**Master Data Extraction Table on ‘Technologically-Assisted Interventions In Neurological And Psychological Applied Disciplines In South Africa: A Scoping Review’ LK Eardley, N Cassimjee**

**Table 3**

*Master Data Extraction Table Outlining the Characteristics of Studies Reviewed*

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| First Author & Publication Year | Title | Study Design  Methodology | Area of Technologically Assisted Intervention | Sample size & Study population | Nature of mHealth Intervention | Aims/  Purpose of study | Treatment support |
| Atujuna et al., 2021 | Khuluma: Using Participatory, Peer-Led and Digital Methods to Deliver Psychosocial Support to Young People Living With HIV in South Africa | Qualitative | Telemedicine | 52 Adolescents (15–20-year-olds) living with HIV | Text message | Utilising mobile phone technology within a group setting to broaden outreach and take advantage of peer support groups and peer-driven educational initiatives. | Reminders and follow-up focus groups |
| Cassimjee et al., 2018 | Longitudinal neuropsychological outcomes in treatment-resistant depression following bed nucleus of the stria terminalis-area deep brain stimulation: a case review | Quantitative | Neurorehabilitation | 36-year-old Caucasian female diagnosed with Treatment-resistant depression and generalized anxiety | Deep brain stimulation | To investigate the neuropsychological status of a patient diagnosed with treatment-resistant depression (TRD) one year after undergoing deep brain stimulation (DBS) in the BNST (bed nucleus of the stria terminalis) area. | Follow-ups |
| Crumley et al., 2018 | What do emergency medicine and burns specialists from resource-constrained settings expect from mHealth-based diagnostic support? A qualitative study examining the case of acute burn care. | Case Review | Telemedicine | N/A | N/A | To understand expert users' perspectives on implementing an mHealth clinical diagnosis system for acute burns in a resource-constrained setting. It also examines the implications for diagnostic trauma and emergency telemedicine within this context. | N/A |
| Davies et al., 2021 | Demonstrating the feasibility of digital health to support pediatric patients in South Africa | Quantitative | Telemonitoring | 40 children with refractory epilepsy or epilepsy associated with intellectual disability and/or behaviour difficulties | Mobile application | To evaluate the practicality of precision medicine initiatives and mobile health (mHealth) applications for home-based use, aiming to enhance the care of children with epilepsy in South Africa. | Reminders and follow-ups |
| Ettinger et al., 2016 | Building quality mHealth for low-resource settings | Qualitative | Telemedicine | Six participants from the study site in Paarl and four from Worcester enrolled in the usability study. The participants were all female and between 24 and 50 years old. | Mobile application | To utilise technology to enable the delivery of a high standard of care that can be safely administered by community health care workers (CHCWs). | Reminders and follow-ups |
| Evans et al., 2022 | I was like intoxicated with this positivity": the politics of hope amongst participants in a trial of a novel spinal cord injury rehabilitation technology in South Africa | Cluster Randomized Controlled Trials | Robotics | 16 participants reported in a randomised controlled trial of a novel intervention for spinal cord injury (SCI) rehabilitation | Reports on activity-based training (ABT) and robotic locomotor training (RLT) | To explore the physiological impacts of activity-based training (ABT) and robotic locomotor training (RLT). | 3-month post-trial care |
| Hasselberg et al., 2017 | A smartphone-based consultation system for acute burns – methodological challenges related to follow-up of the system. | Longitudinal study | Telemedicine | N/A | Mobile application | To provide an overview of the system under consideration and assess its implementation, with a specific focus on addressing methodological challenges. | Formative evaluations (not described in this study) |
| Jarvis et al., 2019 | An Evaluation of a Low-Intensity Cognitive Behavioral Therapy mHealth-Supported Intervention to Reduce Loneliness in Older People | Mixed methods | Telemedicine | 828 residents living in four inner-city residential NGO care facilities | Mobile application (WhatsApp) | To evaluate an mHealth-supported intervention using low-intensity cognitive-behavioral therapy (LI-CBT) through WhatsApp. The focus was on addressing maladaptive cognitions and reducing loneliness in older individuals living in a residential setting. | Reminders and follow-ups |
| Kisten et al., 2022 | Efficacy of deep brain stimulation of the anterior-medial globus pallidus internus in tic and non-tic related symptomatology in refractory Tourette syndrome | Quantitative | Neurorehabilitation | 5 patients with refractory Tourette syndrome | Deep brain stimulation | To assess the results of tics and non-tic-related symptoms in treatment-resistant Tourette syndrome (TS) through the use of deep brain stimulation (DBS) in the anteromedial globus pallidus interna (amGPi). | Reminders and follow-ups |
| Leon et al., 2021 | Process evaluation of a brief messaging intervention to improve diabetes treatment adherence in sub-Saharan Africa | Qualitative | Telemedicine | 54 individual interviews in total | Text message | To appraise the effectiveness of brief text messaging compared to usual care in improving health outcomes and medication adherence for patients with Type 2 Diabetes Mellitus (T2DM) in Malawi and South Africa, through a pre- and post-trial process assessment alongside a randomized controlled trial. | Reminders and follow-ups |
| Moriarty et al., 2019 | Improving TB outcomes by modifying LIFE-style behaviours through a brief motivational intervention followed by short text messages (ProLife): study protocol for a randomised controlled trial | Qualitative | Telemedicine | 696 participants | Text message | To evaluate the effectiveness and cost-effectiveness of the ProLife program in enhancing treatment outcomes for pulmonary tuberculosis (PTB) when compared to standard care. | Reminders and follow-ups |
| Robbins et al., 2015 | Enhancing Lay Counselor Capacity to Improve Patient Outcomes with Multimedia Technology | Qualitative | Telemedicine | 55 non- adherent South African HIV+ patients | Multimedia technology | To assess how patients comprehend and respond to a diagnosis of non-epileptic attack disorder and to investigate whether these factors play a role in determining outcomes. | Follow-ups |
| Robbins et al., 2018 | A Mobile App to Screen for Neurocognitive Impairment: Preliminary Validation of NeuroScreen Among HIV-Infected South African Adults | Quantitative | Telemedicine and Neurorehabilitation | A total of 102 HIV-positive black South African adults aged 18 to 56 years | Mobile application | To determine the effectiveness of a modified NeuroScreen, administered by a lay health worker, in identifying Neurocognitive Impairment (NCI) among HIV-infected individuals in South Africa. This was compared to a gold standard neuropsychological test battery administered by a trained research psychometrist. | N/A |