# $66^{\text{th}}$

# Annual Academic Day 31 August – 1 September 2022

#### **UNDERGRADUATE STUDENT PRESENTATIONS**



## Stellenbosch

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### Zoe Gadeyne, Tasha Ainsworth, Kirsten Trankle, Christina Meli, Prof Ernstzen



Effectiveness of quadriceps muscle strengthening on active terminal knee extension deficit following femur fracture: a case study and literature review





# Effectiveness of quadriceps muscle strengthening on active terminal knee extension deficit following femoral fracture: a case study and literature review

#### Tasha Ainsworth<sub>1</sub>

1Rehabilitation Science, Cape Town, South Africa

**Introduction:** Muscle weakness after a femoral fracture often results in the inability to perform active knee extension. An active terminal knee extension deficit (TKED) contributes to functional deficits. Effective interventions to reduce active TKED can help mitigate its effect on individuals and healthcare system outcomes.

Aim: To investigate the effectiveness of quadriceps muscle strengthening on muscle strength, active knee extension range of motion (ROM), pain, and function in adults following a femoral fracture. Methods: A case study of an adult presenting with an active TKED following a femoral fracture and a rapid literature review was used. A 3-day intervention, comprising isometric, eccentric and concentric quadriceps contractions was performed. Outcomes of interest included: quadriceps muscle strength; active knee ROM; pain intensity; and self-reported functional ability. Studies for review were identified from electronic databases. The inclusion criteria were adults presenting with an active TKED following femoral fracture; quadriceps strengthening intervention; and studies investigating the outcomes of interest. The methodological quality of the eligible studies were appraised using the Physiotherapy Evidence Database (PEDro) Scale. Data pertaining to context, intervention and effect were extracted and compared. Results: The case presented an adult male with an active TKED of 15° following femoral fracture-related sepsis. Knee extension ROM, pain, and function improved after the intervention. However, muscle strength remained unchanged. Three randomised controlled trials, with an average PEDro score of 7/10 were included. All studies found a significant improvement in muscle strength post-intervention, whilst one found a significant improvement in pain, and another in function. Intervention timeframe influenced the outcomes. **Conclusion:** This research report provides preliminary evidence supporting the effectiveness of quadriceps muscle strengthening on muscle strength, pain, and function in adults following a femoral fracture. This intervention is feasible for improving patient-specific outcomes. Further research is recommended on ROM and longer intervention duration.

#### Minell de Villiers and Tarryn Exford



Facilitators and Barriers of Telerehabilitation at the Bishop Lavis Rehab Centre:

**A Stakeholder Perspective** 





#### Facilitators and barriers of telerehabilitation at the Bishop Lavis Rehabilitation Centre: A stakeholder perspective

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**Background:** Telerehabilitation as a form of service provision has increased across many of the heath care professions, especially after the outbreak of the COVID-19 pandemic in 2020. Given the scarcity of research on telerehabilitation in low socioeconomic contexts, this research study considered the barriers and facilitators of telerehabilitation from a stakeholder perspective at Bishop Lavis Rehabilitation Center (BLRC), situated in a low-income community in the Western Cape.

**Aim**: To gain insight on the accessibility, contextual relevance and responsiveness of telerehabilitation and provide recommendations for the improvement of telerehabilitation for future service users.

**Methods:** A qualitative, collective case study design was followed. Purposive sampling was used to recruit participants, namely 2 occupational therapists running the telerehabilitation program at BLRC, 5 fourth-year occupational therapy students of 2021 that facilitated the telerehabilitation sessions, 3 patients who received telerehabilitation and 5 home-based carers who received training via telerehabilitation. Data collection was conducted by individual and focus group interviews. Coding was done with ATLAS.ti and Thematic Analysis was used to identify themes.

**Results:** Three themes emerged: (1) Elements that aid or increase responsiveness and relevancy of telerehabilitation (Facilitators), (2) Elements that hinder the responsiveness and relevancy of telerehabilitation (Barriers) and (3) Suggestions for improvement of telerehabilitation.

**Conclusion**: Telerehabilitation has great benefits with regards to reduced time and money consumption in terms of transport mobility and access to therapy. Though it is clear that telerehabilitation can be successful and does hold many advantages, the feasibility and effectiveness of the service in a low-recourse setting is however questioned in terms of the practicality and the carryover of information from service provider to the service user in a meaningful way. Although there is still a great preference for face-to-face therapy from all the stakeholders, there is definitely an opportunity for telerehabilitation to grow in use within occupational therapy.

### <u>Yusuf Docrat</u>, Ilna Conradie, Razaan Davis, Rubina Razack



A Killian-Jamieson diverticulum potentially mimicking a thyroid nodule. A case report highlighting the cytology of a pharyngoesophageal diverticulum





# A Killian-Jamieson diverticulum potentially mimicking a thyroid nodule: A case report highlighting the cytology of a pharyngoesophageal diverticulum

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**Background:** Pharyngoesophageal diverticula (PED) can mimic thyroid nodules clinically and sonographically. This case report demonstrates the utility of rapid on-site evaluation of fine needle aspiration biopsy (FNAB) of a tentative thyroid lesion. By identifying key cytological features, the cytopathologist could immediately guide further management.

**Case-History**: A 46-year-old male presented with a tender midline neck abscess, a normal thyroid gland and no other clinical abnormalities. The abscess resolved with antibiotics. Ultrasound of the neck revealed a cystic midline lesion suggestive of a thyroglossal duct cyst and a well-defined, hypoechoic structure, initially interpreted as a posterior thyroid nodule which was aspirated. Cytology was suggestive of a PED. Further imaging studies with a barium swallow confirmed the diagnosis of a Killian-Jamieson diverticulum. **Conclusion**: PEDs are rare. Awareness of the pitfalls of presentation, imaging and diagnosis is important across disciplines. This case report emphasises the value of clinic-pathological and radiological correlation and the value of working in a multidisciplinary team.

#### **William Thomas Howard**



Injury pattern, management and outcomes of gunshot-related fractures to the hand and wrist at a tertiary level trauma center





#### Injury pattern, management and outcomes of gunshot-related fractures to the hand and wrist at a tertiary level trauma centre

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**Background:** Civilian gunshot-related hand and wrist injuries are largely underreported in the literature, especially in South Africa. This type of injury can carry significant financial, social, and quality of life implications. This study aimed to describe the injury pattern, management, complications, and treatment outcomes of patients with gunshot-related injuries to the hand and wrist. A secondary objective was to identify possible risk factors for patients lost to follow-up.

**Method**: This retrospective descriptive study included all patients who sustained a gunshot-related injury to the hand and wrist, managed at a tertiary level hospital between 2013 and 2017. Patient demographics, injury-related information, definitive management, management outcomes, and functional ability at the final follow-up visit were recorded. Associations between risk factors and loss to follow up were investigated. **Results**: A total of 144 patients (92% male) were included in the study (mean age 29• }9 years, range 10 – 62). Most injuries were sustained to the metacarpals (43.1%) and phalanges (40.9%). The most used definitive management was conservative (45.1%), followed by ORIF with Kirschner-wires (31.3%). The outcomes noted in the study were non-union (4.2%), joint contracture (22.2%), sepsis (1.4%) and range of motion loss (39.6%). 51.4% of patients were lost to follow-up, with significant associations observed between injury site (P=0.037), and type of definitive treatment (P=0.042) and the likelihood of being lost to follow-up.

**Conclusion**: Gunshot-related injuries to the hand and wrist predominantly affected male patients, which is in agreement with the literature. There was no clear, distinct injury pattern with a wide variation of reported injuries. Low complication rates were noted, with the highest being loss of range of motion. Lost to follow-up rates were expectedly high with two interesting associations: the injury site and the type of definitive treatment. Future research should interrogate these findings in more detail.

### Keri Lambooy, Rosie Grace Elliott, Alexa De Villiers and Daniel Jordaan



Digital media content required for health education by registered nurses working in primary health care setting in the Northern Tygerberg Sub-Structure of the Cape





#### Digital media content required for health education by registered nurses working in primary health care setting in the Northern Tygerberg Sub-Structure, Cape Metropole region, Western Cape

Mr Daniel Jordaan<sub>1</sub>, **Ms Keri Lambooy**<sub>1</sub>, Ms Alexa De Villiers<sub>1</sub>, Ms Rosie Elliot<sub>1</sub> <sup>1</sup>Ronel Beukes, Town, South Africa, <sup>2</sup>Lynette Daniels, Town, South Africa, <sup>3</sup>Rosie Elliot, Town, South Africa, <sup>4</sup>Alexa De Villiers, Town, South Africa, <sup>5</sup>Keri Lambooy, Town, South Africa

Health education is integral in combating the burden of disease. However, the dissemination of health education is challenged by the vast resource constraints, both human and material, that exist within South Africa. Therefore, the objective of the study was to determine the digital media practices and preferences relating to health education, to identify the resource considerations to deliver health education, as well as the learning barriers of the community members, through registered nurses' perspective A cross-sectional descriptive study design was followed in the Northern Tygerberg Sub-Structure of the Cape Metropole, Western Cape, South Africa. The data was collected by means of fieldworker administered questionnaires, to 93 registered nurses, at ten primary health care facilities within a 10km radius of Tygerberg medical campus.

The most beneficial method of health education according to participants, was in person explanation by healthcare professionals (35.5%; n=33), use of posters and pamphlets (32.3%; n=30), and video content (23.7%;n=22). A Majority of participants (76.3%,n=71) are in favour of subtitles. A majority (77.4%) participants agreed upon the necessity of different language subtitles. A total of 53.8%(n=50) of participants agreed subtitles of the same language were necessary for information retention. The most valuable type of educational content is preventative (69%; n=64), summary information (28%; n=26) & curative health education (3.2%; n=3). A TV in the waiting area was reported by 64,5%(n=60). The predominant learning barriers to health education were identified. Five-minute videos were identified as the most effective duration.

Use of digital media tailored to the health education needs of Registered Nurses has the potential to overcome barriers that hinder the provision of effective health education in primary health care facilities. Future research could compare the use of the same language versus different language subtitles in communities, where multiple languages are spoken among patients for health education.

### Hannah Haswell, Jessica Mol, Sarah-Jane Klopstra, Candice van Vuuren



Functional response of a patient with hemiplegia to trunk rehabilitation: a case study and literature review





# Functional response of a patient with hemiplegia to trunk rehabilitation: a case study and literature review

Miss Sarah-Jane Klopstra, Miss Jessica Mol, Miss Candice van Vuuren, Miss Hannah Haswell Division of Physiotherapy, Stellenbosch University, Cape Town

**Introduction:** Cerebrovascular accidents (CVA) contribute to a high burden of disease in South Africa, affecting independence and participation of many in society. Trunk rehabilitation can improve functional outcomes and reduce disability post-stroke.

**Aim:** The aim of this case report and literature review was to investigate the effect of a trunk rehabilitation programme on function in a middle-aged female patient with hemiplegia, and to compare the case study findings to published evidence.

**Methods:** A case study was conducted in August 2021 and reported using the TIDieR framework. The Patient Specific Functional Scale and the Timed Up and Go test were used to assess function and mobility. A systematic search of literature which implemented upper- and lower-trunk flexion-rotation exercises to improve function and mobility in adult chronic hemiplegic patients, was conducted in May 2022. Methodological quality of the literature was critically appraised. The study description, PROGRESS-PLUS elements, TIDieR framework, outcome measures and intervention effect were compared to the case study using the PATIENT-FIT framework.

**Results:** The case study presented a 50-year-old female with right-sided hemiplegia after sustaining a left CVA in June 2018. The participant received rehabilitation post-CVA and was able to mobilise independently, however, due to the COVID-19 pandemic, rehabilitation was discontinued. Upon evaluation, the participant presented with poor trunk control, increased tone globally on the right side, poor upper limb function and decreased mobility. Management included a trunk-specific rehabilitation programme and primary caregiver education to administer the home exercise programme. Following the intervention, the participant demonstrated improvement in mobility and perceived difficulty in functional upper limb activities.

**Conclusion:** This case study suggests that selective trunk rehabilitation can improve upper- and lower limb function and mobility in patients with stroke, despite the chronicity timeline of recovery. The literature review findings confirmed the positive effects found in the case study.

#### **Bahale Mehale and Gert Koekemoer**



A Scoping Review of Dysphagia Assessment Procedures and/or Protocols for 2-6-year-old Children with Paediatric Traumatic Brain Injury in the Acute Care Setting

Stellenbosch



# Available dysphagia assessment protocols for populations with paediatric traumatic brain injury: A scoping review

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Background: Traumatic brain injury (TBI) is a non-degenerative injury following blunt force trauma or penetrating injury to the head, resulting in disrupted brain functions. Disruptions in typical brain functioning may manifest in impairments, notably in feeding and swallowing i.e. dysphagia. Dysphagia is present in 10-15% of children with moderate TBI, and 68-76% in children with severe TBI. The high incidence rate of dysphagia among PTBI patients highlights the need for a comprehensive assessment protocol to meet the urgent and specific needs of the paediatric population. Rationale: This scoping review explores and describes the available dysphagia assessment protocols for 2–6-year-old children with moderate to severe PTBI. The methodology was utilized to determine the available assessments and identify any research gaps within the field of dysphagia in PTBI patients in order to inform quality patient management. Information was retrieved from a total of 26 articles (n=26) that complied with the set criteria was used for the charting, analysis, and discussion of the data. Results: No set dysphagia assessment protocols were identified for the PTBI population. Non-instrumental assessment procedures were typically utilized by speech-language therapists (SLT) as screening and diagnostic tools for PTBI patients. Most articles confirmed the use of instrumental assessment procedures, such as the VFSS and FEES, by a multidisciplinary team (MDT) in acute healthcare contexts. Limited contribution from middle to low-income countries such as South Africa was noted, where the lack of research and standardization of operational procedures are prevalent. **Conclusion:** The efficacy of dysphagia assessment procedures depends on the clinician's skill and their access to resources, which is not always feasible in middle-to-low countries such as South Africa. As a result, the development of a set dysphagia assessment protocol remains a priority in dysphagia care for PTBI patients.

### <u>Lamprecht D</u>, Forgan T, Alblas A, Lathe S, Fourie H, Witbooi L & Baatjes K



Mesorectum Volumetry in Males with Rectal Cancer: Variabilities Observed in Pre- and Post-Neoadjuvant Radiotherapy Imaging and the Clinical Implications





#### Mesorectum volumetry in males with rectal cancer: Variabilities observed in pre- and post-neoadjuvant radiotherapy imaging and the clinical implications

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**Introduction:** Rectal cancer is a significant health burden on both a global and national scale, requiring a multimodal treatment approach. Neoadjuvant pre-operative radiotherapy has been shown to effectively reduce tumour burden prior to the patient undergoing surgical resection, leading to a more efficacious oncologic excision. The aim of this study is to utilise magnetic resonance imaging (MRI) to describe the variability observed in the volumetry of the mesorectum pre- and post-radiotherapy, prior to surgical intervention, and explore its clinical implications in males with rectal cancer who underwent a total mesorectal excision (TME).

**Methodology**: Twenty pelvic MRI scans of male patients diagnosed with rectal cancer, confined to the mesorectal fascial layer, who underwent neoadjuvant pre-operative radiotherapy prior to undergoing a TME were retrospectively reviewed and analysed after ethical approval was granted. The volume of the mesorectum was determined on both the pre- and post-radiotherapy scans by planimetric tracing of the area on axial slices, after which a compounded three-dimensional structure was created, and its volume automatically calculated. Subsequent analyses will be done to determine the association of mesorectal volumetry and the surgical outcome of the TME.

**Results:** Preliminary results show a mean calculated pre-radiotherapy mesorectum volume of 267.03 • } 82.94 cm3, and a post-radiotherapy volume of 229.75 • } 91.11 cm3, suggesting a statistically significant difference (p = 0.01) between pre- and post-radiotherapy volumetric measurements.

**Conclusion:** The significant variation in the volumetry of the mesorectum pre- and post-radiotherapy can have important clinical and prognostic implications with regards to the TME in patients with rectal cancer. This study will provide valuable insight into whether the pre-operative interpretation of existing imaging should be used to assess mesorectal volumetry and be used as an opportunity to gain insight and guide surgical decision-making, thereby facilitating the planning of optimal treatment strategies and improve patient outcomes.

#### <u>Lamprecht D</u>, Berner K, Marais C, Neuhoff JM, Hack M, Zaayman WM, Tawa N, Louw Q & Fisher D



Effectiveness of therapeutic massage versus other or no therapy on depression, CD4+ count, & quality of life in people with HIV: systematic review & meta-analysis





# Effectiveness of therapeutic massage versus other or no therapy on depression, CD4+ count, and quality of life in people with HIV: systematic review and meta-analysis

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**Background**: Modern antiretroviral therapy (ART) has improved the life expectancy of people living with HIV (PLWH). However, HIV is often accompanied by morbidities related to the virus and its treatment, including depression, that may be associated with reduced immune function and quality of life (QOL). Therapeutic massage has been proposed as a cost-effective, scalable complementary treatment for PLWH to improve person- and immune-related outcomes.

**Objectives**: To systematically search, critically appraise, and synthesise the best evidence on the effectiveness of therapeutic massage compared to other/no interventions on depression, CD4+ cell count, and QOL in people of all ages living with HIV.

**Method**: The review included randomised controlled trials (RCTs) of all languages scoring a minimum of 3 on the PEDro scale. Five databases were searched in August 2021. Search terms related to HIV, massage, complementary therapy, depression, CD4, and QOL. Where possible, homogeneous data for review outcomes were statistically pooled.

**Results**: Five RCTs were included (mean PEDro score = 5.6). Most trials hailed from high-income countries. Trials were heterogeneous regarding many clinical characteristics. Massage significantly improved depressive symptoms in PLWH (p=0.0003). No statistically significant effects of therapeutic massage on CD4+ count (p=0.62) or QOL (p=0.80) were found in meta-analyses, although evidence from individual trials suggests improved CD4+ count in certain circumstances.

**Conclusion:** Therapeutic massage significantly improves depressive symptoms in PLWH when used according to recommended dosages. For future clinical practice and research, massage combined with other modalities should be investigated, and particularly so in low-resourced settings.

#### MEGAN LEE; CHLOE MORRIS; MEAKA GARLAND; THANDEKA SIBANDA



VALIDATION STUDY ON HEIGHT PREDICTION METHODS COMPARED TO THE GOLD STANDARD IN THE TYGERBERG HOSPITAL SETTING





# Validation study on height prediction methods compared to the gold standard in the Tygerberg Hospital setting

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In clinical nutrition, patients' accurate height measurements are crucial for determining body mass index, nutritional requirements and malnutrition risk. However, many patients with severe disease or are unconscious or immobile are exempt from the gold standard method of measuring height: the stadiometer. This validation study aimed to compare the results obtained from measuring height with a stadiometer to alternative height prediction methods. All measurements were performed, using standardised methods, on 303 adult participants (56.8% female; 53.5% mixed race; 38.3% black; 7.3% white) at Tygerberg Hospital, South Africa. Bland-Altman plots and appropriate inferential statistics were performed.

Clinically insignificant differences in height compared to the gold standard were only observed for demi-span (1.63cm) and knee height (1,03cm). Age had a moderate positive correlation to knee-height (r=0.436, p<0.01). Gender showed statistically significant differences for arm span (p=0.03), demi-span (p=0.02) and knee height (p<0.001). Ethnicity was a statistically significant factor in the differences in height, therefore strengthening the argument that height prediction equations should be race-specific.

These results indicate that a single perfect height prediction method cannot be validated for the South African hospital population, using current regression equations. However, by determining the degree of accuracy between the gold standard and alternative height prediction methods, it provides insight on the order of best use in males and females, which can deliver improved patient management. Further investigation is required to create population and gender specific equations for standardised height prediction methods.

#### Jana Maree, Thobile Nkabinde, Mikyle Rodrigues



THE EFFECT OF REDUCED HEMODIALYSIS SESSIONS DUE TO COVID-19 ON NUTRITIONAL OUTCOMES





# The effect of reduced hemodialysis sessions due to covid-19 on nutritional outcomes

Ms Jana Maree<sub>1</sub>, Mr Mikyle Rodrigues<sub>1</sub>, Ms Thobile Nkabinde<sub>1</sub>, Mrs Zarina Ebrahim<sub>1</sub>, Mrs Nazeema Esau<sub>2</sub> <sup>1</sup>Division of Human Nutrition, Stellenbosch University, Northern Suburbs, South Africa, <sup>2</sup>Department of Dietetics, Tygerberg Hospital, Northern Suburbs, South Africa

End stage kidney disease (ESKD) requires replacement therapy, such as hemodialysis (HD) to alleviate the nutritional and metabolic complications of the disease. Due to the Covid-19 pandemic, the number of HD treatments at Tygerberg Hospital was reduced from three to two sessions per week. The aim of this study was to investigate the effect of the reduced HD sessions on participants' nutritional outcomes. This is a cross-sectional study with a retrospective component. Anthropometric and biochemical data of three time points (starting-, mid- and endpoint), were collected and a questionnaire was used to obtain sociodemographic and dietary adherence information.

The study population consisted of 34 participants, of which 59% were female and 41% were male, with a mean age of  $41.3^{\circ}$  9.4 years. There was a significant increase in serum sodium levels, which remained higher at the endpoint . Potassium significantly increased from starting to midpoint (p = 0.015) and reduced from mid to endpoint . Urea and creatinine both significantly increased after the starting point, whereafter urea significantly decreased at the endpoint and creatinine decreased from mid to end point , it was however significantly higher at the endpoint compared to the starting point . Most participants (73,5%) boiled their vegetables, 47,1% consumed vegetables 1-2 times per week, while 44,1% consumed fruit 1-2 times per week. The majority of participants (94,1%) consumed more than the advised fluid allowance per day. The main symptoms experienced during the lockdown were fatigue, anorexia and muscle cramps.

Biochemical and anthropometric changes were not all substantial from a clinical perspective over time; fluid adherence was low and dietary changes regarding potassium were made. The reduction in hemodialysis sessions may be acceptable to practise for short periods of time, in a pandemic, together with dietary counselling by a registered dietitian.

#### Jenna Lovegrove, Annabel McCaig, Nadia Visser



Investigation of the modes of delivery and digital media preference among adult females of childbearing age (18-49 years) in Bishop Lavis, Western Cape, South Africa.





#### Investigation of the mode of delivery and type of digital media that females of childbearing age (18-49 years) in Bishop Lavis, Western Cape, South Africa prefer to engage with

Miss Annabel Mccaig<sub>1</sub>, Miss Nadia Visser<sub>1</sub>, Miss Jenna Lovegrove<sub>1</sub>, Prof Du Plessis<sub>1</sub>, Ms Dhlamini<sub>1</sub> *1Stellenbosch University, Cape town, South Africa* 

Infant and young child nutrition (IYCN) and health is of concern in South Africa. Breastfeeding initiation is good, however continuation is poor and complementary feeding practices are suboptimal. Lack of knowledge and inconsistent messages on IYCN hinder improved child health outcomes. It is therefore important to improve IYCN education targeted at women.

The aim of this study was to investigate the modes of delivery and digital media that women of childbearing age prefer to engage with.

A cross-sectional descriptive study with an analytical component was conducted at Bishop Lavis primary health care (PHC) clinic in the Western Cape Province, South Africa.

An educational video on IYCN, including pictures, words, sound, animation and real people was loaded onto tablets and presented to women (n=368) attending Bishop Lavis PHC clinic. A researcher-administered questionnaire was used to assess participants' preference regarding the different modes of delivery used in the digital media presentation.

Results indicate that participants preferred real people (57%; n=210) portrayed in the video, followed by pictures (48%; n=178), sound/voice (37%; n=137), words (30%; n=111) and animation/cartoon (15%; n=55). Most participants (81%; n=297) reported daily usage of digital media, mostly via mobile phones (91%; n=334). Our findings are consistent with the limited evidence nationally and internationally that real people are preferred in digital media. Evidence suggests that this type of educational content can lead to better engagement and behaviour change. These findings should inform the improvement of health education provided to women attending PHC facilities within this digital age.

#### Leah Lauren Nell



A quality improvement study of the factual information pertaining to anticipated postoperative course in mastectomy patients





# A quality improvement study of the information pertaining to anticipated post-operative course in mastectomy patients

<u>Miss Leah Nell</u>, Dr Wilhelmina Conradie<sub>1,2</sub>, Dr Patsy Oosthuizen<sub>1</sub>, Dr Ingrid Hartmann<sub>1</sub>, Dr Lindi Martin<sub>1</sub>, Dr Peggy Msomi<sub>1</sub>, Dr Sumare Prinsloo<sub>1</sub>, Dr Rizwana Roomaney<sub>3</sub>, Miss Salomien Oosthuizen<sub>1</sub>, Miss Astrid Bothman<sub>1</sub>, Miss Sibongumzuzu Mkhwanazi<sub>1</sub>, Dr Jenny Edge<sub>1,2</sub>

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Study aims: to evaluate patients' knowledge of the information sheet content provided prior to mastectomy, and to assess post-operatively whether patients felt they were adequately prepared for their surgery and informed about post-operative complications.

The study is a student-led prospective mixed-method study including quantitative and qualitative data. Females over 18 years undergoing a mastectomy for breast cancer at Tygerberg Hospital from March 2022 are invited to participate. Patients excluded from the study are those receiving tumour excision, those receiving immediate reconstruction, patients with communication barriers or those unable to give consent independently. Quantitative data analysis was performed using SPSS Statistics for Windows. Qualitative data will be analysed using ATLAS.ti. The quantitative data from patients 1-25 form the basis for this abstract. Ethics approval reference: N21/02/012.

Average age of patients = 52. Language distribution: Afrikaans=14, isiXhosa=6, English=5. Stage distribution: stage 2=10, stage 3=7, stage 1=5, stage 4=1. Risk-reducing mastectomies=1. Pre-operative neoadjuvant chemotherapy=13.

Preliminary results indicate that most patients recall receiving the information sheet and almost all said they had read it. Almost all patients knew when their operation was due to be performed. However, only 17 were able to list any possible side effects. The majority knew at least one doctor in their team but only 4 were aware of the nursing staff. Level of education, first language and employment status does not seem to significantly influence patients' pre-operative questionnaire responses.

These preliminary results on a small cohort of patients show that most patients do read information sheets prior to their operation. In addition, patients highlighted the appreciation and need for support from families and medical staff, and felt that they should be well informed of possible complications. Results from the full study will give more information about how we can improve the experience of having surgery at our hospital.

#### Jaimee Buchan, Deidre Fouche, Cheron Rudolf, Nicole Smithdorf



A description of recent research literature in Early Communication Intervention (ECI) in South Africa, with a particular focus on research topics and recommendations: a scoping review





#### A description of recent research literature in Early Communication Intervention (ECI) in South Africa, with a particular focus on research topics and recommendations: a scoping review

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**Background:** South Africa is a country with a high prevalence of environmental risk-factors for developmental delays or disorders coupled with poor access to healthcare. Infants and toddlers with a communication developmental delay or disorder may face far-ranging negative effects if adequate early intervention is not provided. To provide effective early communication intervention (ECI) clinicians must have access to contextually relevant and up-to-date scientific information. The human resources for research on ECI in South Africa are limited. Knowledge about the topics that are studied locally, recommended for study, or underrepresented in the existing literature would aid their research efforts and can be used to determine research priorities.

**Objectives:** To describe the current research literature in ECI, specifically to determine what topics researchers are interested in and what their recommendations for future research are.

**Method**: A scoping review methodology based on the latest guidance by the Joanna Briggs Institute and PrismaScR checklist was followed. Five electronic databases were searched. Manual searches and searching through reference lists were also conducted. All studies with a focus on ECI within the scope of speech-language therapy in South Africa, published in English or Afrikaans, between 2016 and 2022 were included. Information from a final selection of 20 studies was entered into a charting table and analysed using basic qualitative and frequency counting techniques.

**Results**: ECI research in South Africa has focused on a range of topics such as, stakeholder's perceptions, effects of early intervention, and language- and speech assessment instruments. Recommendations for future research primarily focused on expanding sample sizes and diversifying participant groups and research settings across linguistic, cultural and socio-economic groupings.

**Conclusion**: Researchers may benefit from pooling their resources to produce the knowledge most needed by South African early interventionists and their clients.

Deena Shaulov, Kirstin Allies, Bronwyn Grey, Katlego Kgoedi, Uzayr Moerat, Henricke Uys



SOCIAL MEDIA AND ELECTRONIC COMMUNICATION USAGE BY SOUTH AFRICAN DIETITIANS





## Social media and electronic communication usage by South African dietitians

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An increasing number of dietitians are utilising social media platforms and electronic communication tools to enhance professional networking and to provide accurate nutritional information to both the public and healthcare sector.

This study aimed to determine the extent of the use of social media and electronic communication by South African dietitians, and to investigate selected digital platforms hosted by dietitians in terms of adherence to relevant guidelines and regulations, particularly those of the Health Professions Council of South Africa (HPCSA).

Dietitians were included in this cross-sectional descriptive study, collecting data by means of an online survey (N=125) and observational checklist (N=135). Both parts assessed demographic characteristics, content and awareness, or adherence to ethical guidelines of dietitians' digital platforms.

Most participants used Instagram (n=45, 45.9%) and Facebook (n=31, 31.6%) as these platforms are user friendly, quick and suitable to their target audiences. The Covid-19 pandemic caused an increase in social media usage amongst dietitians (n=54, 65.1%). Barriers to social media usage included not having enough time (n=44, 28.8%) and being unfamiliar with some platforms (n=31, 20.3%). Enablers to social media usage included better reachability of platforms to their target audience (n=51, 20.2%) and ease of use of some platforms (n=47, 18.6%). The majority of survey participants were aware of HPCSA social media guidelines (90.7%, n=68). Thirty-four (25.2%) of the platforms observed engaged in forms of touting/canvassing. Twenty one dietitians sold products on their websites (15.6%), with the most commonly sold products being meal plans (n=7, 5.2%) followed by supplements (n=5, 3.7%).

This study has shown that South African dietitians actively engage with digital platforms to a varied extent, highlighting the importance of being cognizant of, and applying the HPCSA Ethical guidelines for Good Practice. The study can be useful in guiding future research on this unexplored, emerging topic.

#### Alvine Steenkamp, Nicolene Kruger, Mekayla Betteridge, Maryam Kollia, Estelle van Rijn, Amaris Snell



VALIDATING THE SEFI® TOOL (SELF EVALUATION OF FOOD INTAKE) IN HOSPITALIZED PATIENTS OF SOUTH AFRICA BY STUDENTS AT STELLENBOSCH UNIVERSITY.





# Validating the SEFI<sup>®</sup> Tool (Self Evaluation of Food Intake) in hospitalized patients of South Africa

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Nutrition status deteriorates during hospitalisation, with nutritional assessment seldom performed as staff are unskilled and untrained. Dietary intake is fundamental to nutritional assessment and directly impacts clinical outcomes of undernutrition. This cross-sectional descriptive study aims to validate the SEFIR tool in establishing the food intake of hospitalised patients in Cape Town, South Africa.

519 patients were screened, and 265 participants were recruited (48,1 years; IQR: 34.4-63.1; 53.2% male). After lunch, the SEFIR tool was completed to determine food intake, using two methods, the visual analogue scale and the assessment of the portions consumed. The reference standard for actual food intake was a SEFIR score determined by assessing photographs of the consumed meals. The tool's understandability and ease of completion were recorded. The SEFIR tool demonstrates minimal limitations compared to existing food intake assessment tools.

All participants were able to complete the SEFIR tool efficiently. Majority fully understood the tool (75.5%; n=200) and found it easy to complete (78.5%; n=208). A significantly strong positive correlation was found between the SEFIR score allocated by participants and researchers (r=0.798; P<0.001). Results established a relatively high sensitivity (85%), specificity (81%), positive (79%) and negative predictive value (86%). SEFIR provides a valid, accurate subjective assessment of food intake and can be performed without training. It's a quick, easy-to-use tool that can be utilised to determine food intake within the hospital settings of South Africa to facilitate the early identification of malnourished participants. Future studies can focus on the use of the SEFIR tool by other health care professionals and the use within the GLIM criteria for early identification of malnutrition.