

The impact of COVID-19 on Occupational Therapy services in Gauteng Province, South Africa:

a qualitative study

Authors

Kitty Uysⁱ
Daleen Casteleijnⁱ
Karin van Niekerkⁱ
Raashmi Balbadhurⁱ
Jenna d'Oliveiraⁱ
Henry Msimangoⁱ

The impact of COVID-19 on healthcare services has been widely reported, but there is limited information available on the impact of COVID-19 on Occupational Therapy services in South Africa.

The impact of COVID-19 on healthcare services has been widely reported, but limited information is available on its impact on rehabilitation services in South Africa. This article reports on the impact of COVID-19 on Occupational Therapy services and programmes in public and private health care as delivered by occupational therapists.

A qualitative case study design was selected to explore the perceptions of occupational therapists in private and public healthcare settings regarding the impact of COVID-19 on rehabilitation services. Asynchronous on-line focus group interviews were conducted by a team of researchers. The data were thematically analysed.

Three themes emerged from the data. Theme 1, the 'impact on the practice context', revealed that infection prevention and control protocols were a barrier to achieving rehabilitation goals. An enabler was the therapists' creativity and new ways of practice. Theme 2 described the 'impact

on the service-users' where isolation and physical distancing curbed access to rehabilitation services. The struggle of vulnerable populations and socio-economic disparities in healthcare was evident in these data. Theme 3 referred to changes in the 'professional and personal self' of the occupational therapists. Challenges to ethical practices – for example, the uncertainty of the benefit of adapted services – resulted in stress and anxiety among therapists. Constantly adapting to changes in Regulations caused compassion fatigue, but therapists also reported healthy coping strategies and resilience.

Occupational Therapy rehabilitation services should be listed as essential in times of a pandemic. Better health and social support to vulnerable populations should be established, as their challenges escalated during COVID-19. Research is required to determine practice guidelines and effectiveness of novel rehabilitation practices that were identified during the COVID-19 pandemic.

Introduction

On 27 March 2020, the South African government imposed a hard lockdown (Level 5) to curb the spread of SARS-CoV-2, the coronavirus that causes COVID-19 disease. Most economic activities were halted, but essential services were permitted to continue working on site.¹ Restrictions were eased to Level 3 on 13 July 2020, when data were collected for this study.

The mandatory protocols to curb the spread of the virus have disrupted life globally. Healthcare workers have been disproportionately affected by the COVID-19 pandemic, especially in terms of their mental health, with many displaying an increased incidence of depression, anxiety and other psychological conditions.^{2,3} Healthcare workers have been compelled to make difficult clinical decisions without evidence of best practice.⁴ Rehabilitation healthcare workers, including occupational therapists (OTs), had to terminate services prematurely or not provide services at all, often knowing that the health of service-users may deteriorate. These difficult clinical decisions have aggravated mental health conditions among healthcare workers.

Before the pandemic, the South African healthcare system faced severe challenges, struggling to deliver quality services to all citizens. These challenges were exacerbated by the pandemic, and rehabilitation professionals were under even greater pressure to provide resources and guidelines to manage rehabilitation under difficult conditions. Healthcare workers in under-resourced countries such as South Africa, where poverty is prevalent and inequality rife, may experience the negative effects of the pandemic more acutely.¹

OTs provide services to those who struggle to meet the demands of everyday life, and help service-users to fulfil their specific roles and occupy their time meaningfully and productively.⁵ People may struggle to meet these daily demands due to medical conditions, injuries, developmental delays, social circumstances, economic challenges and pandemics such as COVID-19. During the COVID-19 pandemic, the number of service-users increased, yet during the hard lockdown, support to service-users was extremely restricted.

OTs in the public and private sector were severely affected under Level 5 restrictions, when only emergency healthcare services were permitted. Under Level 5, most non-essential services were discontinued or disrupted, and telehealth options, such as video or telephone calls, could be provided only to some. During Level 4, telehealth was permitted for existing service-users and was regarded as the best option to limit transmission, while face-to-face services were allowed only under strict conditions.⁶

Hospital beds were reserved for COVID-19 cases, and out-patient services were mostly cancelled to limit transmission. OT transitioned to more contact sessions under Level 3 restrictions, with appropriate hand hygiene, physical distancing, use of personal protective equipment, and disinfecting workplaces. OT services in private and public mental healthcare services remained open throughout lockdown Levels 5 to 3, provided that OTs and clients adhered to adapted safety protocols.

The practice of OT, much like other rehabilitation professions, is influenced by the personal and professional lenses of the therapists themselves, as well as the personal lens of the service-user. The practice context or healthcare setting shapes the interaction between OTs and service-users. This is illustrated in Boyt Schell's Ecological Model for Professional Reasoning.⁷ Therapists and service-users, with their respective lenses, meet in the practice context, where they interact therapeutically. The quality of the therapeutic interaction often depends on the practice context and how the participants view themselves in the practice context. A pandemic such as COVID-19 may disrupt the practice context, and the magnitude of the disruption may vary depending on individuals and settings. Recent studies illustrated this phenomenon internationally^{2,3}; however, to date, the impact of the COVID-19 pandemic on local OTs has not been explored. The aim of this study was to explore how OT clinicians in private and public healthcare settings in Gauteng Province perceived the impact of COVID-19 on their rehabilitation services.

Methodology

A qualitative case study methodology was implemented. In this research, the case study was the context in which OT clinicians found themselves during the initial lockdown levels of the COVID-19 pandemic from March to August 2020. The unit of analysis constituted the qualitative responses of OT clinician's perceptions of the impact of lockdown on their services, as posted in the on-line discussion groups.

Participants were purposively selected from various practice sites within Gauteng to obtain a heterogeneous sample.⁸ The final sample comprised 16 participants. Participants included OT clinicians registered with the HPCSA; postgraduate OT students or clinical OT supervisors from the University of Pretoria and the University of the Witwatersrand; and OT clinicians in public or private employment with access to e-mail and virtual meeting platforms.

Once a list of possible participants was compiled, stratified sampling followed to ensure variations of settings and practices. The variations included private and public settings, and various types of practices, including paediatric health, mental health, vocational rehabilitation, physical rehabilitation, and school-based OT. Two groups of eight participants each were invited to participate.

Due to COVID-19 restrictions, on-line focus group sessions were preferable. Although this method does not allow for observation of non-verbal behaviours, the benefits of using asynchronous on-line focus groups include increased opportunity to recruit geographically diverse participants from different practice settings, and provision of additional time for deep reflections.⁹ The focus groups were hosted in the on-line learning system of the University of Pretoria (Blackboard Learn™). Participants completed an on-line consent form and a demographic questionnaire before they were enrolled for the focus group.

A set of main questions was posted in the discussion tool of this system and it was presented asynchronously so that participants could log on and answer questions within a span of one week. Questions with possible probes were developed from literature on the impact of COVID-19 on healthcare professionals in general. The opening question invited participants to share their views on how COVID-19 affected their practice as OTs. Each group had a facilitator who posed a new question every day for five consecutive days. Day six was used for wrapping up and inviting participants to share concluding remarks. Participants could refer back to the discussion threads and respond to other participants' responses or add information if needed. The facilitators engaged with participants through the discussion board and probed where necessary.

Data were analysed using Atlas.ti (version 8) and guided by Braun and Clarke's¹⁰ six steps of thematic analysis. Participants were assigned research codes to ensure anonymity. The research codes were compiled with the first two or three alphanumeric characters indicating the participant number (e.g. P10), followed by private (Pr) or public (Pu) setting. A research code thus appeared as a string (e.g. P10Pr). In qualitative research, this level of detail can be used to report differences between groups.

The following trustworthiness aspects were considered throughout the study. Credibility was enhanced by peer debriefing, whereby the authors engaged in reflective dialogue and collaborated throughout the research process. Transferability was ensured through an audit trail whereby detailed descriptions of the participants, context and the research process were documented. Confirmability was maintained using independent co-coders, whereby objectivity of the data analysis process was confirmed.

The Faculty of Health Sciences Research Ethics Committee, University of Pretoria, granted ethical permission (Clearance number: 436-2020).

Key findings

Demographics of participants

The majority (62.5%) of the study sample comprised participants who were COVID-19 frontline workers, and 87.5% of the sample were women. Most participants worked in physical and mental healthcare services (37.5% each), and were employed in public sector (43.75%), public health (31.25%), public schools (12.5%), and the private sector (56.25%). This indicates that there was an almost equal representation between the two sectors.

Emerging themes from the data

Three themes emerged from the data, namely: impact on practice context (theme 1), impact on service-users (theme 2), and therapists: professional and personal self (theme 3).

Each theme, with its sub-themes, is presented in the following section. For each sub-theme, the frequency of codes indicates the weight of each sub-theme. The sub-themes are supported by selected direct quotations.

Theme 1: Impact on practice context

Theme 1 (Table 1) captures how the practice context changed in response to the COVID-19 pandemic. Participants reported that infection prevention and control (IPC) protocols impeded rehabilitation time. Participants had less time to spend on rehabilitation services because they had to constantly sterilise equipment, and ensure that mental healthcare users (MHCUs) wore masks and maintained physical distance. This inevitably affected the quality of services. Therapists in the public sector reported increased workload because more service-users, who were unable to cope with the pandemic, were admitted. In the private sector, therapists saw fewer service-users due to lower admittance rates resulting from adherence to physical distancing protocols.

Some participants identified enablers in the practice setting, such as being creative in doing things differently. Therapists even chose to retain different methods of communicating with service-users because they were so effective.

Table 1: Participants' perceptions on the impact of the COVID-19 pandemic on their practice context (Theme 1)

	Sub-theme	Frequency	Quotation
Barriers	Implementing IPC protocols reduced time for rehabilitation	40	<i>In craft groups, the therapist's time is now mostly dedicated to ensuring a clean and safe environment. Where previously my approach would have been very client-centred, I now spend a lot of time sterilising equipment, ensuring that MHCUs wear masks properly, and ensuring that MHCUs maintain social distancing. (P10Pr)</i>
	Service quality implications	20	<i>In-patients would be admitted for less than a week, thus impeding achieving the goals of therapy that we had set out. (P5Pu)</i> <i>The turnover of patients is high; currently, as soon as a patient is medically stable, they are discharged and patients are waiting to be accepted at COVID facilities; the demand for wheelchairs has increased as we are not able to do in-patient rehab for long enough or to delay discharge. (P16Pu)</i> <i>Not being able to run groups or do home visits is a major concern for me as I work in a district hospital in rural MP. Some mothers really benefit from one another's support and having sessions with patients in their natural setting has shown to be beneficial to them and their caregivers (one cannot even get aha moments with one's patients as they are often in a panic to get out of the hospital asap). (P11Pu)</i>
	Change in workload	5	<i>Psych ward became full as well, lots of SIPD (substance-induced psychotic disorders) and para-suicidal patients. (P14Pu)</i>
Enabler	New ways of delivering services	32	<i>For some clients I made therapy home programmes that the parents could continue [with] to stimulate the children at home. (P13Pr)</i> <i>We had to think outside the box and get creative with regard to providing feedback to families of patients who are admitted. Some of the things we implemented will remain even after the lockdown has been lifted. (P7Pr)</i> <i>It has been a good experience taking on a new platform (telehealth) and running with it. (P4Pr)</i>

Theme 2: Impact on service-users

Theme 2 describes participants' views and experiences of the impact of COVID-19 on their service-users (Table 2). Participants reported that isolation had a negative impact on service-users and created risk factors such as aggravating pathologies and increasing falls among the elderly. Young children with burns did not have the support and comfort of their mothers, who were not allowed to stay with them in hospital. Group interventions, especially with MHCUs, lost the curative aspects of universality and interpersonal learning due to small group sizes. According to the participants, some service-users decided not to attend therapy due to various factors, among which were being

afraid of contracting the virus, inability to afford the cost of public transport, or feeling overwhelmed. Additionally, participants identified that socio-economic factors kept service-users from attending therapy. Participants were concerned about vulnerable service-users such as those becoming unemployed due to COVID-19, clients with disabilities living at home, as well as clients who had limited or no access to technology to enable regular communication with therapists.

Some service-users became empowered during the pandemic and took ownership of their home programmes as they managed their own or family members' rehabilitation.

Table 2: Participants' perceptions on the impact of the COVID-19 pandemic on their service-users (Theme 2)

	Sub-theme	Frequency	Quotation
Barriers	Isolation	35	<p><i>... that all the stringent rules perpetuate certain clients' pathology (anxiety, social isolation, defiant behaviour, etc.). (P6Pr)</i></p> <p><i>Not mobilising (for the elderly) – we experienced a definite decline in balance and mobility with more falls. (P15Pr)</i></p> <p><i>Increase in paediatric burns, severe acute malnutrition, treating screaming children who have gone for the longest time not being held by their mother ... (P16Pu)</i></p>
	Social distancing	32	<p><i>In Mental Health we have a strong focus on interaction and social connectedness as therapeutic objectives and given the social distancing rules, mask-wearing and reduced number of clients per group, our clients are losing out significantly on the benefits of group therapy. (P6Pr)</i></p>
	Fear of contracting the virus	18	<p><i>Residents scared of other residents – so when they could join groups again – they opted not to. (P15Pr)</i></p>
	Socio-economic factors and vulnerable populations	13	<p><i>... the vulnerable populations we serve [in] our largest catchment area even prior to COVID had substantial socio-economic challenges and have had to evaluate accessing therapy vs the risks of exposure on the taxis and community [which] are really high. (P16Pu)</i></p> <p><i>... seeing the effects of occupational deprivation on young and old and the difference between poverty and middle-class clients ... (P16Pu)</i></p> <p><i>Some clients no longer have the funds to pay for therapy. (P6Pr)</i></p>
Enablers	Taking ownership in their own rehabilitation and becoming empowered	5	<p><i>Our parents who have babies with clubfoot and orthopaedic patients have been much more compliant with home programmes and it is evident that they are taking their management more seriously than before. (P16Pu)</i></p> <p><i>The clients who have participated in the home programme had to take on more responsibility and ownership; they were able to better understand what was expected from them. (P13Pr)</i></p>

Theme 3: Professional and personal self of the occupational therapist

Theme 3 captured participants' expressions on how the COVID-19 pandemic affected their professional and personal selves (Table 3).

Participants realised that they were ethically responsible for caring for service-users and providing quality services, despite being afraid of contracting and spreading the virus. Ethical decisions to mitigate risks caused anxiety and negatively affected their confidence in delivering quality services. Therapists experienced feelings of guilt and uncertainty regarding whether they could effectively treat service-users who were diagnosed with COVID-19.

Participants felt that COVID-19 Regulations damaged their therapeutic relationships with service-users, and reported feeling drained by having to deal with professional and personal challenges.

Participants reported signs of compassion fatigue¹¹ and mentioned feeling numb when service-users passed away. Compassion fatigue in healthcare workers has been described as exhaustion resulting from continuous exposure to compassion stress.¹¹ Some therapists reported feelings of loss of purpose when realising that rehabilitation was not complete, as service-users were discharged too soon.

Participants reported feeling exhausted by the endless adaptation required when lockdown-level Regulations changed. One participant felt that she was constantly in survival mode.

Anxiety was the most frequently reported mental health sign, showing that the COVID-19 pandemic affected therapists' emotional wellbeing. The anxiety was ascribed to the uncertainty of future developments, fear of spreading the virus to families, financial uncertainties, and effects of isolation. Isolation affected environmental wellbeing, as

therapists said that they could not move around freely to attend places of comfort. Participants in private practice reported a loss in income due to fewer service-users and an increase in expenditure to implement infection prevention protocols.

Participants reported coping mechanisms that enabled them to manage the changed environment and adjust to the new normality. Participants mentioned a variety of strategies, from applying tools that they teach their clients, to taking time off work and engaging more with family life.

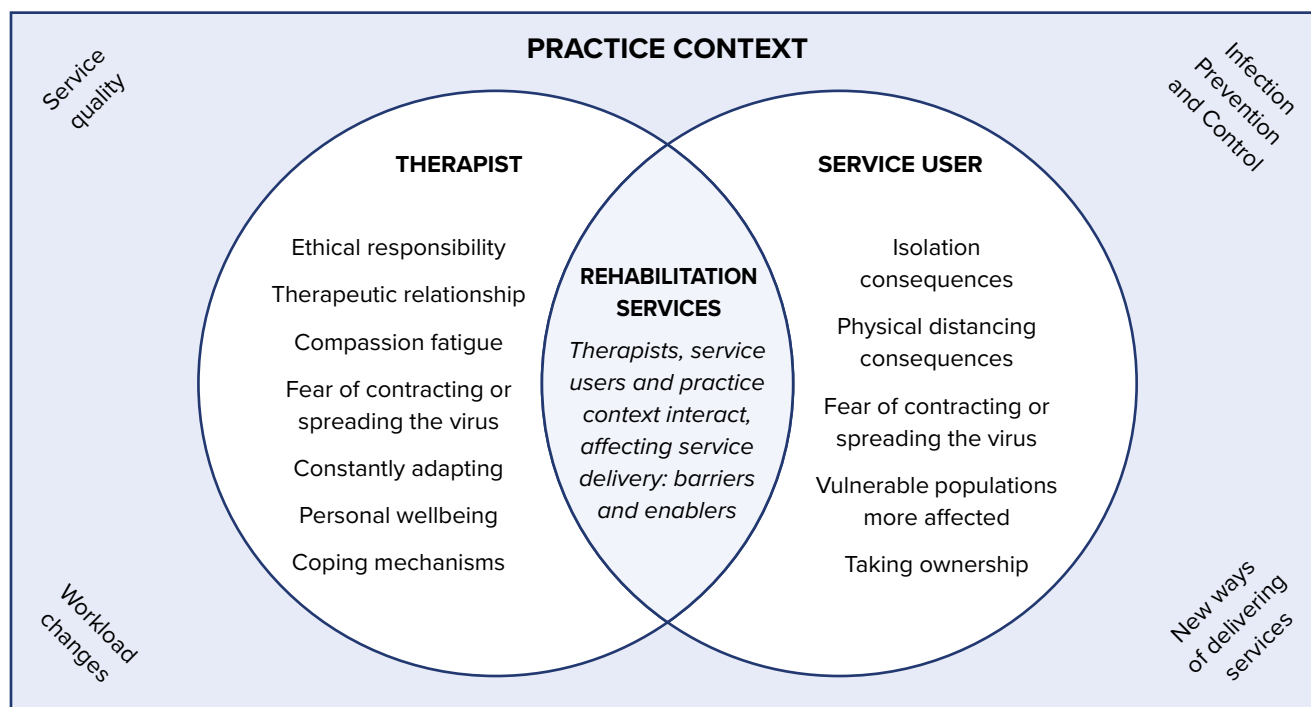
Table 3: Participants' perceptions on the impact of the COVID-19 pandemic on their professional and personal selves (Theme 3)

	Sub-theme	Frequency	Quotation
Barriers	Therapists' ethical responsibility as their duty to care, deliver quality service and assessing the risks	28	<p><i>One of the major stumbling blocks for me was the feeling of a loss of purpose. (P12Pu)</i></p> <p><i>... had to evaluate ... accessing therapy vs the risks of exposure on the taxis and community [which] are really high. (P16Pu)</i></p> <p><i>... not having clear-cut guidelines if what we are doing right now is best practice. (P16Pu)</i></p>
	Impact on therapeutic relationship	16	<p><i>... on the one hand, we have the privilege of building these connections with our clients but on the other hand, it drains a lot of extra energy when as humans, we already have so much to deal with during this time. (P6Pr)</i></p> <p><i>I had to make sure that I am well-prepared for each session (either on-line or in person), to make sure that I am feeling calm and able to support the therapeutic needs of my clients. (P8Pr)</i></p>
	Compassion fatigue	10	<p><i>I have felt some compassion fatigue. (P8Pr)</i></p> <p><i>... numbness when a patient passes away or one of my employees tests positive. (P15Pr)</i></p>
	Therapists' fear of contracting/ spreading the virus	15	<p><i>On another note, I am also immensely worried [about] contracting it and being responsible for bringing [the virus] into the hospital I work at, as many of our clients have comorbidities - I would hate to be the reason a client becomes ill ... (P6Pr)</i></p>
	Therapists constantly adapting	35	<p><i>The rules and requirements change so often, it is tiring to adapt or to plan anything with certainty. (P8Pr)</i></p> <p><i>Even though we are adapting and getting used to the new Regulations and ever-changing restrictions, a part of me is still in survival mode. (P12Pu)</i></p>
	Personal wellbeing	73	<p><i>Stress and anxiety levels have definitely increased, as we are no longer able to follow a routine (at home) we are used to. (P2Pu)</i></p> <p><i>I am a single mom and sole breadwinner so the anxiety was there during stage [Level] 5 in terms of income. (P4Pr)</i></p>
Enabler	Therapists' coping mechanism	39	<p><i>It really helped to 'sit myself down' and think of the tools I am teaching my clients and how I need to implement them practically in my own life. (P6Pr)</i></p> <p><i>We give each other time out, usually in the form of an afternoon off or if it's really bad then a few days off. (We have invented our own mental health days because they are not catered for (we submit the hours and leave under annual leave but when communicating with our rehab co-ordinator or each other we use the term 'mental health'). (P11Pu)</i></p> <p><i>I tried to occupy myself with other things; I engaged myself more with my family to worry less. I feel more in control at this stage and I feel like I'm adjusting to this new normal. (P3Pr)</i></p>

According to Boyt Schell et al.⁷ the practitioner (therapist), client (service-user) and practice context continuously interact. The product of these transactions inevitably affects rehabilitation services, as shown in the graphic map of the findings illustrated in Figure 1. This figure depicts themes and sub-themes as identified in Tables 1, 2 and 3. The practice context refers to environmental factors that influence both the OT and the service-user. The interplay

of the practice context, therapist and service-user influence rehabilitation services. Significant changes in one area – in this case the practice context due to COVID-19 – will have ripple effects in all other areas. Although barriers were identified that had an impact on rehabilitation services, therapists described enablers which allowed them to adapt their practices to render novel rehabilitation services.

Figure 1: Interaction of practice context, service-users and occupational therapists in response to the COVID-19 pandemic in South Africa



Discussion

In this study, we explored the perceptions of OTs in Gauteng regarding the impact of the COVID-19 pandemic on their rehabilitation services. Our findings show that the COVID-19 pandemic has had a far-reaching influence on the practice context, service-users, as well as OTs themselves.

In this study, the public and private healthcare settings were affected incongruously in terms of allowing face-to-face contact. This affected OTs differently. Some had compassion fatigue due to work overload, while others experienced anxiety due to loss of income and limited workload. A global study by Hoel et al.¹² on the impact of COVID-19 on OT mentioned a heightened demand for OT rehabilitation for improving the performance of daily living activities and interventions for treating exacerbated mental health conditions. As in our study, Hoel et al.¹² and Sy et al.¹³ reported many OTs being severely affected by service restrictions and loss of income.

In all South African healthcare settings, OTs were similarly influenced by compulsory COVID-19 IPC protocols. Safety protocols affected the quality of services in many ways. Group therapy is often a preferred intervention and is chosen for its therapeutic potential^{14,15}, but physical distancing and isolation Regulations limited the use of groups. In our study, OTs were concerned with the inadequacy of individual therapy and service-users losing out on the benefits of group work. Other negative implications of the IPC protocols included limited healthcare services and service-users being discharged before achieving rehabilitation goals. Hoel et al.¹² and Sy et al.¹³ reported similar findings in their studies on OTs' perceptions of the impact of the COVID-19 pandemic.

OTs working in rehabilitation services use everyday life occupations during therapy with service-users. They rely on space, tools and materials, which are now seen as potential virus-spreaders and are subject to stringent IPC protocols. Additional space, sanitiser and personal protective equipment are required, increasing costs while reducing

available time, ultimately limiting the number of service-users in therapy. In this study, OTs highlight the burden of extra costs and limited time in an already constrained financial environment, similarly reported by Hoel et al.¹² In their study, some OTs had to personally pay for personal protective equipment.¹³ Cobb et al.¹⁶ acknowledged the lack of resources in low- and middle-income countries and suggested alternative recommendations, but South Africa has applied Regulations developed in high-income countries.

In South Africa, COVID-19 Regulations led to changes in the practice context, which stimulated new ways of thinking. OTs implemented home programmes and telehealth with several existing service-users. Similar trends were seen in other countries¹² including lower-middle-income countries such as the Philippines, where telehealth was implemented.¹² Due to its success, telehealth is being considered for future use and may be incorporated into future OT regulations in South Africa.^{17,18}

The effect of the COVID-19 pandemic on service-users in Gauteng has highlighted many socio-economic disparities. Many vulnerable service-users have become even more vulnerable because they do not have access to alternative interventions such as telehealth and cannot afford to travel to hospitals. Siegel and Mallow¹⁹ highlighted that unemployed persons from certain ethnic groups and those with poor functional status with a disability are most vulnerable. In Gauteng, many OT service-users in public healthcare settings are vulnerable and marginalised. Such realities affect the ethical responsibility of OTs to deliver care to all, resulting in moral injury for OT clinicians. Grobler and Dhai²⁰ advocate for supporting healthcare workers who experience this ethical dilemma.

The impact of the COVID-19 pandemic on healthcare workers is well known, and without stating over-reported issues such as anxiety, fear of contracting and spreading the virus, compassion fatigue, and numbness, to name a few^{3,21-23}, we highlight the resilience of OTs in our study. The OT participants also reported generic problems, common to all healthcare workers, but their coping strategies showed that they had equipped themselves to weather the storm. Similarly, Filipino OTs also displayed a positive outlook and aimed to activate the untapped potential of OTs by “igniting their creativity, innovation, problem-solving, adaptation capacity and resourcefulness”.^{13:63}

Such creativity was also noted among service-users in this study. OTs reported that more service-users took ownership of their rehabilitation. This positively affected rehabilitation outcomes and inspired OTs to feel that despite all the challenges, they were making a difference.

Conclusions

The perceptions of OTs on the impact of the COVID-19 pandemic on their rehabilitation services emerged in three themes: the interplay between the practice context (theme 1), the therapist (theme 2), and the service-user (theme 3) influenced rehabilitation services in negative and positive ways. As rehabilitation OT services were negated during lockdown, many service-users were deprived of care, which may result in wide-ranging, substantial and long-lasting challenges. OT is indicated and therefore essential when people’s routines and engagement in meaningful occupations and activities are disrupted, which has happened during the pandemic. In the future, OTs should position themselves firmly as providing essential services in order to mitigate any negative consequences for the occupations and daily living routines of service-users. Finally, even though the negative psychological impact of the pandemic on OTs is evident, their resilience was highlighted through descriptions of creativity, innovation, problem-solving, adaptation and resourcefulness.

Recommendations

A high need for OT rehabilitation and intervention for people affected by the pandemic is reported in research.^{12,24} The findings from our study similarly indicated a dire need for OT during COVID-19. We grouped recommendations to influence health and social development policies for effective service delivery.

Firstly, OTs contribute to improving the health and well-being of people through meaningful engagement in everyday living activities. When meaningful engagement is disrupted for whatever reason, including pandemics, people should have access to OT services. We recommend that OT be listed as an essential service and not be restricted in times of a pandemic. As healthcare workers, OTs are resourceful and adaptable in facilitating service-users’ participation in their meaningful daily occupations, while adhering to IPC protocols.

Secondly, OT services to vulnerable populations were limited during the COVID-19 pandemic. Our findings indicate that much more should be done to provide vulnerable populations with priority access to rehabilitation services. Usually, vulnerable service-users already receive some form of social grant from the Department of Social Development, but it is recommended that additional benefits, including travel and food vouchers, be provided in times of a pandemic. This may help service-users to continue with rehabilitation programmes.

Thirdly, professional organisations such as the Occupational Therapy Association of South Africa could develop on-line programmes that OTs can deliver to groups of people and the larger population, so as to maintain healthy routines and adapt lifestyles to promote meaningful and productive living in times of a pandemic. This could prevent many mental health symptoms such as anxiety and lack of coping, not only for healthcare workers, but also for persons at risk of developing mental health problems.

Finally, higher education institutions should revisit their curricula and implement modules to educate OTs, and other healthcare professions, to adapt services in times of pandemics and natural disasters. The COVID-19 pandemic has thrown many healthcare professions into uncharted territory, but we should reflect on these challenging times and prepare ourselves for the future.

A quantitative expansion of this topic, utilising Q-methodology to explore the subjective viewpoints of participants, will provide scope for more in-depth analysis.

Novel rehabilitation practices (e.g. telehealth, transdisciplinary rehabilitation) were identified during the COVID-19 pandemic; however, research is required to determine practice guidelines and their effectiveness.

References

1. Broadbent A, Combrink H, Smart B. COVID-19 in South Africa. *Glob Epidemiol*, 2020; 2:100034. URL: <https://dx.doi.org/10.1016/j.gloepi.2020.100034>
2. De Kock JH, Latham HA, Leslie SJ, Grindle M, Munoz SA, Ellis L, et al. A rapid review of the impact of COVID-19 on the mental health of healthcare workers: implications for supporting psychological well-being. *BMC Public Health*, 2021; 21(1):104. URL: <https://dx.doi.org/10.1186/s12889-020-10070-3>
3. Lasalvia A, Bonetto C, Porru S, Carta A, Tardivo S, Bovo C, et al. Psychological impact of COVID-19 pandemic on healthcare workers in a highly burdened area of north-east Italy. *Epidemiol Psychiatr Sci*, 2021; 30:e1. URL: <https://dx.doi.org/10.1017/S2045796020001158>
4. Brown T. The response to COVID-19: Occupational resilience and the resilience of daily occupations in action. *Aust Occup Ther J*, 2021; 68(2):103–105. URL: <https://dx.doi.org/10.1111/1440-1630.12721>
5. American Occupational Therapy Association. Occupational Therapy Practice Framework: Domain and Process – Fourth Edition. *Am J Occup Ther*, 2020; 74:1–87. URL: <https://dx.doi.org/https://doi.org/10.5014/ajot.2020.74S2001>
6. Health Professions Council of South Africa. The Health Professions Council of South Africa (HPCSA) response to COVID-19 pandemic. Pretoria: HPCSA; 2020. URL: https://www.hpcsa.co.za/Uploads/PSB_2019/Announcements/HPCSA_RESPONSE_TO_THE_COVID-19_PANDEMIC_7_April_2020_Final.pdf
7. Boyt Schell BA. Professional reasoning in practice. In: Boyt Schell BA, Gillen G, Scaffa ME, Cohn ES, editors. *Willard and Spackman's Occupational Therapy*. 12 ed. Baltimore: Lippincot Williams & Wilkins; 2014. p.384–397.
8. De Vos AS, Delpont C, Fouche C, Strydom H. *Research at grass roots: A primer for the social science and human professions*. Pretoria: Van Schaik Publishers; 2011.
9. Burton LJ, Bruening JE. Technology and Method Intersect in the Online Focus Group. *Quest*, 2003; 55(4):315–327. URL: <https://dx.doi.org/10.1080/00336297.2003.10491807>
10. Braun V, Clarke V. *Successful qualitative research: A practical guide for beginners*. Thousand Oaks, CA: Sage Publications; 2013.
11. Sorenson C, Bolick B, Wright K, Hamilton R. Understanding Compassion Fatigue in Healthcare Providers: A Review of Current Literature. *J Nurs Scholarsh*, 2016; 48(5):456–465. URL: <https://dx.doi.org/https://doi.org/10.1111/jnu.12229>
12. Hoel V, Zweck CV, Ledgerd R. The impact of Covid-19 for occupational therapy: Findings and recommendations of a global survey. *World Fed Occup Ther Bull*, 2021; 1–8. URL: <https://dx.doi.org/10.1080/14473828.2020.1855044>
13. Sy MP, Pineda RCS, Yao DPG, Guevara CAL, Delos Reyes RC, Castro IM. Shared voices of Filipino occupational therapists during the COVID-19 pandemic: reflections from an online forum. *World Fed Occup Ther Bull*, 2020; 76(1):60–64. URL: <https://dx.doi.org/10.1080/14473828.2020.1761575>
14. Occupational Therapy Association of South Africa. Position statement on therapeutic group work in occupational therapy. *S Afr J Occup Ther*, 2014; 44(3):43–44.
15. Pollard N, Cook S. The power of low-key groupwork activities in mental health support work. *Groupwork*, 2012; 22(3):7. URL: <https://dx.doi.org/10.1921/095182412X662167>
16. Cobb N, Papali A, Pisani L, Schultz MJ, Ferreira JC. Pragmatic Recommendations for Infection Prevention and Control Practices for Healthcare Facilities in Low- and Middle-Income Countries during the COVID-19 Pandemic. *Am J Trop Med Hyg*, 2021; 104(3_Suppl):25–33. URL: <https://dx.doi.org/10.4269/ajtmh.20-1009>
17. De Wit M, Gaskin A, Coetzee M, Louw QA, Plastow NA. Guest editorial: Navigating Telerehabilitation for student training – Sharing experiences. *S Afr J Occup Ther*, 2021; 51(1).

18. Hoel V, von Zweck C, Ledgerd R. Was a global pandemic needed to adopt the use of telehealth in occupational therapy? *Work*, 2021; 68:13–20. URL: <https://dx.doi.org/10.3233/WOR-205268>
19. Siegel RM, Mallow PJ. The Impact of COVID-19 on Vulnerable Populations and Implications for Children and Health Care Policy. *Clin Pediatr*, 2020; 60(2):93–98. URL: <https://dx.doi.org/10.1177/0009922820973018>
20. Grobler C, Dhali A. COVID-19: Mental health and clinical equipoise in the face of moral injury. *S Afr J Bioeth Law*, 2020; 13(1):60–61. URL: <https://dx.doi.org/10.7196/SAJBL.2020.v13i1.00724>
21. Kar N, Kar B, Kar S. Stress and coping during COVID-19 pandemic: Result of an online survey. *Psychiatry Res*, 2021; 295:113598. URL: <https://dx.doi.org/10.1016/j.psychres.2020.113598>
22. Orru G, Marzetti F, Conversano C, Vagheggini G, Miccoli M, Ciacchini R, et al. Secondary Traumatic Stress and Burnout in Healthcare Workers during COVID-19 Outbreak. *Int J Environ Res Public Health*, 2021; 18(1). URL: <https://dx.doi.org/10.3390/ijerph18010337>
23. Serrao C, Duarte I, Castro L, Teixeira A. Burnout and Depression in Portuguese Healthcare Workers during the COVID-19 Pandemic – The Mediating Role of Psychological Resilience. *Int J Environ Res Public Health*, 2021; 18(2). URL: <https://dx.doi.org/10.3390/ijerph18020636>
24. Brugliera L, Spina A, Castellazzi P, Cimino P, Tettamanti A, Houdayer E, et al. Rehabilitation of COVID-19 patients. *J Rehabil Med*, 2020; 52(4):1–3. URL: <https://dx.doi.org/https://doi.org/10.2340/16501977-2678>