional healers and religious clerics (Joosub, 2019) The development of knowledge and an awareness within communities about disability rights (Hussey et al, 2017) in healthcare facilities, amongst caregivers (Naidoo & Ennion, 2019) and even persons with disabilities themselves, is needed. Calls were made for political and governmental action towards better recognition of rehabilitation as a human
rights issue (Schierenbeck et al, 2013; Vergunst et al, 2015), the development of disability friendly healthcare policies (Moodley & Ross, 2015) and practical access support such as designated transport (Kumurenzi et al, 2015) for persons with disabilities to healthcare facilities.

Decentralising rehabilitation (Grut et al, 2012; Ntamo et al, 2013; Vergunst et al, 2015; Scheffler et al, 2015; Naidoo & Ennion, 2019), with a focus on community and home-based rehabilitation (Grut et al, 2012; Cobbing et al, 2014) interventions, was identified as a potential solution by authors. Equipping rehabilitation professionals with contextually relevant skills, (not only focusing on profession relevant skills) (Kritzinger, Schneider, Swartz & Braathen., 2014) Kumurenzi et al, 2015; Scheffler et al, 2015), was a further need that specifically pertained to community service practitioners (Wegner & Rhoda, 2015). Grut et al (2012) noted that community service practitioners, as a section of the South African rehabilitation workforce, can improve the distribution of rehabilitation. As such it is essential that graduates are trained and equipped for community-based rehabilitation to improve the quality of care and transfer of services to low-resourced areas. Wegner and Rhoda (2015) expanded on this, stating that it is important to educate and prepare rehabilitation service providers to be culturally aware, knowledgeable of and competent to meet the needs of rehabilitation service users, and especially so in rural contexts.

Rehabilitation practitioners are reminded to focus on client-centred approaches that allow participative decision making, considering the rehabilitation users’ right of choice (Scheffler et al, 2015) – even within high-demand, busy and pressured practice settings. They are advised to foster good relationships with rehabilitation service users, and to educate, motivate, and encourage them (Naidoo & Ennion, 2019). Rehabilitation service providers should assist persons with disability to engage assertively within the health system (Kritzinger et al, 2014) to ask for what they need from rehabilitation services. To this end, they might need to understand better what rehabilitation can offer them. Comprehensive, individualised, non-discriminatory, and continuous care, based on good communication, respect and courteous interaction with service users (Scheffler et al, 2015), is required to ensure a positive and enjoyable experience for users.

Limitations

Barriers and facilitators should have been added to the search strategy and this oversight is acknowledged as a limitation of the review. The inclusion criteria
could limit the transferability of evidence from this review to rehabilitation accesses outside of South Africa. Even within South Africa, studies showed differences between rural and urban access to rehabilitation, and it is suggested that such contexts be reviewed separately. Rehabilitation beyond healthcare was not considered, thus excluding services such as, for example, vocational rehabilitation and rehabilitation in schools.

CONCLUSION

South African persons with disabilities’ access to rehabilitation in public healthcare facilities can be seen as a cauldron filled with a variety of inter-effecting issues of which history, poverty, location, limited resources, lack of knowledge and understanding, culture, and tradition are ingredients. Researchers, policymakers, rehabilitation service providers and other stakeholders such as families and organisations of persons with disabilities need to work together across scopes of practice and beyond the healthcare sector to improve access to their services. Efforts aimed at addressing access to rehabilitation services in South Africa’s public healthcare, should take cognisance of facilitators that emanate from persons with disabilities and their communities. In addition, such efforts should include collaboration with community leaders, family members and, most importantly, persons with disabilities who are service users.

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