The availability, utilisation and relevance of therapeutic apparatuses in South African occupational therapy clinical practice

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INTRODUCTION

The World Federation of Occupational Therapists (WFOT) steers the development, use and practice of occupational therapy internationally through numerous operations including policy and research in an effort to homogenise and advance occupational therapy training globally. The Federation has compiled and published the Minimum Standards for the Education of Occupational Therapists that serves as a blueprint to both set the minimum standard for educational programmes in occupational therapy and to foster continuous quality assurance and professional development. In South Africa, the Professional Board for Occupational Therapy, Medical Orthotics and Prosthetics and Arts Therapy has incorporated these standards into the national policies and guidelines for occupational therapy training. Consistent with international standards, one of the key outcomes highlighted in the national policies and guidelines is the graduate’s knowledge of occupation. This key component is demonstrated by the “critical awareness of the ‘Person-Occupation-Environment Relationship’ relevant to the South African context” and is measured through 17 criteria. The criteria include the graduate’s skills in selecting the appropriate principles, strategies and technologies, (which comprise of assistive devices and therapeutic apparatuses) for promotive, preventative, palliative, therapeutic/care, rehabilitative interventions or programmes. In light of the above, institutions offering occupational therapy training are required to select context appropriate technologies, to be referred to as therapeutic apparatus(es) from here onwards, to fulfil the listed outcome.

With eight South African academic institutions offering training in occupational therapy and very limited literature on therapeutic apparatus to guide training it becomes important to evaluate whether the theoretical and practical training offered on therapeutic apparatus is applicable in South African occupational therapy clinical practice. Consequently, the overall aim of this study was two-fold: first, to describe the therapeutic apparatus curriculum from the various institutions; second, to describe, the availability, utilisation and relevance of therapeutic apparatuses in South African occupational therapy clinical practice.

METHODS

The research design used was quantitative and consisted of two phases. In phase 1 the researchers contacted all eight academic institutions that offer occupational therapy training and requested the therapeutic apparatus course outline from either the occupational therapy undergraduate coordinators or lecturers who were responsible for teaching the therapeutic apparatus content. Institutions that did not respond or required the researchers to apply for ethical approval at their institution were excluded due to time constraints.

In phase 2 of the study, an online survey platform was used to design and distribute a survey to all Health Professions Council of South Africa (HPCSA) registered occupational therapists throughout South Africa. The survey consisted of a synopsis of the study, a consent form, and closed and open-ended questions that evaluated whether participants had received practical and theoretical training in therapeutic apparatus, as well as the primary sources of their knowledge about, and exposure to, therapeutic apparatuses. Furthermore, the survey queried the availability, utilisation and relevance of therapeutic apparatuses in the practitioners’ current practice settings. To recruit all eligible participants, the survey was marketed through several social media platforms, including the Occupational Therapy Association of South Africa (OTASA) newsletter, Facebook and occupational therapy related networks. All the data and records received were anonymised and handled according to HPCSA guidelines for good practices. The data were recorded, cleaned and analysed using SPSS for various measures of central tendency.

Ethical clearance was obtained for this descriptive study from the Undergraduate Research Ethics and Health Research Ethics
Institution Definition of therapeutic apparatus and Source of Definition | Type of training offered on therapeutic apparatus | Classification of therapeutic apparatus content | Therapeutic apparatuses included in training
---|---|---|---
A | Not Specified | Theoretical and Practical Training | Not Specified | MTA-ITS200M Electronic Cycle OB Help Arm Mobile Arm Support Therapeutic Furniture e.g. Hot Box Tilt Table
C | “Apparatus that are used in an occupational section for treatment purposes” — Lecture’s Opinion | Not Specified | Not Specified | OB Help Arm Tilt Table Standing Frame MTA Adjustable table/plinths Hoist
D | Not Specified | Theoretical and Practical Training | Not Specified | Not Specified
E | “Therapeutic apparatus are used together with activities to provide meaning and purpose to treatment. Thereby making the treatment session therapeutic for the client. Therapeutic apparatus has a variety of treatment applications in the treatment of sensory- motor problems.” -Informal Institutional definition | Theoretical and Practical Training | 1. Suspension and Related Apparatus 2. Mechanical and Electronic Apparatus | 1. Suspension and Related Apparatuses: OB Help Arm Mobile Arm Support 2. Mechanical and Electrical Apparatuses: Standing Frame Tilt Table

Table 1: Comparative table of institutional course outlines
DISCUSSION

Phase 1 of the study was dedicated to describing the therapeutic apparatus curriculum from all eight South African institutions that offer occupational therapy. Of the five institutions that participated in the study all, except one, specified that they provided both theoretical and practical training on therapeutic apparatus, while two institutions specified a non-peer-reviewed definition and classification system in both instances. Surprisingly, all the institutions had a comprehensive list of therapeutic apparatuses they included in their curriculum. Institutions that had a non-peer-reviewed classification system used it to inform the type of therapeutic apparatuses that were taught during occupational therapy training and classify it accordingly.

The findings of phase one present two arguments: Firstly, that a universal definition and classification system for therapeutic apparatuses may promote clarity and uniformity. The lack thereof leaves the definitions and classification systems subject to development by the institution or the educator. This not only results in institutional variations in terms of the type and amount of therapeutic apparatus content that is being taught, but also provides graduates with limited resources for further investigation on the topic. Consequently, the lack of a peer reviewed definition and classification system may hamper the growth of graduates’ knowledge of therapeutic apparatuses. Secondly, the paucity of peer reviewed references leaves occupational therapists with inadequate resources for evidence and reference when patients or health professionals query the purpose, function and curative value of an apparatus this may subsequently restrict the effectiveness, efficiency and cost-effectiveness of the already limited occupational therapy services.

The process through which institutions select their therapeutic apparatus of choice for academic training could benefit from consistency within and amongst institutions. Consequently, the question arises of what should inform the type of therapeutic apparatus included in the occupational therapy therapeutic apparatus outline? Should it be policy, the global or national burden of disease, evidence of quality practices or the variety of clinical settings where occupational therapists offer their services - or all of the above? In addition, training institutions need to establish how many therapeutic apparatus items should be included during academic training to cultivate a well-rounded perspective in graduates. Institutions that developed a non-peer-reviewed definition and/ or classification system, had identified which apparatus is appropriate for inclusion according to their definition and/or classification system. This classification demonstrates the potential value of having structured or semi-structured definitions and/or classification systems. The latter argument is that rigid adherence to a single definition and classification system could stifle development subsequently, making the current curricula appropriate and easily adaptable for contextually-relevant development.

Phase 2 of the study aimed to describe the relevance of therapeutic apparatuses in South African clinical practice. A large number of participants, irrespective of their clinical experience or work setting, indicated that therapeutic apparatus are beneficial and they would use it if they had access to it. Therapeutic apparatus is thus relevant in South African occupational therapy clinical practice and there may be a need to upscale access to context-specific therapeutic apparatuses that are in working order. The results of this study showed that there is potentially great value in developing and investing in therapeutic apparatuses for occupational therapy clinical practice. Collaborative research between institutions and various occupational therapy networks can serve as a possible solution to advancing the use of therapeutic apparatuses in both academic and clinical settings.

One limitation of the study is that the scope of the project did not allow for a formal systematic review of the literature on international practices in the use of therapeutic apparatuses this would been valuable for comparison to this study.

REFERENCES


AUTHOR CONTRIBUTIONS

Anne Rodrigues, Alicia Swart and Kelly Slater, students at the University of Stellenbosch conducted the research under the supervision of Catharina Duvenage. Kopano Dube and Catharina Duvenage conceptualised the study. All participants contributed to shaping the arguments in the article and writing the final submission.

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