2024

Proceedings of the 7th Annual Africa Interdisciplinary Health Conference (AfIHC)

University of the Witwatersrand
Johannesburg, South Africa
21-23, August 2024

Conference Proceeding Editors:
Dr.ir. Karlheinz Samenjo, Prof.dr.ir. Jan-Carel Diehl,
Prof. Jerry John Ouner

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Conference Theme

"Healthcare in Africa: Collaboration, Innovation, and Sustainability."

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Colophon

Proceedings of the 7th Annual Africa Interdisciplinary Health Conference (AfIHC)

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Keywords:
Chronic Diseases, Healthcare Professionals, Mental Health, Sustainable Development Goals (SDGs), Infectious Diseases'.

Research themes:
Burden of Chronic Diseases, Education and Training for Healthcare Professionals, Mental Health, Progress on Achieving the Sustainable Development Goals (SDGs), Response Strategies to Emerging and Re-emerging Infectious Diseases, Sexual and Reproductive Health including HIV and AIDS, The Role of Social Sciences in Strengthening Africa's Healthcare System.

Published by:
TU Delft OPEN Publishing — Delft University of Technology, The Netherlands

DOI: https://doi.org/10.59490/mg.135

ISBN: 978-94-6366-993-1

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https://books.open.tudelft.nl

Cover design made by Dr.ir. Karlheinz Samenjo

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ABOUT AFRICA INTERDISCIPLINARY HEALTH CONFERENCE

Africa Interdisciplinary Health Conference (AfIHC) is a peer-reviewed forum for health-related researchers, practitioners, academics, and students at all levels. It serves as a unique platform for students, researchers, and health professionals to showcase and discuss innovative health-related research. AfIHC is unique because it emphasizes the importance of interdisciplinary exchange and, therefore. The purpose of the conference is to create a platform for the various healthcare providers in both clinical and academic/research settings to meet and discuss their research findings to promote evidence-based practices related to the health sector in Africa.

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PREFACE

Welcome Message from Planning Committee Chair and Co Chair.
With great pleasure and profound honor, we welcome you to the 7th Africa Interdisciplinary Health Conference (AfIHC) on the theme "Healthcare in Africa: Collaboration, Innovation, and Sustainability."

In a continent as large and diverse as Africa, healthcare challenges are complex and varied. Nonetheless, collaboration allows us to pool our strengths and resources effectively. By connecting governments, private sectors, healthcare professionals, and communities, we can establish a strong support network and shared knowledge base. This conference sought to promote such partnerships, encouraging open dialogue and the exchange of ideas for transformative results. These combined strengths can be used to create partnerships that improve healthcare delivery and outcomes.

In addressing Africa's unique healthcare challenges, it is imperative that we adopt innovative strategies and remain receptive to new ideas and approaches. Utilizing cutting-edge technology, embracing digital health solutions, and promoting research and development tailored to African contexts are essential for achieving improved healthcare outcomes. We must challenge the status quo and create pathways for breakthroughs that enhance the quality of life of millions across the continent. This conference delved into groundbreaking research, successful case studies, and forward-thinking solutions that are shaping the future of healthcare in Africa. Throughout the conference, we draw inspiration from these innovations and consider how they can be adapted and scaled to meet our needs.

Throughout this conference, we are privileged to hear distinguished experts and visionary leaders who share their invaluable insights and diverse experiences. We partake in profound discussions, interactive workshops, and dynamic networking sessions, that are meticulously designed to inspire actionable strategies and cultivate collaboration. This is an unparalleled opportunity to learn from each other, collectively innovate, and to commit to sustainable practices that will significantly shape the future of healthcare across Africa. Let us fully embrace this moment to forge partnerships, drive transformative change, and set a new standard for healthcare excellence on the continent.

In conclusion, we wish to express heartfelt gratitude to all the organisers, sponsors, speakers, and participants who have made this conference a reality. Unwavering dedication and passion are the driving forces behind this extraordinary event. Your presence signifies a profound commitment to advancing healthcare in Africa and is inspired by the collective energy and expertise gathered in this room. Through hard work, vision, and collaboration we can achieve meaningful and lasting outcomes. Our shared efforts will pave the way for significant advancements and improvements in healthcare across the continent. Thank you for your invaluable contributions and for being an integral part of this remarkable journey.

Welcome to the International Conference on Healthcare in Africa.
Dr Nkosi Nokuthula, Prof Nomfundo Moroe and Prof Maureen Akolo

Welcome Message from Push Aid Africa (PAAF) board of directors.
It is always a pleasure to welcome you to the annual Africa Interdisciplinary Health Conference (AfIHC). This is our 7th conference, and we are proud of what we have accomplished over the past seven years. The theme for AfIHC 2024, "Healthcare in Africa: Collaboration, Innovation, and Sustainability," is especially pertinent as we approach the deadline for the Sustainable Development Goals. More than ever, it is crucial that we work together to advance interdisciplinary healthcare delivery and effectively communicate research findings. The COVID-19 pandemic has highlighted the necessity of deliberating and exploring best practices for delivering interdisciplinary healthcare, a need that will persist as we prepare for future pandemics.

AfIHC 2024 offers the opportunity to meet and exchange ideas with a global network of colleagues while engaging with the latest research and interdisciplinary projects in Africa and beyond. We hope that our 2024 conference will provide a tremendous opportunity for educators, clinicians, administrators, policymakers, researchers, and specialists across various disciplines to network and foster collaborations.

Thank you for taking the time to join us here in Johannesburg, South Africa, to share your experience and expertise both in person and virtually.

On behalf of everyone associated with AfIHC, we welcome you to our conference. We look forward to engaging with you to promote interdisciplinary education and collaboration.

PAAF Board of Directors

Welcome Message from AfIHC secretary general.

I warmly welcome you, our participants, guests and government officials from across the globe, to the 7th annual Africa Interdisciplinary Health Conference (AfIHC). The theme for AfIHC 2024 is Healthcare in Africa: Collaboration, Innovation, and Sustainability.

This year's conference marks the 7th year since we started AfIHC. Interdisciplinary collaboration is becoming the dominant model for understanding complex health issues across the globe. However, not much has been done on our continent to promote this collaboration among healthcare professionals. AfIHC is the first of its kind in the Africa sub-region, focusing on connecting health-related researchers, academics, students and practitioners.

Africa stands at a critical juncture where collaboration among diverse disciplines, innovative approaches, and sustainable practices are paramount to achieving equitable healthcare for all. This conference serves as a beacon of hope and opportunity, where experts, practitioners, policymakers, and thought leaders convene to exchange insights, forge partnerships, and chart a course towards transformative change.

This conference is the most remarkable event that brings together healthcare professionals from all disciplines including governmental, private, and bilateral organizations in Africa to deliberate on the future of interdisciplinary health research and collaboration in Africa. AfIHC 2024 is the ideal platform for us to discuss innovative ways to mitigate pandemics, climate change and chronic diseases in Africa using an interdisciplinary approach.

We are grateful to our co-host, University of Witwatersrand for the support. We would like to say a special thank you to the planning committee members and other members of the various sub-committees for their commitment and enormous contribution to the success of AfIHC 2024. Finally, a special thank you to our sponsors

I wish all of you the best in this year's conference.
Jerry John Ouner (Nutor), RN, PhD, FAAN, Secretary General, AfIHC, President and Chair, PAAF

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Hospital and Client-Related Determinants of Delayed Emergency Caesarean Sections in Machakos Level 5 Hospital, Kenya

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Keywords
Delayed emergency Caesarean section, hospital-related determinants, Client related determinants, Machakos Level 5

Introduction
Labor to delivery is a natural process that begins and ends spontaneously. However, in some circumstances, the need for an intervention is inevitable. One of these interventions is surgery whereby the foetus is delivered via caesarean section and time is of the essence. According to The Joint Royal College of Obstetricians & Gynaecologists, a statement on good practice on the classification of urgency states that a 30-minute Decision to Delivery Interval (DDI), has become an accepted tool used to assess the efficiency of the whole delivery team. However certain factors have made it difficult to achieve this desired DDI, especially in resource-constrained areas. This study sought to establish determinants of delayed Caesarean sections among pregnant women in Machakos County Referral Hospital.

Methodology
A Retrospective Descriptive study design was adopted. Systematic random sampling was used. Three hundred and seventy-one patient files for women who underwent emergency Caesarean Delivery (CD) from January to December 2019 were selected. A data abstraction tool was used to collect data. Descriptive statistics involved calculation of measures of central tendency, Chi-square test was used to establish associations with a significance level at $p \leq 0.05$.

Results and Discussion
The proportion of caesarean sections was at 25% and the mean class was 25-34 years with a standard deviation of $\pm$0. 755. The average DDI was 192.3 minutes and only 25/368 (7%) met the ideal DDI of 30 minutes. These findings compare with those of a study carried out in New Delhi India that revealed that the DDI was 89 minutes and above indicating that all the emergency CDs were delayed (Radhakrishnan et al., 2013)

Client-related factors did not affect the DDI significantly. These findings differ from previous studies in Nigeria and India that showed financial constraints and delayed consent were major contributors to delays in caesarean sections (Gupta et al., 2017; Km et al., 2018).
Hospital-related factors had a significant effect with Inadequate theatre space contributing highly to delay at 54.6% followed by blood investigations at 39.4% and significantly contributed to delay $p \leq 0.05$. The findings are incongruent with other studies that revealed institutional factors such as lack of

an operating table, lack of surgical materials and delay in laboratory investigations played a major in contributing to the delay (Kitaw et al., 2021).

Recommendations

Provision of more theatre space and priority for blood investigations for maternity cases would go a long way in reducing DDI. Further studies to highlight the impact of delayed DDI are also recommended.

Acknowledgements

I wish to acknowledge the Machakos Level 5 hospital for allowing me collect data in the facility.

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The "3C" Strategy for Team Development when Implementing Evidence-Based Practices in Healthcare Organisations

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Keywords
''3C'' strategy, Blended facilitation, Evidence-based practice, Healthcare organisations, Implementation science, Knowledge translation, Team development

Introduction
Evidence-based healthcare is essential for quality and cost-effective patient care (Clarke et al., 2021). Therefore, healthcare organisations should prioritise implementation projects for translation of evidence into practice. However, the implementation process is often complex since changes are required on multiple organisational levels and multiple stakeholders are involved (Dryden-Palmer et al., 2020; Heerschap et al., 2019). The use of theoretical approaches, including frameworks and models, is advised to navigate these complexities of implementation (Damschroder, 2020). Teamwork to drive and facilitate the implementation process is a key strategy for successful and sustainable implementation (Mamhidir et al., 2017; Smith et al., 2020). There are few studies explaining how these teams can be developed for evidence-based implementation in healthcare organisations. This paper provides an overview of the development of a strategy (referred to as the ''3C'' strategy) for team development as part of a larger theoretical framework [The Process, Adoption, Values, Engagement (PAVE framework)] to implement evidence-based wound care at South African nursing homes.

Methodology
This study used a three-phase multi-method design. The first phase entailed a Best-Fit Framework Synthesis (BFFS) (Booth & Carroll, 2015) to develop a list of elements for the framework. During a BFFS, an *a priori* framework is identified and then used deductively to analyse empirical studies [7]. Two systematic reviews were conducted. The first review focused on published papers since 1995 that reported theoretical approaches for knowledge translation in nursing homes were identified through a systematic search across seven electronic EBSCOhost databases. At least two of the authors independently screened the titles, abstracts, and full-text papers. The value of the theoretical approaches was appraised with the Theory Comparison and Selection Tool (T-CaST) (Birken et al., 2018). Analyses involved the deconstruction of the theoretical approaches and thematic analyses. The themes and sub-themes formed the *a priori* framework. During the second review, empirical studies reporting effective knowledge translation of evidence-based wound care interventions since 1994 were identified through a similar process to the first review. The methodological quality of the papers was appraised using the Johns Hopkins Evidence Appraisal Tool (Dearholt & Dang, n.d.). The narrative content of the primary

studies was deductively analysed to confirm the list of theoretical elements and new content was analysed inductively.
The second phase used an online workshop with 10 stakeholders with vested interests in the provision of wound care in nursing homes to contextualize the elements. Data was collected using live polls and facilitated discussions on the online platform Blackboard Collaborate (*Blackboard Incorporated, "Blackboard Collaborate,"* 2021). A draft framework was developed. During the third phase, the framework was adapted and validated among 11 experts across seven countries, through a two-round e-Delphi.

Results and Discussion

BFFS results: Five theoretical frameworks (from 63 records), and 15 empirical studies (from 1116 records) were identified. The main constructs relevant to team development included: 1) building trust relationships, 2) various stakeholder types, 3) team roles, and 4) securing support (management, financial and advisory). Stakeholder workshop results: The stakeholders confirmed the importance of building trust relationships, the researcher's role and securing management, financial and advisory support. An interprofessional approach was regarded as important but not always possible due to a lack of access to healthcare professionals. It was established that a core implementation team is preferred including the nurse manager and researcher, but that this team should expand and sub-divide if the need arises. The framework was developed to accommodate the preferences. Through the e-Delphi, consensus (≥0.8 agreement index) was achieved after two rounds on all items and the comprehensiveness, relevance, usability, transferability, and ease of use of the framework.

The "3C" strategy consists of three components as illustrated in Figure 1: C1) Core implementation team, C2) Consultation and partnership with experts and C3) Continuous agreement discussions with the core team and adopters. These components apply throughout the pre-implementation, implementation and evaluation phases of a project (illustrated from left to right in Figure 1). The brown block stipulates the main outcomes to be achieved through the "3C" strategy including a team that is engaged, committed and able to implement change. Furthermore, the team should have ownership of the intervention and be able to sustain it after withdrawal of external support. The diagonal line running across the pre-implementation and implementation phases depicts this ownership transition. Throughout the process, normative and relational restructuring will occur to establish a foundation for sustaining the evidence-based practice aligned with the Normalization Process Theory (May et al., 2022). The sustainment phase should include strategies for continued teamwork.

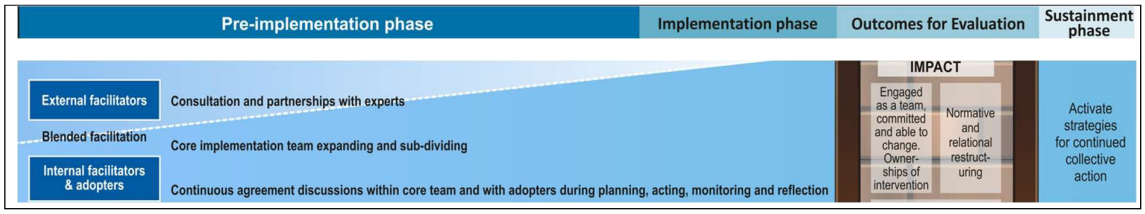

Figure 1. The 3C strategy for team development in the PAVE framework. © 2023 Author Name (hidden for peer review).

Conclusion

The "3C" strategy provides a structured approach to develop teams ensuring inclusivity to promote commitment to change, a continuously steered process and decision-making that is based on expert and practice-based knowledge. Through blended facilitation, the "3C" strategy aims to promote ownership of the intervention among the implementers to ensure sustainment of evidence-based practices. The "3C"

strategy can be relevant for team development in healthcare organisations other than the nursing home context. Experiential testing can further validate, adapt and delineate the "3C" strategy to specific contexts.

Acknowledgements

Funding was received from the University of the Free State, Postgraduate School Doctoral Bursaries for PhD tuition fees and the University of South Africa, Academic Qualification Improvement Programme to cover research expenses.

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Knowledge, Attitude and Practices on Travellers Diarrhoea among short-term Travellers to Kenya

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Keywords
Travel-related diseases, travellers' diarrhoea, short-term travellers, knowledge, attitudes, practices.

Introduction
Diarrhoea is one of the most common travel-related diseases (TRDs) with a global prevalence of 30–70% (Angelo et al., 2017; Heather, 2015). Traveller's diarrhoea (TD) is defined as having 3 or more loose stools over 24 hours and associated with cramps, nausea, vomiting, and urgency (Steffen, 2017). In Kenya, previous studies reported an incidence of 49.3% (Angst & Steffen, 1997), and a total diarrhoea attack rate of 54.3% (Steffen et al., 2004). While the etiology of TD is mainly bacterial (*Escherichia coli*, *Shigella*, *Campylobacter*, *Salmonella* species) or parasitic (*Giardia*, *Entamoeba*) (Steffen et al., 2015); in as many as 53% of cases no pathogen is isolated (Jiang et al., 2002). Though preventable, TD leads to huge economic impact from associated healthcare costs and interference with travel plans (Diemert, 2006). To develop an effective educational program, it is paramount to understand the knowledge gap, community's perceptions and willingness to change (Bennett, 1976). The aim of this study was therefore to assess the level of knowledge, attitudes and practices on TD among short-term travellers to Kenya and identify the risk factors for self-reported TRDs.

Methodology
A cross-sectional study was conducted through self-administered mobile- or paper-based surveys at Jomo Kenyatta International Airport (JKIA) in Nairobi. Inclusion criteria were based on; stay for >1 day and < 6 months, resident of an Asian or Western country, age ≥18 years, and ability to comprehend English. Western countries were defined as countries shaped by Western Christianity while Asian countries as those located in the Asia continent. We excluded those unable to speak English and any critically ill travellers. Eligible participants were purposively enrolled at international departure lounges, 24 hours a day by 4 trained research assistants. We surveyed 418 travellers over 26 days from 14th April to 10th May, 2023, with 397 included in the final analysis. Main outcome measures were knowledge scores and practice scores as displayed in Table 1. Data (hardcopy and digital) was collated onto an online database and analysis performed using STATA version 16. Descriptive statistics using frequencies and proportion were calculated and associations performed through Chi-square non-parametric tests (Phi, Cramer's V, and Kendall tau-b). The study received Ethical Approval from Kenyatta National Hospital/University of Nairobi (KNH/UoN) P850/12/2018), The Nairobi Hospital

(TNH-ERC/DMSR/RSE/001/22) and National Commission for Science, Technology & Innovation (NACOSTI/P/22/15097); and permissions obtained from the Ministry of Immigration, Kenya & Kenya Airports Authority/JKIA.

Results and Discussion

Participants were predominantly male 61.5% (243/395), less than 30 years of age 67.9% (267/393), of French, English, American, Dutch and German nationalities and formally-employed (white collar) 66.5% (237/394). In terms of knowledge, the most commonly cited symptoms of TD were stomach ache 19.1% (76/397), diarrhoea 18.9% (75/397) and fatigue 12.3% (49/397). The most common food items implicated in TD were tap water 49.6% (197/397), fruit salad 26.7% (106/397) and fish 25.2% (100/397). However, a significant number incorrectly mentioned foods less likely to cause TD such as boiled eggs 36% (139/397), canned food 43.8% (174/397) and beer 13.4% (53/397). Majority had an overall knowledge score of 1 (75/284), 2 (61/284) and 0 (44/284) with a mean of 2.56 (SEM=0.092).

A small number had previously visited Africa 16.7% (66/395). Further, 22.5% (88/391) believed travel-related vaccines were not essential while 11.3% (43/382) considered them unsafe. Although cholera vaccine was the most commonly received vaccine for TD, and though it is highly effective and its recombinant B sub-unit offers some protection against TD, *Vibrio cholerae* rarely causes TD (Ahmed et al., 2013; Diemert, 2006). Only 18.9% (74/392) spent more than 10 weeks planning for their trip but a majority 70.7% (280/396) sought travel health advice, mainly from the internet, general practitioner or family/friends. In a previous study in Mombasa, majority consulted a medical doctor and 10% from their travel agent [5]. The most frequented destinations were beach holidays 52.1% (207/397) and big towns 33.0% (131/397), and majority stayed in hotels 72.2% (285/395). A small proportion 1.52% (6/395) ate from street vendors while 94% (369/383) had high self-rating of handwashing practices. Only 17.7% (70/395) carried self-treatment drugs for TD. Majority had an overall practice score of 3 (76/284), 2 (61/284), and 4 (55/284) with a mean of 3.09 (SEM=0.076).

Table 1. Criteria for Knowledge and Practice scores

Category	Responses	Scores
	Nausea, stomach pain, stomach upset, abdominal pain	1
	Diarrhoea, loose stool, running stomach	2
Knowledge Scores	Tap water, milk, fruit salad, sushi, fish, fresh salads, ice	1
	Sought travel advice	1
	Advice obtained from: GP, travel medicine specialist, occupational health specialist	1
	Ate from street vendor (high risk)	-1
	Ate from private home (intermediate risk)	0
Practice Scores	Ate from expensive restaurant luxury hotel (low risk)	1

Only 10% (43/396) presented with a history of illness. The most common complaints were headache 5.3% (21/396), fever 4.5% (18/396), and stomach ache 3.5% (14/396). Incidence of TRDs was related to having been to Africa, staying in big towns and rural areas, staying in hotel, private home, practice score, and self-treatment, but unrelated to age, gender, knowledge score, handwashing, and duration of planning. From previous studies, prior travel, longer planning and seeking health advice were protective, while risks included environmental factors, camping, extremes of age, and genetics (Jiang et al., 2002; Steffen et al., 2015).

Conclusion

Despite relatively low levels of knowledge and precautionary measures among mostly younger travellers, there was low incidence of self-reported TRDs. This could arise from more informed travellers, and positive perceptions and uptake of vaccines. Future studies can be conducted across local health facilities on updated etiology of TD and its presentation.

Acknowledgements

Dr. Ruth Chunge, Centre for Tropical and Travel Medicine, Kenya contributed in review of study tools and piloting of the study at a travel clinic in Nairobi. David Gitonga, CEO Tourism Research Institute (TRI), Kenya and Betty Maranga assisted in design of the online survey, hosting the tool on the TRI website, obtaining approvals from JKIA, and recruitment and supervision of Research Assistants. The study was funded by International Society of Travel Medicine (2017/2018) and managed by KAVI-ICR/University of Nairobi Grant Office.

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Exploring the Experiences of Male Partners to Women Living with Cervical Cancer at Texas Cancer Center, Nairobi – Kenya; A Qualitative Study

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Keywords
Cervical cancer, male partners, psychosocial distress, role strain, altered sexual relationships, heavy economic burden, inadequate support, inadequate knowledge.

Introduction

Cancer is of great concern worldwide. By 2025, it is estimated that globally, there will be 20 million newly diagnosed cancer cases (Sung et al., 2021). Of the 270,000 cervical cancer-related mortalities that occurred in 2015, 90% of them were recorded in low-income and middle-income countries (LMIC) (Shrestha et al., 2018). It is documented that the mortality is 18 times higher compared to developed countries (Hull et al., 2020). In LMICs countries, cervical cancer is ranked second most common condition among women (Sung et al., 2021). As a chronic disease, cervical cancer necessitates long-term involvement of male caregivers or partners in the treatment journey of their spouses. There are psychological and emotional factors associated with having a spouse with cervical cancer, like fear of recurrence, fear of death, problems surrounding sexual relations and specifically intercourse, and challenges related to conceiving and early menopause (Osei Appiah et al., 2021).
A systematic review (Teskereci & Kulakaç, 2018) revealed that 59% of the caregivers to women with gynecological complications were men. The study concluded that carers suffer immense interference in their day-to-day lives including their sexual relations, roles, and responsibilities.

Limited or lack of knowledge among both patients and male partners on cervical cancer is a known barrier in the fight against cervical cancer (Binka et al., 2019). Men who assume the role of caregivers for their partners with cervical cancer encounter unique challenges and substantial adjustments across multiple facets of life. Despite this, there is a notable lack of extensive research on the experiences of male partners in caregiving roles, particularly within Sub Saharan Africa (Gosse et al., 2024). Therefore, this study aimed to explore the experiences of male partners providing care for women with cervical cancer in Nairobi, Kenya.

Methods

This was a qualitative study that employed a descriptive phenomenological design. Data saturation was arrived at after interviewing 16 respondents who had been purposively sampled. An interview guide and

a tape recorder were used to collect data. Thematic analysis was conducted. Ethical approval had been sought from ISERC, and NACOSTI, and consent from the male partners.

Results and Discussion

The majority of the respondents 8(53.3%) were aged 51-60 years, 11(73.3%) were married, 6 (40%) had partners who had been diagnosed with cancer in the last two years, 12 (76.9%) were Christian, 9 (60%) had attained primary education, and 8 (53.3%) were self-employed.

Based on our qualitative analysis, men had poor knowledge of the causes of cancer. The themes emanating from their experiences were intricate, the following seven themes were elicited: knowledge deficit, psychosocial distress, role strain, altered sexual relationships, heavy economic burden, inadequate support, and attitudes towards cervical cancer.

Table 1: Sociodemographic characteristics of the participants

Themes	**Subthemes**
Knowledge deficit	Information inaccessibility
	Vague details
Psychosocial distress	Reaction towards diagnosis, treatment and prognosis
	Concern regarding partner's wellbeing
	Social disruption
Attitudes towards cervical cancer	Male partner attitude
	Spiritual support
Support	Social support
	The role played by healthcare providers
	Family support
Economic burden	Increased financial demands
	Disruption of economic activities
Altered sexual relationships	Impaired sexual activities
Role transition	Multiple roles

Conclusions and recommendations

Inadequate knowledge of the causes of cervical cancer, social disruption in the lives of male caregivers, and role transitions among caregivers highlight the urgent need for comprehensive health education on the causes, prognosis, treatment, and care of the disease. There is also a critical need for care and support tailored to male partners caring for women with cervical cancer. Further research should explore issues such as dealing with masculinity and caregiving roles. Additionally, developing a framework of care specifically for males caring for partners with cervical cancer is essential.

Acknowledgements

I wish to acknowledge the Aga Khan University School of Nursing and Midwifery for funding this project. I also acknowledge Allan Muthiga my research Assistant and Professor Sheila Shaibu my mentor.

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A Scoping Review of Suicide Postvention for Staff and Student on University Campuses

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Keywords
Postvention, universities, suicide, bereavement, staff, students

Introduction
Globally, there has been an increasing concern over the mental health of university students due to the prevalence of mental disorders and suicide among this population (Auerbach et al., 2018; Bantjes et al., 2022)

The World Health Organization (World Health Organization, 2019) has identified suicide as the fourth leading cause of death among 15-29 year olds which is typically the age group of university students making this a cause for concern. Belonging to a minority group, poor socio-economic background, non-heteronormative sexual orientation, mental disorders and academic pressure have been identified as some of the risk factors for student suicide (Bantjes et al., 2022). Staff and students on university campuses are exposed to student deaths by suicide and therefore become "bereaved by suicide". Staff and students who have been bereaved by suicide may experience some negative impacts to their physical and mental well being over their life course such as depression and death by suicide (Kaur & Stedmon, 2022).

Postvention, (providing care and support for those bereaved by suicide), has been identified as a strategy for suicide prevention (World Health Organization, 2019). Postvention has been understood to promote recovery following suicide bereavement and to prevent prolonged impacts on grief and mental health (Andriessen, 2009). The objective of this abstract is to discuss the findings of a scoping review designed to determine what was known about suicide bereavement and postvention interventions for staff and students at universities.

Method
The Joanna Briggs Institute (JBI) guideline for scoping reviews was used to conduct the review (Peters et al., 2024). We systematically searched 12 electronic databases (PubMed, PsycINFO, MEDLINE, CINAHL, Africa-Wide Information, PsycARTICLES, Health Source: Nursing/Academic Edition, Academic Search Premier, SocINDEX via the EBSCOHOST platform) between September 2021 and June 2022. We manually examined the reference lists of included articles and consulted with specialist

librarians. The studies that met the inclusion criteria were assessed by two reviewers in an independent manner. Inclusion was restricted to studies that reported on suicide bereavement or postvention interventions of university staff and students and were published in English. Two independent reviewers carried out the screening in accordance with a three-step screening process for articles. Using a data extraction form, biographical information and study characteristics were extracted and subsequently synthesised.

Results and Discussion

The outcomes of our search strategy yielded 7691 records, of which 317 abstracts were subsequently screened. After evaluating the full texts of 29 articles, we selected 17 for the scoping review. The included studies were conducted in high-income nations (United States, Canada, United Kingdom). No postvention intervention studies conducted on university campuses were identified in the review. Predominantly descriptive quantitative or mixed methodology study designs were utilised. The key findings were discussed using the following themes: impact of suicide bereavement on staff and students at universities, institutional responses to suicide bereavement at universities and postvention interventions at universities. Sampling and data collection were heterogeneous processes.

Conclusion

Staff and students need support measures because of the distinctive characteristics of the university environment and the profound repercussions of suicide loss. Additional research is required to transition from descriptive to intervention-oriented studies, with a particular emphasis on universities situated in low-income and middle-income nations.

Acknowledgement

We would like to thank the two subject librarians from Stellenbosch University who assisted with the search strategy: Mrs Marleen Hendriksz (Faculty of Arts and Social Sciences) and Mrs Ingrid Van der Westhuizen (Faculty of Medicine and Health Sciences). Appreciation and thanks is also extended to Dr Elsie Breet as the secondary reviewer throughout the article screening and selection process and data extraction. We are grateful for Ms Zarina Syed, who was able to assist as an auditor for the quality assessment.

This work was made possible through funding by the South African Medical Research Council (SAMRC) through its Division of Research Capacity Development under the MCSP (awarded to JB) and the National Research Foundation (NRF) (Grant number 142143, awarded to SA).

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Exploring Contextual Adaptation of a Caregiver-led Training programme Delivered to Caregivers of Children with Cerebral Palsy in Rural Malawi.

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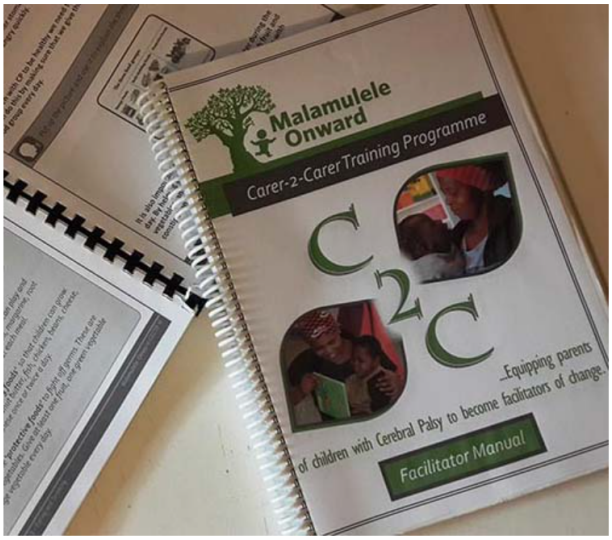
Keywords
Adaptation, rural context, training programme, caregiver-led, cerebral palsy

Introduction

Evidence regarding the value of engaging caregivers of children with disability as training facilitators is growing (K et al., 2023; Saloojee & Bezuidenhout, 2020; T et al., 2020). This is especially important in low- and middle-income countries, where the shortage of rehabilitation professionals is critical (Bright et al., 2018). This study aimed to explore stakeholders' perspectives on contextual adaptations necessary for implementing a caregiver-led training programme developed in South Africa to be used by caregivers of children with cerebral palsy in a rural setting in Malawi.

Method

Five focus group discussions (n=10), two dyadic interviews and 14 individual interviews were conducted during the feasibility trial of the Carer-to-Carer Training Programme developed by Malamulele Onward in South Africa described in Figure 1 (Saloojee & Bezuidenhout, 2020). The setting was a rural community in a district called Mangochi in the southern region of Malawi. Participants were caregivers of children with cerebral palsy, physiotherapists and community-based organisation representatives. Data were managed using Nvivo version 12 and analysed thematically.



Content

1. What is Cerebral Palsy (CP)
2. Looking at CP as a way of life
3. Getting active
4. Eating and drinking
5. Communication
6. Play
7. Cerebral Visual Impairment

Figure 1: The Malamulele Onward Carer-2-Carer Training Programme manual
Source: https://www.cpchildren.org/online-resources, Malamulele Onward © **2020**

Results

Four main themes emerged from the qualitative analysis as shown in Table 1.

Table 1: Themes developed from the qualitative data

Theme	Subtheme	Node
Conceptual linguistic translation of terminology to suit literacy levels	• Have comprehensive translations for CP subtypes • Have relatable descriptions for CP patterns • Revise translation for Visual Impairment	• Translation for vision is still needed • Subtype names are difficult • Translate pattern names in full • Meaningful phrases than just name
Repackaging content for consistency with local situations and guidelines	• Add an introductory section to childhood disabilities • Repackage the section on food groups	• Need more of hydrocephaly • More detail about epilepsy • We use 6 not 3 groups of food • Some children have multiple issues
Increase in programme delivery time to allow thorough understanding	• Give some modules more time • Give room for repetition to master skills	• Others were slow learners • Repeated practice was helpful • Feeding module has a lot • We took more time on the play module • Attention difficult for elderly
Integration of the programme into existing centre activities to ensure accessibility and sustainability	• Need to reduce the travel of caregivers • Need to blend programme into centre activities	• We struggled travelling • Weekly sessions can work • Once a week is ideal • Less costly without travel • Deliver alongside centre activities

The need for adaptations arose from several key factors: physical access to the centre, caregivers' literacy levels, language diversity, and the range of disabilities seen among children

in the community. These factors align with findings from other low-resource settings (Saloojee & Bezuidenhout, 2020; Szlamka et al., 2022; Zerihun et al., 2024)

Conclusion

This study underscores the crucial role of intervention stakeholders in offering valuable insights for adapting innovations to new contexts. We recommend early and ongoing collaboration with local stakeholders to identify specific contextual needs. Educational materials should be tailored to be culturally and linguistically appropriate. Furthermore, training programmes should have flexible structures to accommodate different literacy levels.

Acknowledgement

Thanks to Malamulele Onward for offering training resources, the Consortium for Advanced Research Training in Africa (CARTA) for funding and the Kamuzu University of Health Sciences Research Support Centre for support with data management, translation and analysis.

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Nursing Student's Perception of the Lecturers' Ability to Explain Bioscience Application to Practice and its Inclusion in the Undergraduate Nursing Programmer

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Keywords
Bioscience, nursing students, application, teaching, clinical practice

Introduction

The integration of bioscience knowledge into clinical nursing practice is fundamental for identifying and managing patient symptoms, resulting in positive outcomes (Barton et al., 2021; Craft et al., 2017; Logan & Angel, 2011). Mastery of this knowledge is critical for accurately conducting physiological assessments, prioritizing care, implementing clinical interventions. Likewise, the ability to evaluate the effectiveness of treatment is heavily dependent on an in-depth understanding of biosciences principles (Jensen et al., 2018; McVicar et al., 2015; Rafferty et al., 2023).

Literature illustrates that nursing students recognize the critical role of bioscience in developing their competence, confidence, enhancing patient care and delivering holistic evidence-based patient care that underpin safe practice (Barton et al., 2021; Fell et al., 2016; Taylor et al., 2015). However, (McVicar et al., 2015) highlighted several challenges related to teaching bioscience to nursing students. These include creating an optimal learning environment, organizing the course effectively, and providing appropriate support for students as they learn the fundamental principles of biosciences early in their curriculum. Furthermore, the biosciences in nurse education are frequently taught as distinct disciplines often by science lecturers. These may not have had exposure to the clinical setting and this lack of background can subsequently lead to the poor integration of bioscience theory into the clinical setting of students (Craft et al., 2017). This can cause educational issues concerning the relevance to nurse' professional practice (Jensen et al., 2018). And consequently, students perceive bioscience to be difficult and irrelevant given the way in which it is delivered (Craft et al., 2017). Therefore, this study seeks to investigate undergraduate nursing students' perceptions of the lecturers' ability to explain the application of bioscience to practice and inclusion in undergraduate nursing programme.

Method

The study utilised a quantitative research approach with a descriptive survey design. It was conducted at a tertiary institution in the Western Cape, South Africa. Simple random sampling strategy involved second-, third-, and fourth-year undergraduate nursing students (n=211). The data collection tool was a self-administered questionnaire which was adopted to suit the context of the study. Data were analysed using IBM Statistical Package for Social Sciences software version 25.0 (IBM SPSS-25). Descriptive statistics for all variables were performed as well as a Chi-squared test to describe the relationship among

the study variables. Quantitative content analysis was conducted for the open-ended questions

Results and Recommendation

Students' perception of the lecturer's ability to explain bioscience application to practice

Students rated the lecturers' ability to explain human biology 113 (53.55%) to be very good, physics 80 (38.28%) as good. Chemistry was rated as adequate by 73 student (34.93%), while pharmacology was rated as good by 73 students (35.27%) regarding the lecturer's ability to explain the application of bioscience theory to practice.

Reasons why lecturers succeeded in explaining the application of bioscience to practice.

Majority of responses (40) from students indicated that the lecturer's use of visuals, demonstrations and practical were reasons for them succeeding in explaining the application of bioscience theory to practice. This was followed by the lecturer's consistent integration, examples of real-life situations and their experience, knowledge and understanding.

Reasons why lecturers did not succeed in explaining the application of bioscience to practice.

Students expressed mixed opinions about their lecturers. While some felt the lecturers performed well, others highlighted several issues. These included a lack of theory-to-practice application, inadequate clinical knowledge, illogical course planning, poor scheduling, language barriers, and unaccommodating behaviour. Some students found the lecturers disinterested and overly reliant on PowerPoint slides.

Students' perception of reasons for inclusion of bioscience subjects in a 4-year undergraduate nursing programme.

Students' responses revealed the following perceptions: 127 (89.43%) indicated an understanding of bioscience knowledge; 37 (26.05%) reflected an understanding of the rationale for specific nursing actions; 16 (11.26%) felt they could identify abnormalities and apply bioscience concepts to nursing practice; and 22 (15.49%) reported for improvements in safe practice and understanding technological advancements in nursing practice.

Discussion

The students' perception of the lecturers' ability to explain the application of Human biology and Pharmacology ranged between adequate to good. Physics and Chemistry was rated between poor to good similar findings were noted in the study of (Betty & Una, 2016). This raises questions about lecturers' ability to contextualize these subjects for nursing students. The students' responses of why lecturers did not succeed in explaining the application of bioscience to practice could be seen as factors that may contribute to the students' academic performance in biosciences as similar problems were reported in literature (Mhlongo & Masango, 2020; Pinehas et al., 2017). In two studies, poor teaching strategies, lack of after-class sessions, shorter study periods for examinations, and language barriers were identified as factors contributing to students' academic challenges, additionally, weak student-teacher relationships and communication issues negatively impacted academic performance (Mhlongo & Masango, 2020; Pinehas et al., 2017).These issues may contribute to students struggling to grasp complex concepts, limited time for clarification, and surface-level learning. Students in the present study highlighted the importance of basic bioscience knowledge in understanding patient care, physiology, and management of disorders. Similarly, respondents in the study of (Betty & Una, 2016) study acknowledged the value of biosciences but couldn't provide specific critical incidents where this knowledge directly applied.

Conclusion

The study explored students' perceptions of lecturers' ability to teach the application of bioscience in nursing practice. Findings highlight the need for increased emphasis on clinical relevance and better integration of bioscience teaching into nursing practice.

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Development and Validation of a Self-Management Intervention for Adolescent Living with HIV in Namibia

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Keywords
Adolescent, Development, Human Immunodeficiency Virus, Intervention, Self-management, Validation

Introduction
The marking of the adolescence stage is by increased vulnerability to risky behaviours and poor health outcomes (Shayo & Kalomo, 2019). The World Health Organization (WHO) defines an adolescent as an individual aged 10-19 years of age (World Health Organization, 2013). Adolescents living with HIV (ALWH) are poorly retained in care, with poor adherence to treatment, low viral suppression rates and increased mortality and morbidity rates hence the evident disparities in HIV care outcomes (Mulawa et al., 2023). To enable them to be effectively involved in their care, treatment and achieve successful health outcome, they need a self-management intervention which align with their identified HIV self-management challenges, needs and priorities. There are several self-management functions in a set of psychological sub-functions. One such function is for individuals to familiarise themselves with ways to monitor their health behaviours, the conditions in which they take place, and to utilise proximal goals to sway themselves and direct their behaviour. Although some evidence of self-management interventions for ALWH in Africa exist, it is not clear what methods and processes were used in designing and validating those interventions. This paper describes the methods and process of development and validation of a self-management intervention for adolescents living with HIV, which may be used as a guide for others developing health interventions.

Methodology
We used a mixed method design, employing both qualitative and quantitative approaches. The study was conducted at five (5) selected Anti-Retroviral Clinics in an urban and semi-urban district, north-eastern region, Namibia. The district is the second most populated district in Namibia besides Windhoek, the capital city, it has the fastest growing pace of urbanization and has a high HIV prevalence (21.3%) in the country (NAMPHIA, 2017). The five clinics cater for majority of adolescents in the district.

The development process was guided by the three phased multimethod framework:

1. review of evidence and need assessment. Here, the research team conducted a scoping literature review to determine the nature of available interventions for ALWH aimed at enhancing their

knowledge on HIV and ART treatment, determine the content of these interventions and identify best practices. Secondly, we conducted a qualitative research to determine the needs, views and experiences of ALWH. The interviews further aimed to identify type of support ALWH need from an intervention to self-manage their health condition (Mukerenge & Schomollgruber, 2023)(Mukerenge & Schmollgruber, 2023).

2. Co-designing the prototype- with the use of Social Cognitive Theory, information from the preparatory research, we developed a novel Self-management intervention for ALWH. The ALWH supported the translation of the theoretical intervention content in to a working prototype.
3. Content validation, refining and planning for future use- we showcased the prototype intervention to the stakeholders to obtain their views and feedback. The current paper only describes the methods and results of phase two and three of this framework.

Our study participants were seven (7) adolescents living with HIV, two (2) nurse practitioners and one (1) medical doctor. In collaboration with the adolescents living with HIV, we designed a prototype of the self-management intervention, informed by the results of the preparatory research and the Social Cognitive Theory. We incorporated the findings of our preparatory research to develop the content of the prototype. We presented the prototype of the intervention to ten (10) purposively sampled local stakeholders for content validation in two, 4 hour long presentations and group discussions in October 2022. We used a focus group schedule to guide the discussions and participants were also asked to rate the session content for relevancy using a four (4) point Likert scale validation tool. The quantitative data from this step was summarised and analysed quantitatively whilst the qualitative data was analysed using content analysis.

Results and Discussion:

A three phased framework resulted in the development of a self-management intervention for ALWH. The first phased identified needs and concerns of adolescents on self-management. Descriptive findings were extracted from both data sets and key findings from each category were triangulated including their implications for content in the self-management intervention. They were reviewed and refined by the whole team through discussion with agreement on the four (4) matrix overarching categories used to make concluding statements, namely understanding HIV (including HIV disclosure); Understanding Anti-Retroviral treatment; Making sexual decisions and healthy relationships; Developing, practicing good communication skills and living positively. Based on this, a prototype was developed with a goal to improve adolescents' knowledge on self-management of HIV. We presented it to participants in a focus group discussion.

The participants (n=10) included ALWH (n=7) and health care professionals (n=3). They engaged in discussions to validate the content of the intervention, evaluate the quality and rate it for relevancy. They co-produced suggestions for content modification, refinement and identified content that was not relevant to the adolescents. They also identified concepts which were not clear and suggested simplification of such. Finally, discussed and made suggestions on the delivery of the intervention. Findings from the verification exercise showed that majority of the of the module contents were very relevant and needed no modification, and only a few required minor alterations. Our findings are consistent with those of a previous research which found content of this nature is appealing adolescents (Widman et al., 2020) and appropriate to individuals living with HIV at any stage of their treatment journey (Chory et al., 2021). A six (6) session face to face self-management intervention was developed to be delivered by health care providers at Anti-Retroviral Treatment clinics for adolescents' self-management of HIV.

Conclusion

A three phased framework was utilised to design the intervention. These phases were necessary as each phase sequentially fed in to another. The use of a three-phased framework resulted in a desirable novel self- management intervention content and resources that participants have not previously seen. This method is effective for use in designing and validating a face to face self-management intervention of ALWH based on their needs and preferences. The rigorous process of developing and validating the intervention does not underscore the need for testing this intervention for effectiveness.

Acknowledgements:

The authors thank all adolescents and health care providers at the Anti-Retroviral clinics where the data was collected for their contribution and support

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Antenatal Attendees' Perception on Prevention of Mother-to-Child Transmission of Human Immunodeficiency Virus (HIV) Services in the Central Region of Ghana

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Keywords
Antenatal attendees, Human immunodeficiency virus, Perceptions and Prevention of mother-to-child transmission

Introduction

The Prevention of Mother-To-Child Transmission (PMTCT) of HIV services is a critical intervention designed to prevent the transmission of HIV from HIV-positive mothers to their unborn children during pregnancy, delivery, and breastfeeding (World Health Organization (WHO), 2021). Globally, the HIV pandemic continues to escalate, with approximately five million new infections annually(UNAIDS, 2022b). While initially dominated by men, the epidemic has increasingly affected women, particularly in sub-Saharan Africa, where women comprise 55% of adults living with HIV (UNAIDS, 2022a). In Ghana, the HIV prevalence is estimated at 1.7%, with a significant proportion of these infections occurring among women of childbearing age (Ghana AIDS Commission, 2022). Despite the presence of PMTCT services in Ghana, the rate of Mother-To- Child Transmission (MTCT) of HIV remains troublingly high, contributing to avoidable child deaths due to HIV/AIDS (Ghana Health Service, 2021). This study aims to explore the perceptions of antenatal attendees regarding PMTCT services in district hospitals within the central region of Ghana, as these perceptions significantly impact the utilisation and effectiveness of these services.

Methodology

A descriptive cross-sectional study with a quantitative approach was conducted among antenatal attendees aged 15 to 49 years at 11 district hospitals in the Central Region of Ghana. A total of 448 participants were selected using a convenience sampling method. Data were gathered through a structured questionnaire. The data were processed and analysed using the Statistical Package for Social Sciences (SPSS) version 25. Both descriptive and inferential statistics were employed in the analysis, and ANOVA was used to evaluate the statistical significance of differences in perceptions, beliefs, and views among antenatal attendees across three gestational age groups.

Results and Discussion:

A total of 448 antenatal attendees were included in the study. Two hundred and nineteen (48.9%) perceived receiving poor care from midwives when tested positive, 318 (71%) admitted that they fear stigmatization associated with PMTCT of HIV services, 224 (50%) of

them admitted that distance to the ANCs was a bother to them and 258 (57.6%) were uncomfortable to use condom for HIV prevention. Anova test reported statistically as perception [F (degree of freedom of the groups) = F-statistic 8.957; p-value = 0.001: $p<0.05$) beliefs, [F (degree of freedom of the groups) = F-statistic 3.138; p-value = 0.025: $p<0.05$) and views, [F (degree of freedom of the groups) = F- statistic 3.287; p-value = 0.021: $p<0.05$).

Table 1:ANOVA on perceptions on PMTCT services and gestation age of antenatal attendees

Perceptions	Statistics	Sum of squares	Df	Mean square	F	Sig.
Perceptions	Between groups	32.283	2	10.761	8.957	0.001
	Within groups	533.396	445	1.201		
	Total	565.679	447			
Beliefs	Between groups	3.886	2	1.295	3.138	0.025
	Within groups	183.255	445	0.413		
	Total	187.141	447			
Views	Between groups	15.119	2	5.040	3.287	0.021
	Within groups	680.825	445	1.533		
	Total	695.944	447			

Source: Field survey (2020)

Conclusion

The antenatal attendees generally had poor perceptions towards the services, hence, affecting their participation in the services available. Thus, they had the perceptions of receiving poor care from ANC midwives, feared experiencing stigma when tested positive, hospitals located far from their homes and discomfort with the use of condoms to prevent further transmissions and complications. Also, the advancement in gestational age improves the antenatal attendees' perception on PMTCT of HIV services.

Acknowledgements:

The authors would like to thank the Central Regional Health Directorate of Ghana, the selected district hospitals in the Central Region of Ghana and all the individuals who supported the project, as well as the respondents who provided valuable information and other health care professionals who assisted in the data collection processes.

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"They knew what I was Studying!" Impact of a Parent-child Focused Sexual and Reproductive Health Intervention in Western Kenya

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Keywords
Adolescent sexual and reproductive health, family planning, health communication, intervention

Introduction
In western Kenya, the median age at first intercourse is 17 years and about one in three (29%) of adolescents ages 15-19 have already begun childbearing (Kenya National Bureau of Statistics et al., 2015). Misconceptions around contraception contribute to low contraceptive use in Kenya (Ochako et al., 2015); notably, almost 35% of unmarried, sexually active girls ages 15-19 report unmet contraceptive needs nationally (Kenya National Bureau of Statistics et al., 2023). Early sexual debut is associated with challenging sexual and reproductive health (SRH) outcomes throughout life, including early pregnancy (Maina et al., 2021), and early pregnancy is associated with cultural norms and traditions around early marriage, gender dynamics, and stigma related to premarital sex (Yakubu & Salisu, 2018). Parent-adolescent communication on SRH is often hindered by sociocultural norms (Nyathi et al., 2020); however, supportive family relationships can be protective for adolescent SRH (Chung et al., 2018). *Stepping Up!* is a parent-child focused SRH intervention that aims to delay childbearing among adolescent women in western Kenya by delaying sexual initiation and increasing family planning use. The *Stepping Up!* program adapted two evidence-based curricula—*Stepping Stones* (Welbourn et al., 2016) (for youth) and *Families Matter!* (Miller et al., 2013) (for parents) to address SRH education, gender equity, communication skills, and SRH stigma reduction. This study aims to explore the impact of *Stepping Up!* on parents and their children.

Methodology
This study was conducted in 10 randomly selected villages located in two counties in western Kenya—Kakamega (n=6 villages) and Uasin Gishu (n=4 villages). The *Stepping Up!* curricula were implemented simultaneously from November 2022 to March 2023. Following implementation, 10 focus group discussions (FGDs) were conducted in August 2023 with 31 adolescents (15-18 years), 17 parents/guardians, and 14 community facilitators. Youth FGD respondents had attended at least 10 program sessions, parents had attended at least five sessions, and all community facilitators participated. FGDs were audio recorded with consent, transcribed verbatim, and translated into English. A thematic codebook was developed based on the FGD guide and a review of transcripts. A qualitative intercoder reliability process was conducted to assure consensus of code application before analysis. Transcripts were thematically coded using Dedoose, after which code summaries were developed to identify the impact of the parent-child focused SRH intervention.

Results and Discussion

The positive impact of this parent-child program emerged from three major thematic areas: The *Stepping Up!* Program Experience, Parent-Child Relationships, and Parent-Child Communication. Girls and boys (15-18 years) from both counties were happy to be engaged in a program in which their parents were learning the same content, and they had an opportunity to interact with their parents freely. One boy from Kakamega County indicated, "*I felt good because the things [my parents] learned they would explain them to me and* ***they knew what I was studying,***" while a girl from Uasin Gishu County echoed this perspective saying, "*It has helped me gain confidence because* ***they were also being taught the same thing as us***."

Engaging in a program with their children helped parents understand adolescent issues and encouraged them to approach their children with friendliness, creating a good relationship between them. Parents learned more about supervising and monitoring their children's movements to support their safety. The program also enhanced parents' knowledge and self-confidence in discussing SRH issues with their children. They learned that they can best support their children by listening to them, communicating with them about diverse issues, and discussing how they can overcome their challenges, To these points, one parent shared:

> *To the parent,* ***you are the first teacher to your child.*** *When you see the child is growing up to a grown up, you call the child a little bit to the table or under a shade [and] you start talking with the child.* ***If you get used to each other the child starts to ask you a question and you also ask the child that will help so much when the child continues with growth.*** *It gives the child a successful life in future* [Parent of youth ages 15-18, Kakamega County].

Before the *Stepping Up!* Project, communication between parents and their children was limited. Parents were not open to discuss SRH with their children, and youth were fearful to approach their parents about SRH and other issues they faced. Both parents and youths reported that their relationships with one another were stronger, and they were more confident talking about sex compared to before the intervention when they were afraid to discuss sex and sexuality—topics that were considered taboo before the program. Young people felt more capable of expressing themselves freely and without shame when communicating about SRH issues. Additionally, they learned how to approach and communicate with their parents in a more respectful manner. In Kakamega County one boy reported, *"For me* ***the communication with my parents is good because now we create time with my parent****, my mother, we usually talk on Thursday, we sit down with her,* ***talk about my challenges and solve them.****"* Meanwhile a parent from Uasin Gishu County reflected on this transformation of communication saying:

> I *think****, things have changed because now children and parents can talk [openly about] these things when they are together.*** *So now the things of fear came out; now, everyone has no fear. They were sharing openly because, most of us were staying in the stable [i.e., in the dark]. They gave everyone freedom to talk about those things. ...So, [now] it's a normal thing. It's not what it was* [Parent of youth ages 15-18, Uasin Gishu County].

Conclusion

This study demonstrates that the *Stepping Up!* program improved parent-child communication dynamics and suggests that SRH interventions in western Kenya should engage both adolescents and their parents to build confidence to discuss SRH issues.

Acknowledgements

This project was made possible through the support of a grant from the John Templeton Foundation. The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the John Templeton Foundation.

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Mental Health Knowledge of Nurses Working at Primary Health Care Facilities in The Western Cape

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Keywords
Mental health knowledge, mental disorders, nurses, primary health care

Introduction

Mental disorders contribute to the burden of disease worldwide (Meyer et al., 2019). In South Africa, integrating mental health services into primary health care (PHC) aims to reduce this burden (Meyer et al., 2019). However, professional stigma towards people with mental disorders hinder them from seeking professional help. This professional stigma might result from a lack of mental health knowledge (Yin et al., 2020) and specifically a lack of knowledge about mental disorders. In South Africa, there is a lack of studies that investigated PHC nurses' levels of knowledge of mental disorders. This study aimed to assess primary health care nurses' mental health knowledge, specifically on mental disorders, in the Western Cape Province

Methodology

A quantitative descriptive survey was conducted. The population consisted of 641 PHC nurses (including registered nurses, enrolled nurses and enrolled nursing assistants) permanently employed at 31 PHC facilities in Cape Town Metropole. The Mental Health Literacy Scale was adopted to measure PHC nurses' knowledge of mental disorders. A self-administered questionnaire consisting of eight questions related to socio-demographic characteristics and twenty closed-ended questions with a 3-point Likert scale ('disagree', 'uncertain', 'agree') and associated with knowledge of mental disorders was used to collect the data. This questionnaire was pre-tested with 10 PHC nurses and the Cronbach's alpha value was 0. 80. Data were collected from December 2019 to January 2020 from a simple random sample size of 246 nurses. All ethical considerations were applied. Descriptive statistics and Chi-square tests were used to analyse the data. The points obtained for each of the twenty questions were summed and converted to a percentage. The Bloom's cut-off point of 80% (16/20) was used to determine the levels of knowledge, indicating that the respondents who scored ≥ 80% had sufficient levels of knowledge.

Results and Discussion

Registered nurses were the majority (140, 59.8%) of the 234 respondents followed by enrolled nursing assistants (50, 21.4%) and enrolled nurses (44, 18.8%). Nearly 60% (139, 59.4%) of the respondents scored ≥ 80%, thus they had sufficient levels of knowledge while 95 (40.6%) had insufficient levels of knowledge. Most of the respondents had experience of caring for people with mental disorders (199,

85.0%). These respondents had higher knowledge scores than those who did not have experience of caring for people with mental disorders (16.1 vs 13.0/20, p<.001), indicating that exposure to people with mental disorders contributed to their knowledge, supported by the study from Kolb, Liu & Jackman (2023). Registered nurse respondents (104/140, 74.3%) had the highest proportion with scores ≥ 80% compared to enrolled nurses (18/44, 40.9%) and enrolled nursing assistants (17/50, 34.0%). These findings confirmed that having some mental health training was associated with higher levels of knowledge, also supported by the study from Kolb et al. (Kolb et al., 2023). Most of the respondents were knowledgeable on common signs and symptoms of mental disorders, such as depressive symptoms (221, 94.4 %), bipolar disorder (217, 92.7%), schizophrenia (213, 91.0%) and anxiety disorders (209, 89.3%).

Conclusion

This study showed that nurses' mental health training and their experience of caring for people with mental disorders contributed to their mental health knowledge.

Acknowledgements

The authors would like to thank Dr. M. O'Connor for permission to modify and use the "Mental Health Literacy Scale" (MHLS).

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Health Policy Initiative, Finance and Outcomes in Selected African Countries: What Lessons Do We Unlock?

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Keywords
Health system, Immunization, health financing, health policy, region, & outcome

Introduction
The widening reports that significant numbers of people are impoverished by health expenses every year, while several still struggles to fulfil their basic healthcare needs, is gradually challenging. Moreover, it is necessary to verify the level of variations between levels of performance of countries' health policies, both in financing approach and outcomes and in the result achieved. Interestingly, government involvement through its policies program has deliberately outlined how to improve health outcomes especially as it concerns its area of regulatory behavior of institutions within the spectrum of public domain, and allocative program across fiscal lines of population health yet this has been unreached.

While the burden of catastrophic health expenditures remains substantial in Sub-Saharan Africa (SSA) countries thereby drawing attention to the health financing approach in the region. At the macro level, investment in health and health infrastructure is still inadequate and expected to improve health conditions and health outcomes when significant research evidence demonstrated that financing healthcare in sub-Saharan Africa (SSA) is characterized by high levels of out-of-pocket (OOP) payments.

Despite significant progress in global interventions toward the region's healthcare sector and public sector response, several studies have demonstrated a huge challenge within the SSA countries' healthcare system, which may not necessarily be policy issues. This we also understood in the studies done by (Bangura et al., 2020; Barrow et al., 2023; Bobo et al., 2022; Mbonigaba et al., 2021) and (John et al., 2014)

Methodology
The theoretical framework and analytical design for this study are built around the theoretical explanation provided by Wagner's theory of public finance and the Health Promotion Model developed by Pender (1982) which provides bases for financing approaches on healthcare goods and infrastructures, and preventative health measures that could be adopted into global health model for

promoting well-being and healthy lifestyles. As such the theory provides a more robust theoretical framework for this study.

It is on this basis that this theory provides a connection to the panel estimation techniques. The analysis of panel or longitudinal data is one of the most active and innovative econometrics approaches, as it provides a rich environment for cross-sectional estimation across panels based on estimation techniques and theoretical results to estimate the level at which both Health Policy Initiatives and Financing Measures Impact on Health Outcomes among selected sub-Saharan African Countries under the estimation model below;

$$u5morta_{it} = \alpha_0 + \delta_1 hdi_{it} + \delta_2 lncuhxpgdp_{it} + \delta_3 lndgovhxp_{it} + \delta_4 lndprhxppc_{it} + \delta_5 lnoop_{it} + \delta_6 immbcg_{it} + \delta_7 immdpt_{it} + \delta_8 measles_{it} + \delta_9 immpol3_{it} + \delta_{10} i.SSA_{it} + \theta_1 + \phi_{it}$$

Results and Discussion

Table 4.1: Panel Random Effects of the level at which both Health Policy Initiatives and Financing Measures Impact on Health Outcomes among selected sub-Saharan African Countries.

u5morta	Coef.	Std. Err.	z	P>|z|
hdi	-392.6154	19.26055	-20.38	0.000
lncuhxpgdp	9.398294	3.333255	2.82	0.005
lndgovhxp	.4721765	1.572433	0.30	0.764
lndprhxppc	-12.15702	6.481705	-1.88	0.061
lnexhxppc	-4.09329	.9235005	-4.43	0.000
lnoop	17.24212	5.720001	3.01	0.003
immbcg	-.1022847	.102412	-1.00	0.318
immdpt	.0121054	.1351349	0.09	0.929
measles	.2246356	.1089332	2.06	0.039
immpol3	-.5205308	.0926462	-5.62	0.000
id	Base Category: Egypt			
Nigeria	27.56303	6.061747	4.55	0.000
South Africa	45.38929	10.6333	4.27	0.000
Algeria	.8735068	4.268542	0.20	0.838
Ethiopia	-38.78529	6.277779	-6.18	0.000
Morocco	-24.75015	2.820646	-8.77	0.000
Kenya	-6.270095	4.86464	-1.29	0.197
Angola	24.72559	6.032109	4.10	0.000
Tanzania	-13.44651	5.633075	-2.39	0.017
Cote d'Ivoire	10.26167	5.364129	1.91	0.056
_cons	297.4609	12.61499	23.58	0.000
sigma_u	25.40556			
sigma_e	6.6764427			
rho	.93540034	(fraction of variance due to u_i)		

Source: authors' estimation output 2024

Conclusion

Therefore, among the Ten countries selected based on the level of economic growth in Africa, we could see that more is still yet to be achieved despite the level of health policies. As both Algeria and Tanzania are still out of reach. This also reveals the level of healthcare policy implementation among countries in the region. The Need to pay serious attention to HDI is necessary considering its implication in reducing u-5 mortality as depicted in the results. External Health expenditure has continued to play a remarkable impact on human health in the region through global partnerships on certain health promotions in the last few years and should be sustained as shown in the result. While Polio has continued to decrease u-5 mortality in the region, measles is speeding up as depicted in the result. We could also see that OOP is not helping out considering that the population that engages in the practice has few contact at public health facilities. Countries like Ethiopia, Morocco, and Tanzania have decreased rates of u-5 mortality when compared to countries like Nigeria, South Africa, Angola, and Cote d'Ivoire.

Acknowledgements

1. Dr. Henry T. Asogwa for sourcing the data and the analysis
2. Prof. Uju R. Ezenekwe for literature engagement.
3. Dr. Amakom Uzochukwu for the estimation modeling
4. Prof. Ezebuilo, R. Ukwueze for estimation
5. Dr. Boniface D. Umoh for desk review
6. Dr. Kelechi C. Iwuamadi for the desk review
7. World Bank Development Indicator for allowing us access to the data used for the analysis.

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Is it Fair to Limit Access to Free Human Papillomavirus Vaccinations to Only Girls in Public Schools in South Africa?

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Keywords
Human Papillomavirus, HPV vaccination, gender-neutral HPV vaccination, adolescents, ethical considerations, Kantian, utilitarianism, South Africa

Introduction
Gender-neutral Human Papillomavirus (HPV) vaccination programs, covering girls and boys, are necessary to combat the global rise in HPV-related cancers and escalating treatment costs. HPV vaccination is the primary preventative intervention for both men and women (World Health Organization, 2024). In South Africa, it is freely available to adolescent girls in public schools, excluding girls in private schools and boys. This exclusion deprives them of the benefits of free HPV vaccination, potentially exposing them to a greater risk of cancer, and incurring more costs to society in the end. We applied Kantian ethics and rule utilitarianism to evaluate and argue that the current South African school-based HPV program is unfair and morally unjustified in limiting free access to HPV vaccination to only girls in public schools. By examining Kant's Formulas of Humanity and Universal Law, we evaluated the ethical dimensions of the policy and revealed significant shortcomings in terms of equality, autonomy, and universality.

Additionally, we demonstrate that a policy excluding certain groups based on gender and socio-economic status is inconsistent with the principles of rule utilitarianism, as it fails to maximise overall well-being, perpetuates inequalities, hinders optimal vaccine coverage, and overlooks the potential benefits of gender-neutral vaccinations. We also address potential counterarguments that proponents of the current policy might present from both a Kantian and a utilitarian perspective. Ultimately, we advocate for a more just and ethical approach, recommending a revision of the HPV vaccination policy to better align with Kantian and utilitarian principles.

Methodology
We employed normative bioethical inquiry to answer the question: "*Is it fair and morally justified to exclude eligible private school girls and boys from a free national school-based HPV program?*" The hypothesis posited is that there should be universal access to free HPV vaccinations in South Africa. We applied philosophical research methods, including library and desktop research, to gather literature for defining and clarifying key concepts, critiquing assumptions, and formulating reasonable interpretations. The traditional literature review on ethical arguments surrounding gender-neutral HPV

vaccination employed a narrative approach, synthesising and analysing scholarly works to gain a comprehensive understanding of the ethical issues involved. Sources include peer-reviewed articles, books, legislation, and other relevant publications in English. Searches were conducted using databases like PubMed, JSTOR, and Google Scholar with keywords related to HPV vaccination ethics. Hand-searching of references ensured comprehensive coverage, focusing on identifying recurring themes and categorising diverse perspectives on the ethics of gender-neutral HPV vaccination. Non- English publications were excluded.

Results and Discussion

In applying Kant's Formula of Humanity—"*Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only*" (J. Rachels and S. Rachels, 2019)—we argue that vaccinating adolescent girls in public schools treats them as a means to an end, disregarding their individual agency and autonomy, as they are used to protect unvaccinated girls and boys through herd immunity. Furthermore, the existing school-based HPV vaccination program limits the freedom of parents and children to make informed health decisions by imposing a financial burden on those without access to free vaccinations. Additionally, applying Kant's Formula of Universal Law—"*Act only according to that maxim by which you can at the same time will that it should become a universal law*" (J. Rachels and S. Rachels, 2019)—we contend that universalising the maxim that only adolescent girls in public schools should receive free HPV vaccinations inherently discriminates against girls attending private schools and boys.

Kantian ethics, grounded in rationality and consistency, would deem this maxim incompatible with the principle of universalisability. Moreover, a policy that excludes certain groups based on gender and socio-economic status is inconsistent with the principles of rule utilitarianism, as it fails to maximise overall well-being, perpetuates inequalities, hinders optimal vaccine coverage, and overlooks the potential benefits of gender-neutral vaccination. Rule utilitarianism emphasises the importance of rules and policies that promote equality, prevent discrimination, and ensure equitable access to healthcare services to maximise the overall well-being of the population (Savulescu et al., 2020). While counterarguments exist against implementing free gender-neutral HPV vaccination for both girls and boys, significant ethical concerns arise. Evaluating the selective vaccination of girls only in public schools must consider public health objectives, ethical considerations, and the impact on both genders. This assessment should extend beyond immediate cost-effectiveness to include long-term health outcomes and societal equity.

Conclusion

A free gender-neutral HPV vaccination program could significantly reduce HPV-related cancers in South Africa, particularly cervical cancer, and ensure fair and equitable distribution of vaccine benefits. Policy recommendations should focus on achieving fair access and comprehensive coverage. This involves implementing free school-based HPV vaccination programs in both public and private schools, targeting both genders and emphasising the importance of HPV vaccination for both boys and girls.

Acknowledgements

The authors are grateful to the reviewers for their insightful suggestions and comments.

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3-Delays Model Applied to Sepsis Care Seeking and Provision in a Private Hospital in Lagos-Nigeria

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Keywords
Sepsis, access to healthcare, 3-delays model, clinical practice guidelines, health insurance, emergency care.

Introduction
Sepsis is a life-threatening systemic syndrome and a leading cause of morbidity and mortality in sub-Saharan Africa (Morton et al., 2018). Despite progress in sepsis outcomes in high-income countries, low and middle-income countries still experience disproportionate deaths from sepsis (Lewis et al., 2019). In Nigeria, factors contributing to poor outcomes include poorly resourced emergency departments, lack of trained emergency care specialists, patients' delays in care seeking, high cost of emergency care, and poor health insurance coverage (Nwankwor et al., 2019; Onyedibe et al., 2012). Hence, an organised emergency response hinged on early recognition and institution of resuscitative care and sepsis bundles is critical to improving sepsis outcomes (Kim & Park, 2019). In this study, we explored the barriers patients and clinicians face in treating sepsis using the 3-delays model. This paper presents preliminary results from the discussions held with clinicians.

Methodology
This was a qualitative exploratory study involving discussions with physicians and in-depth interviews with patients at a private hospital in Lagos, Nigeria. Fifteen (15) clinicians were recruited from the emergency and outpatient departments via purposive sampling. Discussions were held in dyads/triads due to staffing challenges and consideration for the availability of the clinicians. Data analysis through deductive, reflexive thematic analysis is currently ongoing.

Results and Discussion
Delays in accessing care typically occur at three critical levels: Delay 1 (identifying the need for care), Delay 2 (gaining access to healthcare after recognizing the need), and Delay 3 (challenges with receiving care at the healthcare facility) (Papali et al., 2015). The themes identified from the clinician interviews centred primarily around Delay 1 and Delay 3. The first subtheme under Delay 1 pertains to financial

factors. Clinicians observed that individuals with health insurance tend to seek care earlier, as they do not have to worry about the financial burden of the necessary treatment.

> *"Well, yes, some of them come early, especially those that are covered by HMO. They come early. Immediately they see fever, they've come so I would say some patients present early".*

Patients' care-seeking behaviours were said to be influenced by their perception of the severity of the illness. With many opting for self-medication until the illness became unbearable. A clinician remarked:

> *"Well, a lot of them don't (come early) except it is life-threatening and they feel like they cannot survive again... But if it has not gotten to that point a lot of them still prefer to sit at home and… self-medicate"*

The clinicians noted that the majority of their patients come from a lower socioeconomic class often limiting their ability to afford the necessary medical investigations. One clinician remarked,

> *"We get more of the lower class because some of them are not able to afford the test investigations"*

This financial constraint significantly influences the clinicians' decisions regarding patient care. A clinician commented:

> *"You know apart from when we see health insurance patients when we are convinced that patients would get the test done, if we are seeing private patients, you want to just … do what they can afford … that hurriedly gives you an idea of what is going on and you start your treatment."*

The attitudes of other service providers within the hospital was recognised as another factor shown to influence definitive care delivery. One of the clinicians stated:

> *"…our lab could be of more help. I think sometimes they don't understand what an emergency is. Most times, you are awake at 12-2 am and you have a very bad patient, a very septic patient, and you need blood work, and they are sleeping. You are knocking on the door, and they are making it seem like you are disturbing them."*

Another issue that was said to affect timeliness of treatment was the delay in obtaining permission from the Health Management Organisations (HMOs) managing health insurance. Patients who pay out of pocket have their investigations done faster as they do not need to wait for HMO approval.

> *"… for us in the ER, timely interventions are the standard … I think the only delay we might experience is usually with imaging but that only applies to HMO patients. People who are paying out of pocket, like he said, just make the payment and we'll move you."*

Conclusion

Barriers to providing care for sepsis identified in our preliminary analysis related to delays 1 and 3. Financial constraints and patients' ability to pay for care, constraints experienced with seeking HMO approval for investigations, and the attitude of other healthcare providers towards the delivery of care.

To improve sepsis outcomes, patient and physician barriers must be addressed. Heightened patient awareness of sepsis is required. Health workers need to be trained on the importance of emergency services and the need to be proactive in cases of sepsis. Advocacy is needed to include emergency care in universal healthcare to enhance equitable healthcare access. Conclusively, there is a need to develop a clinical practice guideline for sepsis in our context.

Acknowledgements

This study was funded by the Duke Global Health Institute (DGHI). The authors would like to express their gratitude to the administrative leadership and staff at our research site, R-Jolad Hospital. Special thanks to Dr. Anna Tupetz and the GEMINI Research Center for their invaluable technical and methodological support.

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Enhancing Sexual Reproductive Health Awareness among Adolescent Girls and Young Women (AGYW) in refugee setting

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Keywords
Refugee, Migrants ,Project, Focus Group Discussion (FGD), Interview

Introduction

Refugee adolescent girls and young women experience increased exposure to coerced sex, STI, early marriages, and childbearing coupled with challenges in accessing sexual reproductive health services. Gender-based violence is also a pandemic facing them. With support from the Amplify Change fund, Most at Risk Young Mothers and Teenage Girls Living with HIV initiative (MOYOTE) implemented a project on Voices for Marginalized targeting refugee AGYW.

Methodology

The study is for the 5 months of implementation.
The study explored the critical intersection of SRH and HIV/AIDS prevention among AGYW in refugee settings. It investigated the unique challenges faced by this vulnerable population and proposed targeted interventions to improve SRH outcomes.

Drawing on qualitative data from 2 focus group discussions with 9 participants each and interviews with 51 AGYW refugees living in Nairobi County. Research highlights the multifaceted barriers to accessing SRH services and information.

Results and Discussion

1. 91% of refugee AGYW were sexually abused. 43% were both sexually and physically abused and have not sought health assistance because of the fear of visiting health facilities in a foreign country.
2. 67% haven't accessed services because of the stigma associated with their migrant status.
3. 35% said not to have accessed the services because they were charged for the services.
4. 56% said they fear speaking out.
5. 87% said lack of legal documents makes them persevere violence and fail to report.
6. 93% said police harassment contributes to their perseverance to violence.

Figure 1Refugee AGYW in fucus grioup discussion meeting.

Lessons learned:

1. There is a need to strengthen refugee/migrant policy.
2. There is a need to create refugee-friendly services.
3. Supporting refugee AGYW to attend relevant decision-making processes will empower them to advocate for their rights.
4. Refugee/migrant need advocacy skills.

Recommendation

1. Increase funding to address the health issues of AGYW in refugee setting
2. Establish safe spaces for AGYW in refugee setting
3. Develop and Strengthen Refugee AGYW policies

Acknowledgements

I extend my heartfelt gratitude to adolescent girls and young women in refugee settings for their commitment to being agents of change and participating in the study. I also thank the MOYOTE staff, community, and, finally, Amplify Change opportunity grants for their unwavering support for this project.

Fear of Self-Injection: The Role of Provider-Client Dynamics in the use of DMPA-SC for Contraceptive Self-Injection in Nigeria

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Keywords
Depot Medroxyprogesterone Acetate (DMPA-SC), Self-injection (SI), Sexual and Reproductive Health (SRH), Contraceptive Access, Fear of Self-Injection

Introduction
Nigeria has one of the highest fertility rates globally, with an average of 5.3 children per woman, but a low modern contraceptive prevalence rate (MCPR) of 12% (Npc & ICF, 2019). To increase this to 27% by 2030, Nigeria is scaling up access to Depot Medroxyprogesterone Acetate (DMPA-SC) for self-injection through a task-shifting and task-sharing policy (Federal Ministry of Health, 2018). This approach allows lower-cadre health workers, including community-based distributors and pharmacies, to offer and train women on self-injection. However, despite its benefits, available research shows that women's fear of self-injection is a major barrier to use (Burke et al., 2022; Osinowo, 2021). Also, other studies have shown the fear of self-injection as a barrier (Tesfaye, 2022). Despite receiving training from their healthcare providers, women continue to experience fear when faced with self-injection. This study aimed to understand how these fears affect women's readiness to embrace self-injection and strategies to overcome the fears.

Methodology
Participants were recruited by collaborating Community Health Workers (CHWs) and health facilities in some Local Government Areas (LGAs) in Lagos, Enugu, and Plateau. Interviews were conducted with sixty-one (61) providers and Forty-four (44) SI clients (Round one/2022); Eighty-one (81) providers and Seventy-five (75) SI clients (Round two/2023) using semi-structured guides. In-depth interviews were conducted with consented participants who were DMPA-SC self-injecting users in the three states. Questions from the interview guide were divided into domains, including history of using DMPA-SC and self-injection, care seeking decisions about DMPA-SC, self-injection experiences, and overall reflections on the practice of self-injection. The interviews were audio recorded, transcribed, and translated into English. A thematic analysis was conducted using a codebook to generate themes. Data analysis involved two stages. Primary analysis involved reviewing and coding transcripts, noting key observations and quotes within each domain. Secondary analysis conducted by a separate group of

analysts reviewed and completed the classification of observations into thematic areas, extracting key insights. Both primary and secondary analyses went into a consolidated matrix for high-level conclusions.

Results and Discussion

Common fears of self-injection were consistently expressed through anxiety, which respondents reported as increased heart rate, trembling hands, and pain after injecting. Many women seeking to use DMPA-SC reported reluctance and hesitation due to fear of needles and making errors. SI users described their fear of mistakes as centred around concerns such as the needle breaking during self-injection or doing something wrong that could render the method ineffective. These concerns are tied to potential consequences like unintended pregnancy, adverse reactions, and the inherent risks involved, especially when support from a nearby health provider is absent, particularly for those using the method covertly. A 37-year-old user commented, *"I was afraid. While pressing the injection into my skin, the health provider had to help me push the remaining fluid in. It was very painful and scary... The whole thing is fear. No matter how they do it or teach me, everything is fear."*

The impact of this fear has been significant; some women, due to their fear of self-injection, faced setbacks in their journey towards SI. They showed a preference for having healthcare providers administer the injections rather than doing it themselves. A 36-year-old woman from Plateau stated, *"It's been a while since I last injected myself. If I inject myself, I feel more pain than when my nurse administers it. I feel like the pain is milder when she does it, and then the pain goes away. The last time for my re-injection, I went to her to do it for me. That was two months ago."*

The fear of self-injection has led to a more painful experience for some, as women have reported heightened pain linked to their anxiety. When faced with self-injection, women often anticipate the physical sensation of pain due to their fear and apprehension. In contrast, when a provider administers the injection, the focus might shift away from the impending discomfort, leading to potentially less intense pain perception. Typical clients who self-inject are the educated, working class and confident women. As a result, some providers found it challenging to shift responsibility to clients due to their fear or educational status, discouraging some women on their SI journey and causing them to continue relying on healthcare providers for support.

Providers play a pivotal role in women's transition to self-care and access to family planning. When women display fears of self-injection, healthcare providers use strategies such as encouraging and supporting SI uptake, retraining clients until they are confident enough to perform the procedure independently. Our study also revealed that women felt more empowered and confident in their SI journey as they continued to inject themselves over time. A 39-year-old SI user from Lagos stated: "*Part of its [DMPA-SC] benefits is that I can inject myself (laughs). I have become my personal nurse. I can do it on my own…I really like it."* Nonetheless, some women who self-inject still prefer to do so in the presence of a healthcare provider.

Conclusion

While it is crucial to raise awareness that self-injection is a novel method that may reduce existing barriers to contraceptive access, fear of self-injection must be adequately addressed to ensure that women who want to use it feel empowered to do so. Appropriate provider training in addressing women's fear of self-injection through empathic counselling and reassurance is important in overcoming fear, improving the uptake of self-injection of DMPA-SC and ultimately, facilitating access to sexual and reproductive health services in Nigeria.

Acknowledgements
We acknowledge all our dedicated brilliant colleagues, partners, designers, implementers and other key stakeholders who contributed to the Innovations for Choice and Autonomy (ICAN) Project. We thank each person who consented to us interviewing them about their contraceptive use and care experiences. This project was funded by the Bill and Melinda Gates Foundation with the ethical approval for the research was obtained from: National Health Research Ethics Committee (NHREC), Nigeria (NHREC/01/01/2007-24/10/2023C) and the University of California, San Francisco (UCSF) Institutional Review Board (270555, 270747, 270554, 270084).

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Impact of South African Triage Scale Tool Training on Nurses' Knowledge, Skills and Patient Health Outcomes in an Urban Hospital

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Keywords
South African Triage Scale, Patient Outcomes, Triage Training, Under-triage, Triage

Introduction

Triage optimizes healthcare resource allocation by identifying urgent patient needs and ensuring timely, and appropriate care based on specific needs, thus improved patient outcomes (Goldstein et al., 2017). The South African Triage Scale (SATS) is an essential tool for prioritizing patient care in the emergency room based on the severity of their condition. The tool was developed in response to the need for a reliable indicator of urgency based on physiological measures and clinical discriminators that could be easily implemented in settings with limited resources (South African Triage Group, 2008). The introduction of triage system into the emergency care of patients in the Emergency Department at an urban hospital has significantly reduced traditional protocol of triaging, patient waiting time at the emergency room, and also identified and categorized (Rominski et al., 2014) high-risk patients for prompt intervention.

Most of the registered nurses working in this specialized department are not trained emergency nurses, and as SATs have been formally established in the hospital, it is of the utmost importance that all emergency room nurses are knowledgeable in the use of this standardized triage tool. However, the effective use of this tool is dependent on the training of emergency room nurses. Traditional learning with workshops, didactic lectures, case studies, simulation scenarios, and e-learning (Yazdannik et al., 2018) improves clinical judgment and decision-making. The present study aimed to evaluate the impact of South African Triage Scale tool training on nurses' knowledge and; skills and resulting patient health outcomes in an urban hospital.

Methodology

A qualitative, descriptive design was used. A purposive sampling technique was employed to select fourteen (14) registered nurses working in the emergency room from an urban hospital in the Central Region of Ghana. To gain insights into the impact of training on patient outcomes, focus group discussions and face-to-face interviews were conducted. Data saturation was reached after two focus group interviews. Data were analysed using a thematic content analysis approach.

Results and Discussion

Emergency room nurses were experienced registered nurses selected based on their clinical expertise in clinical practice. The majority of the nurses were female (80%) and had practised in the clinical setting for more than three years. Their highest educational qualification was a diploma in nursing (57%), with 29% bachelors prepared, and 14% had a specialisation in critical care or emergency nursing. Three subthemes emerged from the analysis of data determining the impact of training in the use of the SATS tool on the knowledge and skills of nurses in the emergency room. The themes were (i) improved triage process (ii) increased confidence and (iii) under- triaging. See Table 1 for details. Registered nurses expressed how the training workshops have significantly enhanced their understanding and implementation of the triaging process. The training prepared them to make informed decisions, allocate resources effectively, and provide timely and appropriate care. The increase in nurses' confidence post-training showed a positive shift in their professional competence, but it also emphasized the need for continuous support to ensure that this confidence translates into consistently accurate triage decisions. Under-triage is a major issue in patient care. According to the study, the majority of the nurses failed to identify patients' primary complaints or life-threatening symptoms, which affected the implementation of the triaging process. A study at Komfo Anokye Teaching Hospital found that 17 times more patients were under-triaged as opposed to over-triaged, which was troublesome (South African Triage Group, 2008). This put the patients at risk of deterioration, delayed treatment, and potentially preventable complications.

Table 1. Themes and Subthemes of the Study

Theme	Subtheme	
Impact of training	Improved triage process	*"There is much improvement after the workshop. Initially, I was not triaging well because I didn't understand some aspects, especially with the discriminator list such as focal neurology, circumferential burns, but after the training, I understood them and could use them very well''* **(N11, Male, G2)**
	Increased confidence	*"My confidence has increased. For example, the clarity on when to conduct a bedside test such as an ECG or urine dipstick to prioritize patient care has been particularly empowering. It has reinforced my decision-making skills in critical situations and had a positive impact on my patient's health".* **(N9, Female, G2)**
	Under- triaging	*"Misinterpretation of some aspects of the tool, insufficient knowledge of the chief complaints, and failing to identify any potential life-threatening symptoms of the patients may result in under-triaging."* **(N6, Female, Group 1**)

Conclusion

The study emphasized the necessity of enhancing patient triaging training through practical sessions to boost skills and competency. The training in the use of SATS tool had a significant impact on the knowledge and skills of emergency room nurses. Increased confidence and training have enhanced the usage of the South African Triage Scale (SATS) tool in the ER, ensuring accurate patient prioritization and timely care. Under-triage remains a challenge in ensuring good patient outcomes that requires further attention and improvement. Although

training is essential, additional measures may be required to address under-triaging, such as continued education, mentorship, and real-time feedback during triage. These are vital to reduce under-triage rates and improve patient health outcomes by ensuring healthcare facilities provide the safest and most effective care available.

Acknowledgements

Our deepest gratitude to all the young adults who made themselves available, gave up their precious time, and assisted us in gathering data so that we could do this study. We also thank Ms. Dzigbodi Kpikpitse and Dr. George Ghartey-Kwansah for their support and suggestions. No specific funding was received by the authors in support of this study from the public, commercial, or non-profit organisations.

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Traditional leaders and their contributions to promoting Community-based Health Planning and Services (CHPS) program in rural Ghana for sustainable healthcare. A study of Central Region of Ghana

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Keywords
Traditional leaders, community, health planning, sustainable health, Ghana

Introduction

The need to bring primary healthcare to the doorsteps of many rural communities in Ghana led to the establishment of the Community-based Health Planning and Services (CHPS) program by the government of Ghana. The CHPS program was implemented following an experiment in Navrongo (Nyonator et al., 2005). CHPS is a strategy to deliver essential community-based health services involving health planning and service delivery with the communities. Its primary focus is communities in deprived sub-districts and in general, bringing health services closer to the community. The role of traditional leaders in the communities re important if the CHPS program is to succeed in bringing primary healthcare to their communities. Traditional leaders in these communities play active roles in the establishment of these health centers and the welfare of the health workers. Lands and facilities in which these health services operate are provided by traditional leaders.

Methodology

The study is a qualitative research in three districts of the Central Region of Ghana. 10 participants were interviewed in Cape Coast Metropolitan Area using the semi-structured interview guide. A qualitative method was used because it allowed me to collect important data to ascertain the role played by the traditional leaders in bringing the CHPS compounds to their communities (Kumar, 2025). The respondents were purposively selected. Some members of the communities were also randomly selected and interviewed to find out their experiences of using the CHPS compounds. These consist of health workers in the CHPS facilities and some traditional leaders in the Amamoma and Kwaprow communities of the Cape Coast Metropolitan Area.

Results and Discussion

The use of the CHPS program adopted in 1999 has led to improved healthcare for the many rural communities in Ghana. The involvement of the traditional leaders is a key principle of the CHPS program. Traditional leaders were expected to accept the concept and commit themselves to support it (Nyonator et al., 2005). After a conversation with some health workers in Kwaprow, they highlighted on how frequently traditional leaders pay attention to issues relating to the

health center.

Figure 1. CHPS compound in Ekurabadze, a rural community in the Mfantsiman District of the Central Region.

Conclusion

The CHPS initiative has led to the improved Reproductive Child Health (RCH), Family Planning, Out Patient Dispensary (OPD), Maternity, Antenatal Care, Postnatal Care, Health Talks in schools and home services. Traditional leaders are calling for more help from the central government. The CHPS initiative has been the main flagship program that has helped to bring primary healthcare to the community levels in the past two decades in Ghana (Dzampe & Siita, 2020).

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The Experiences of Intensive Care Nurses Regarding Withdrawal of Treatment and End of Life Care

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Keywords
End-of-life care, experiences, Intensive care unit, and Withdrawal of treatment

Introduction
The withdrawal of treatment and End-of-Life Care (EOLC) in the intensive care setting is a process that often has many challenges ranging from emotional burden, high levels of conflict and ethical dilemmas. Despite the multi-cultural and diversified societies, and differences in EOLC practices globally, all nurses experience obstacles to EOLC.

The mortality rate following admission in the intensive care unit (ICU) is approximately 20%, with 60% of these deaths occurring after the decision to withdraw active treatment. Withdrawal of treatment and end-of-life care (EOLC) is a common occurrence in ICU. Intensive care nurses are the primary caregivers and spend most of the time at the bedside of critically ill patients including those who need EOLC. The idea of death and dying alone evokes many feelings such as sadness, grief, anger and a feeling of failure in the nurse (Vanderspank-Wright et al., 2018). Emotional and psychological support is of utmost importance during and after the EOLC process. This study aimed to describe the intensive care nurses' experiences with regard to withdrawal of treatment and EOLC in the adult ICUs of a university-affiliated public hospital in Gauteng.

Methodology
A qualitative descriptive design was used in this study. Purposive sampling method was used to select a sample of 15 nurses working in four ICUs of an academic hospital in Gauteng Province, South Africa. These ICUs included multidisciplinary, trauma, neurosurgical and cardiothoracic ICU. In - depth semi- structured interviews were used to collect data using a researcher developed interview guide. Data was analysed using thematic analysis.

Results and Discussion
Three broad themes emerged: *obstacles to withdrawal of treatment and EOLC, emotional burden and coping mechanisms.* All participants in this study expressed mixed emotions related to caring for the dying patient and the obstacles encountered during the withdrawal of treatment and EOLC. The intensive care nurses' experiences revealed that EOLC is a very emotional process, very difficult to manage with limited resources and policies to follow and many obstacles present. Psychological support

was perceived either as non-existent, not accessible or not important. This finding is consistent with the Australian studies (Ranse et al., 2012) and a South African study. The study findings highlighted inconsistencies, conflicting feelings, moral dilemmas and delays in decision making due to lack of policies and protocols to guide the withdrawal of treatment. The participants in an Australian study (Ranse et al., 2012) raised similar concerns and they further added that lack of policies led to uncertainty and ambiguity regarding EOLC decision making.

The study participants suggested that deficiencies in the education and training of nurses on EOLC resulted to inadequate knowledge to efficiently meet the needs of the dying patient and their family members. Several studies have reported lack of proper training and support to provide efficient EOLC in the ICU. Most participants in this study expressed concern about being excluded from decision making. They described their relationship with the doctors as authoritative even though they spend more time with the patient. Inadequate physician communication among the MDT was highlighted as the largest obstacle to providing EOLC in the ICU. Several global studies support the perceived lack of collaboration between doctors and nurses during decision-making and described the relationship as authoritative.

Conclusion

It was evident from literature as well as from this study's findings that for more than three decades several obstacles concerning withdrawal of treatment and EOLC exist. This study concludes that intensive care nurses are not adequately prepared and supported to provide skilled and competent care to dying patients in a chaotic and complex environment supercharged with advanced technology. Inconsistent and lack of psychological support may influence the care provided to patients and their families during the end of life. It is recommended that formalised support structures and debriefing sessions be implemented to support nurses providing direct care during withdrawal of treatment and EOLC.

Acknowledgements

The authors thank all the intensive care nurses who participated in this study.

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Nursing Colleges in Higher Education: Determinants of Ogranisational Readiness for Change

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Keywords
Commitment, efficacy, higher education, nursing colleges, readiness

Introduction

Understanding organisational readiness for implementing change is crucial for public nursing colleges as they transition to higher education and implement a new mandate for nurse education in South Africa. Organisational readiness refers to the extent of psychological and behavioural preparedness among members of an organisation to effectively execute organisational modifications (Weiner et al., 2009). Anecdotes exist on the readiness of nursing colleges to transition to higher education; however, there is a lack of empirical research that brings together best practices, evidence and experiences of such change. Considering the perspectives of nurse leaders viz. nursing college managers and nursing education directors, and clearly defining their roles during the change process would enhance their commitment to and readiness for change. While there is substantial research on individual readiness for change, a notable gap exists in understanding organisational readiness in nursing education, especially when transitioning to higher education (Alolabi et al., 2021). This study aimed to determine the readiness for change of nursing colleges as public sector organisations.

Methodology

In a cross-sectional survey, a self-administered data collection tool, the Organisational Readiness for Implementing Change (ORIC) scale (Shea et al., 2014)was used to measure organisational readiness for implementing change in the domains of Change Efficacy and Change Commitment. The study was conducted in public nursing colleges (n=3) in each of three purposively selected provinces: rural, urban, and mixed urban and rural. Seventy-five participants (n=75) from a target population of 88 nurse leaders (N=88), completed the survey. The ORIC scale comprises 12 items measured against a 5-point Likert scale; five items are attributed to Change Commitment, measuring participants' shared resolve to implement change. Change Efficacy comprises seven items, which reflect participants' shared belief and confidence in their capacity to implement change. Descriptive statistics were used to analyse the data. Mann-Whitney test was used to compare differences between two groups using demographic variables as independent variables and Kruskal-Wallis test to to assess the differences of more than two variables.

Results and Discussion

The majority (73.3%; n=55) were from the urban provincial nursing college; females accounted for 90.7% (n=68) of the sample. Most participants (61.3%; n=46) had more than 10 years experience in nursing education. Participant responses to the ORIC scale statements, grouped in the Change Efficacy and Change Commitment subscales, are shown in Figure 1.

Statistically significant differences in readiness were found among nursing colleges (p = 0.04) with the rural province college indicating higher readiness levels (median: 48, IQR: 44 - 52) compared to the other colleges. Nurse leaders with more than 20 years experience reported higher readiness for change (median: 48, IQR: 42 - 49); overall, there was a positive disposition towards change with higher levels of change efficacy than change commitment, suggesting nurse leaders' confidence in the organisation's capacity to implement change. However, there were low collective agreement on organisational efficacy in managing the political dynamics (29%) and maintaining momentum (37%) during the change process.

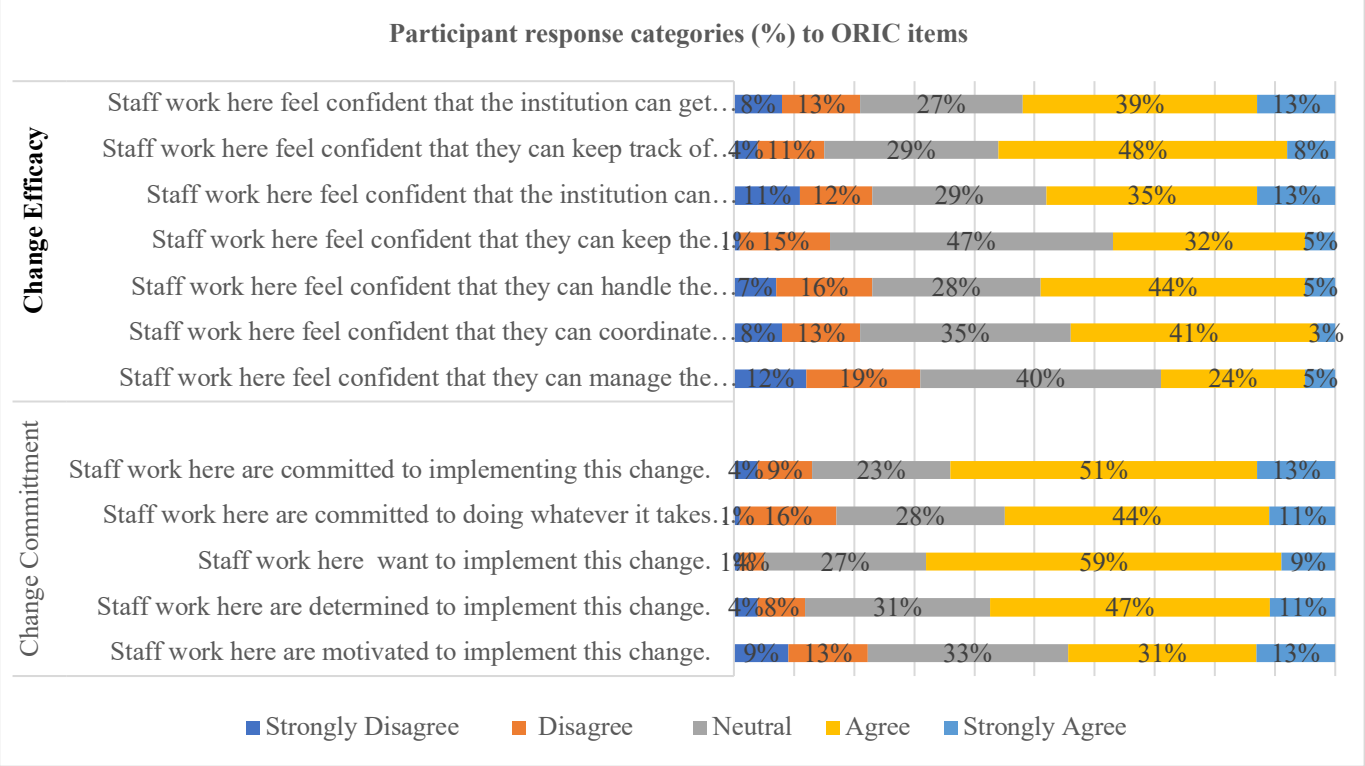

Figure 1. Participant response categories to ORIC statements

Conclusion

Nursing colleges as public organisations have marginally high levels of readiness to implement change to higher education. Change commitment and change efficacy vary across nursing colleges with collective commitment and resolve to implement change lagging behind organisational efficacy to change. To enhance change commitment, it is essential to develop targeted, inclusive interventions that strengthen nurse leaders' motivation and determination towards successful change implementation.

Acknowledgements

We acknowledge the participants' willingness to participate in this study.

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