Rural and Remote Health www.rrh.org.au
James Cook University ISSN 1445-6354

Original Research

Improving surgical care in rural South Africa: exploring collaboration between Indigenous and formal health sectors

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PUBLISHED

4 September 2026 Volume 26 Issue 3

HISTORY

RECEIVED: 30 October 2025

REVISED: 13 June 2026

ACCEPTED: 23 June 2026

CITATION

Sangana N, Tshabalala N, Mkize N, Mji G, Chu KM. Improving surgical care in rural South Africa: exploring collaboration between Indigenous and formal health sectors. Rural and Remote Health 2026; 26: 10648. https://doi.org/10.22605/RRH10648

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Abstract

Introduction: South Africans use both Indigenous and formal health care to address surgical conditions; however, these sectors are often siloed, leaving care for the individual disjointed. This study aimed to improve person-centered surgical care in rural South Africa by identifying community-prioritized surgical conditions and exploring Indigenous and formal healthcare stakeholder buy-in to collaborative solutions.
Methods: This phenomenological qualitative study used focus group discussions and a multi-stakeholder workshop. Study participants included Indigenous knowledge healers, clinic and hospital staff, community members, and community health workers. Perceived barriers and facilitators to collaboration and solutions improving care within a dual health system were explored. Data were collected and analyzed using Rapid Research, Evaluation and Appraisal Lab sheets.
Results: Three focus group discussions of different stakeholder groups were held with five to eight participants each (18 participants total). A total of 33 participants attended the multi-stakeholder workshop. All stakeholders agreed that Indigenous knowledge healers could play a role in improving surgical care. Collaborative solutions included bilateral referral systems and cross-sector education. Barriers included lack of communication and transparency between Indigenous and formal health sectors.
Conclusion: Person-centered care includes acknowledging that many people in rural South Africa with surgical conditions will seek care in both the Indigenous and formal health sectors. Improving communication and referrals between the sectors may streamline care and improve health outcomes and community wellbeing.

Keywords

collaboration, delays to care, global health, global surgery, Indigenous health, South Africa, surgery, surgical access, traditional medicine.

Introduction

Around a third of the global burden of disease comprises surgical conditions; however, in low- and middle-income countries, timely access to surgical care is a significant challenge[1]. Delays to accessing care can occur at four key stages: when seeking, reaching, receiving, and remaining in care[2]. Seeking care is the stage from symptom onset to the decision to seek care. Delays at this stage can be influenced by a host of factors including individual and community beliefs about disease origin, health knowledge, and prior experiences with the health system[3-7]. Indigenous knowledge healers, also known as traditional healers, play a significant informal role in health care worldwide and are often a part of an individual's journey in seeking care, particularly in low- and middle-income countries. Their training and practices are influenced by beliefs around disease origin, health, and wellbeing, and vary among healer cadres and settings. In South Africa, where 80% of the population are of African descent, individuals commonly seek care across both Indigenous and formal healthcare systems, reflecting a pluralistic approach to health-seeking, particularly in rural areas where access to formal medical services is limited[8-13]. Reasons to seek Indigenous knowledge healer care include physical proximity, shared primary language and culture, and addressing the spiritual aspects of disease, which are also perceived shortcomings of the formal health sector in rural South Africa[8-10,14,15].

However, receiving care with Indigenous knowledge healers can delay presentation to the formal healthcare sector[15-18]. Many people with surgical conditions are reluctant to seek care in the formal sector due to barriers such as cost, transportation, language, and lack of trust. Since Indigenous knowledge healers are trusted members of the community, they could play a role in improving surgical care. Person-centered care prioritizes an individual's values, preferences, and goals in treatment[19,20]. WHO supports the integration of Indigenous knowledge healers into health care to promote a holistic and person-centered approach to health and wellbeing[21,22].

Indigenous knowledge healers have worked with the formal health sector to improve disease detection and treatment for several conditions. For example, they have been involved in improving diagnosis and treatment adherence for HIV and TB across sub-Saharan Africa[23]. In Malaysia, they provide cultural and religious support for cancer patients through prayer and traditional remedies[24]. In Ghana, traditional bonesetters have been incorporated into formal health systems to treat fractures[25]. With the rise in incidence of non-communicable disease, there have been recent efforts for Indigenous knowledge healers to screen community members for diabetes mellitus in Cameroon and Bolivia[26,27].

A better understanding of stakeholder buy-in of collaboration between Indigenous and formal health sectors for surgical care is needed. The aim of this study was to improve person-centered surgical care in rural South Africa by identifying community-prioritized surgical conditions and exploring Indigenous and formal health stakeholder buy-in to collaborative approaches to care.

Methods

Study setting

The study setting was the Madwaleni District Hospital catchment, where our research team has had a working relationship with the local community and Indigenous knowledge healers since 2013[15]. This deeply rural area is located in the Eastern Cape province of South Africa, with most individuals belonging to the amaBomvana Indigenous community. The hospital catchment is one of South Africa's poorest districts, with low literacy and a high unemployment rate[15].

Madwaleni District Hospital is a 200-bed district hospital serving approximately 30 villages (over an area of 1200 km^2) with approximately 130,000 inhabitants. There are eight nurse-led satellite primary health clinics. The hospital and the clinics experience severe staff shortage and high staff turnover. Access to these facilities is challenging, with poor-quality gravel roads making transportation difficult.

Community health workers are often the first point of contact with the formal health sector. This primary care cadre, often from the community, visit designated households with a scope of practice focused on health education and preventative health care[28].

Approximately 50 actively practicing Indigenous knowledge healers in the Madwaleni catchment make up the Indigenous health sector. They are well organized and meet regularly. Indigenous knowledge healers work under the jurisdiction of their local chief, who serves as the traditional leader within the community[15].

Research design

The study employed a phenomenological qualitative design to explore lived experiences, perceptions, and stakeholder buy-in regarding collaboration between Indigenous and formal healthcare systems in a deeply rural setting. Depth and diversity of perspectives across stakeholder groups was prioritized, rather than numerical balance or representativeness.

Participants and recruitment

Participants were recruited from multiple stakeholder groups, including community members, Indigenous knowledge healers, community health workers, clinic nurses, and hospital staff. Recruitment was conducted using purposive sampling and snowball sampling, done face-to-face and telephonically. Sampling approaches were designed to ensure inclusion of participants aged over 18 years with relevant experience and insight into healthcare provision and community health needs in the region.

Variation in the number of participants across stakeholder groups reflected both the availability of key informants in the Madwaleni catchment area and the practical constraints of conducting research in a resource-limited rural setting. Participation by Indigenous knowledge healers was influenced by their routine care responsibilities, with attendance at focus groups and workshops often dependent on whether they were required to see clients on the day. Participation by clinical staff was constrained by staffing shortages and service delivery demands at the hospital and clinics.

Data collection

Focus group discussions

Separate focus group discussions were conducted in December 2023 within three different stakeholder groups: community members, clinic nurses, and hospital staff. Sample sizes of five to eight participants per group were used to facilitate group dynamics while allowing participants to speak freely. Discussions aimed to identify community-prioritized surgical conditions, explore beliefs about disease origin, and examine the perceived benefits and limitations of both Indigenous and formal health care. A research team member who was trained in qualitative research and bilingual in isiXhosa and English led the focus group discussions. She belongs to the amaBomvana community but did not know the study participants personally, and her familiarity with the culture helped navigate and provide insight into participant experiences.

Multi-stakeholder workshop

Community members, Indigenous knowledge healers, community health workers, clinic nurses, and hospital staff discussed potential collaboration between sectors in a multi-stakeholder workshop held in April 2024. The principal investigator (NS) gave an overview of the project and presented survey findings on Indigenous knowledge healer treatment and beliefs regarding selected surgical conditions[9]. Multiple trained research assistants then guided small group discussions held on barriers to surgical care and perspectives on collaboration to improve care. The participants reconvened for a larger plenary session discussing mechanisms of collaboration. A second plenary session explored the barriers and facilitators to implementing proposed mechanisms. The same researcher who guided the focus group discussions led the larger plenary sessions and translated between isiXhosa and English in real time for participants.

Data analysis

Guided by a phenomenological approach, our analysis focused on understanding how participants described and made sense of their lived experiences of navigating surgical care across Indigenous and formal health systems, with emphasis on shared meanings, perceptions, and relational dynamics rather than frequency or quantification.

Rapid Research, Evaluation and Appraisal Lab (RREAL) sheets were used to observe and analyze focus group discussion and multi-stakeholder workshop data[29]. RREAL sheets were selected because they align with the rapid and iterative nature of this study; therefore, no formal thematic analysis was conducted. Within the RREAL framework, analytical categories emerged through collective reflection on recurring experiential patterns and shared interpretations across stakeholder groups, rather than through formal coding or categorical abstraction.

To support reflexive and trustworthy analysis, the research team, consisting of four members, documented observations, reflections, and emerging insights during each session. Immediately after each workshop and focus group discussion, the research team met to reflect on the sessions, consolidate findings, and address differing interpretations to collaboratively complete the RREAL sheets, thereby minimizing recall bias. Differing perspectives were addressed through team-based discussion until consensus was achieved, ensuring that analytic decisions were not driven by a single researcher's interpretation. Data were captured directly into RREAL sheets in English and translated from isiXhosa where necessary. During the workshops, participants also documented key discussion points and presented these to the wider group, enabling incorporation of participant-generated data into the analytic record. During the final plenary session, synthesized observations from the research team were presented back to participants for clarification and verification, supporting triangulation and participant validation of the findings.

Both the focus group discussions and multi-stakeholder workshop were audio-recorded to support analytic accuracy and minimize reporting bias.

Ethics approval

Ethics approval was obtained from the Human Research Ethics Committee at Stellenbosch University (HREC reference no. N23/06/071_Sub Study N23/06/062-28321). All participants consented and had the risks and benefits of the study explained to them prior to participation in focus group discussions and multi-stakeholder workshops.

Results

Findings are presented as synthesized conceptual categories reflecting recurring perspectives across stakeholder groups, with illustrative quotations and tables used to support key insights.

Participant overview

Focus group discussions were held with 18 stakeholders grouped as community members (*n*=8), clinic nurses (*n*=5), and hospital staff (*n*=5). A total of 33 individuals attended the multi-stakeholder workshop, including 20 Indigenous knowledge healers, 3 community members, 5 community health workers, 2 clinic nurses, 2 hospital doctors, and 1 clinical associate.

Conceptual category 1: Community-prioritized surgical conditions and perceived disease origins

Across focus group discussions and the multi-stakeholder workshop, participants identified a set of priority surgical conditions that were perceived to require improved access to timely and coordinated care. These included traumatic injuries (stab wounds, fractures, and burns), as well as more indolent conditions such as cancer, diabetic foot infections, and septic circumcision (Table 1).

Traumatic injuries such as stab wounds, fractures, and burns were common reasons for seeking surgical care. Community members reported these injuries often occurred following alcohol consumption, particularly on the first Saturday of the month following payday. They also noted a high number of motor vehicle collisions, particularly during the Easter and Christmas holidays, when there is more traffic on the roads. People with fractures sought care in both the informal and formal health sectors, using both a common Indigenous medicine (*umhlabelo*) and immobilization at the health facility.

More indolent surgical conditions, such as cancer and diabetic foot infections, were frequently linked to spiritual beliefs. These conditions were perceived by community members and Indigenous knowledge healers to originate from displeased ancestors allowing witchcraft and evil spirits to cause disease. Indigenous knowledge healers reported performing ceremonies appealing to the ancestors for protection, as part of treatment for these conditions. Hospital staff noted that a lack of community awareness of diabetes resulted in many undiagnosed individuals presenting with late-stage diabetic foot infections requiring an amputation.

Of note, septic circumcisions during traditional ceremonies, which sometimes involve Indigenous knowledge healers, were highly prioritized by clinic and hospital staff to require surgical care. They also noted that collaboration between formal and Indigenous health sectors has improved detection and treatment of these cases.

Conceptual category 2: Care-seeking pathways across Indigenous and formal health systems

For each of these conditions, study participants reported that community members sought care with Indigenous knowledge healers before presenting to the formal health sectors. They noted that traditional and religious beliefs were most important in guiding care-seeking choices. Visits to a formal health facility were reserved for acute or severe surgical conditions or those unsuccessfully treated by Indigenous knowledge healers. Challenges in seeking, reaching, and receiving formal surgical care included lack of knowledge of surgical conditions among the community, lack of transportation to health facilities, and a shortage of medical staff.

Table 1 illustrates stakeholder perspectives on prioritized surgical conditions, perceived disease origins, Indigenous treatments, and pathways to formal care.

Table 1: Topics discussed regarding community-prioritized surgical conditions

Surgical condition	Category	Quote
Stab wound	Epidemiology	Community 1 member: 'Stab wounds are one of the top reasons for seeking surgical health care.'
	Risk factors	Community 1 member: 'Youth normally consume alcohol during ceremonies in December, which is when conflict emerges and stabbings happen.' Community 2 member: 'Most community members normally carry weapons such as axes.'
	Indigenous treatment	Community 1 member: 'A stabbed victim normally drinks *umhlabelo*† to stop internal bleeding.'
Fracture	Epidemiology	Community 1 member: 'Car accidents are prevalent in December. Many people drive under the influence of alcohol.'
	Indigenous treatment	Community 2 member: 'The community normally uses *umhlabelo*† for treatment. We also use leaves from a certain plant to bandage the affected area of the body.'
	Access to formal health care	Community 3 member: 'We go to the hospital for X-ray and casting.'
Burn	Perceived disease origin	Hospital 1 staff member: 'The community believes they sometimes get spontaneous burns through witchcraft.'
	Indigenous treatment	Hospital 2 staff member: 'People normally use home remedies such as toothpaste and cow dung to facilitate the healing of the wound.'
	Access to formal health care	Hospital 1 staff member: 'The community consults traditional healers first before seeking formal health care.'
Cancer	Perceived disease origin	Community 4 member: 'We have lots of neck cancer. The community believes neck cancer happens because of spiritual pollution.' Clinic 1 nurse: 'The community believes the neck-related diseases emerge because of witchcraft.'
	Indigenous teatment	Community 3 member: 'Most of the time we use amaXhosa medicine to tone down the pain so that the person can be able to eat.'
	Access to formal health care	Clinic 1 nurse: '[Formal] treatment is delayed because clients consult traditional healers first. Cancer is usually metastasized by [the time of] presentation.'
Diabetic foot infection	Perceived disease origin	Hospital 4 staff member: 'Most people don't know they are diabetic. When they have a foot infection disease, they think it is because of witchcraft.'
	Indigenous treatment	Hospital 4 staff member: 'Traditional healers are sought out first to protect from witchcraft.'
	Access to formal health care	Clinic 2 nurse: 'Diabetic foot wounds are necrotic by time of presentation to the hospital or clinic.'

Septic circumcision	Risk factors	Hospital 2 staff member: 'Patients present with sepsis and have high mortality rates.' Clinic 2 nurse: 'There is a lack of information and family involvement once infection presents.' Clinic 3 nurse: 'It is unclear what the methods and hygiene practices involved [in traditional circumcision practices] are.'
	Collaboration between sectors	Hospital 3 staff member: 'The collaborations between the community and Department of Health have helped decrease the rate of mortality cases and septic wounds related to circumcision.'

† Liquid tincture made from dried plant leaves.

Conceptual category 3: Barriers to and opportunities for cross-sector collaboration

Despite broad support for collaboration, stakeholders identified multiple barriers that hinder effective engagement between Indigenous and formal health systems, alongside practical opportunities to strengthen cooperation. These included challenges related to mutual understanding, trust, communication, and system navigation, as well as proposed solutions such as cross-sector education and bilateral referral mechanisms. Formal health staff noted that they did not fully understand Indigenous knowledge healer practices. Inconsistent diagnoses, questionable safety of Indigenous medicines, and lack of formal health literacy were top concerns regarding Indigenous knowledge healers. Accessibility, trust, and affordability for persons with surgical conditions were acknowledged as advantages of Indigenous knowledge healer care. Community members rated accessibility and prioritization of spiritual wellbeing as key reasons for seeking care with Indigenous knowledge healers. However, they reported that Indigenous medicine was ineffective to treat some diseases and that inconsistent diagnoses was an issue. They appreciated the ability to conduct full clinical workups and the wider arsenal of pain medications in the formal health sector. All stakeholders supported collaborative efforts between the two sectors to improve person-centered care. To improve communication, trust, and transparency, cross-sector education was suggested. A bilateral referral system was the main solution proposed to facilitate access to care.

Cross-sector education

Cross-sector education regarding the scope of practice and treatment by the other sector was deemed essential by all stakeholders.

Hospital staff admitted limited knowledge of Indigenous knowledge healer practices and cultural beliefs surrounding wellbeing in the area (Table 2). They noted that physicians and nurses from other areas of South Africa or from other cultural backgrounds rotated through the study health facilities but were unfamiliar with local beliefs and culture. In addition, the short employment of some staff was cited as a barrier to understanding of local culture, including Indigenous health practices. Specific training on the scope and treatments provided by Indigenous knowledge healers during new staff orientation was a proposed solution. Indigenous knowledge healers acknowledged a lack of transparency regarding their practices. It is common for them to be secretive about their knowledge, which they consider to be sacred. This was a barrier to collaboration that Indigenous knowledge healers were willing to overcome by sharing their beliefs and treatment practices. They also expressed a desire to understand more about formal health practices to improve person-centered care. Workshops for Indigenous knowledge healers to learn more about symptoms and diagnosis of surgical conditions were supported by all stakeholders. Community members felt that the siloed nature of the two sectors promoted a sense of stigma towards disclosing their care-seeking behavior in both health systems. Awareness campaigns of the benefits of open communication about health-seeking behavior was a proposed solution. Stakeholders supported people who sought care in the formal sector bringing their medical cards to Indigenous knowledge healer visits, which could be recorded on the cards as well.

Table 2: Issues and potential solutions in implementing cross-sector education

Issue	Solution
Lack of formal health staff knowledge of Indigenous beliefs	IKH-led new staff orientation on spiritual beliefs pertaining to health and wellbeing
Secrecy around IKH practices	IKHs sharing information about their practices
Lack of IKH knowledge of formal health system and physiologic origin of surgical conditions	Workshops for IKHs on surgical conditions and benefits of formal surgical treatment Encourage IKHs to increase public health awareness for preventable conditions
Lack of transparency by people with surgical conditions about their care-seeking behavior in both sectors	Improve acceptability of person-centered care in both sectors Raising community awareness about the benefits of collaboration between sectors Encouraging clients to bring clinic cards to the IKHs and noting Indigenous treatment on them

IKH, Indigenous knowledge healer.

Bilateral referral system

Indigenous knowledge healers and formal health staff supported bilateral referrals and identified issues and potential solutions to achieving this. Indigenous knowledge healers noted they already advised people with surgical conditions to seek formal health care, even without official referral forms. Hospital staff suggested Indigenous knowledge healers could provide a more in-depth history and physical examination to improve triage, reduce long wait times, and improve timely surgical care.

Stakeholders discussed formal mechanisms for referral at the multi-stakeholder workshop. The same referral form recognized by the provincial health department for use by community health workers was proposed to be used or adapted for Indigenous

knowledge healer referrals. Since many Indigenous knowledge healers cannot read or write, a verbal referral to a specific Indigenous knowledge healer liaison working at the formal health facility was another proposed solution. The incorporation of mid-level providers such as nurses and clinical associates familiar with local culture and language as Indigenous knowledge healer liaisons was supported (Table 3). Indigenous knowledge healers requested treatment updates on persons they refer to the formal health sector to better understand disease epidemiology. These updates could be delivered by liaison, in-person meetings, or online chat groups with sector representatives. Notating care by both sectors on medical cards was proposed as another mechanism.

Indigenous knowledge healers noted they did not receive referrals from the formal health sector and felt this represented a lack of reciprocity and respect. The majority of clinic nurses and hospital staff noted they did not refer patients to Indigenous knowledge healers, mostly because of a lack of understanding of their services. A few clinic nurses and hospital staff – who also belonged to the amaBomvana community – reported clandestinely referring patients to Indigenous knowledge healers while fearing reprimand from formal health sector colleagues. Cross-sector education for the formal health sector to understand the scope of Indigenous knowledge healer care was supported to destigmatize them and promote back-referrals. One hospital nurse, who was also a trained Indigenous knowledge healer, explained that individuals often sought Indigenous knowledge healer care before an operation to perform rituals for protection and spiritual wellbeing. Thus, pre-operative Indigenous knowledge healer referrals could enhance person-centered care for those with aligning cultural beliefs. Additional training for formal health staff to enquire about patient beliefs was proposed as part of the preoperative workup.

Table 3: Issues and potential solutions for implementing a bilateral referral system between Indigenous knowledge healers and the formal health sector

Issue	Solution
No formal referral mechanisms between sectors	Allowing IKHs to adopt CHW referral forms or refer via CHW into formal health sector Designate formal health staff as IKH liaisons to receive referrals
Language differences between Indigenous and formal health staff and varying levels of literacy	Provide verbal referral option for IKH Identify formal health staff fluent in isiXhosa to serve as IKH liaisons
Lack of feedback to IKHs after formal health care	Encourage clients show their medical [clinic] cards to IKHs to share treatment plan Verbal feedback to IKHs through formal health staff liaison Regular meetings or online chat groups with both sectors to discuss shared patients
Lack of referrals back to IKHs	Better understanding of IKH scope of practice via cross-sector education for formal health staff Refer persons with surgical conditions to IKHs for treatment spiritual concerns if appropriate

CHW, community health worker. IKH, Indigenous knowledge healer.

Discussion

Person-centered care incorporates an individual's cultural beliefs and personal preferences into their healthcare journey. In this study we found that, in rural South Africa, people with surgical conditions seek care with Indigenous knowledge healers for several reasons, including to address the spiritual aspect of disease and ancestral protection. WHO supports Indigenous medicine as a component of person-centered care, but currently the Indigenous and formal health sectors practice in silos, without communication, contributing to delays in surgical care[2].

There are more registered Indigenous knowledge healers in South Africa than physicians, and large gaps in access to formal surgical care[30]. Indigenous and formal health staff agreed that working together could mitigate disparities in care. Cross-sector education, transparency on scopes of practice, and sharing of different world views about health and sickness were cited facilitators.

Teaching Indigenous knowledge healers about disease prevention and screening, and encouraging them to share this information with clients, may help improve early detection. In South Africa, Ghana, and Uganda, involving Indigenous knowledge healers in health awareness and prevention campaigns has improved uptake of interventions by allowing individuals to better understand disease within their cultural framework[31-33]. Many formal health staff in Madwaleni do not belong to the local amaBomvana community and are unfamiliar with the culture. Cultural education is not currently incorporated into their onboarding process, a fact that stakeholders wished to change. Culturally competent care has been associated with improved surgical outcomes, potentially by building trust in providers and subsequently reducing delays in seeking care and improving treatment adherence[34,35]. A study in Alaska found that just an hour-long didactic session on traditional healing practices significantly improved formal healthcare provider confidence in their understanding of sociocultural aspects of health[36]. After sessions led by Indigenous knowledge healers explaining amaBomvana health beliefs and practices, formal health providers could be similarly empowered to inquire about individuals' spiritual beliefs, either to refer to Indigenous knowledge healers as appropriate, or to ensure that individuals' values are incorporated into the provider's own care.

Stakeholders endorsed a bilateral referral system comprising a standard referral form for Indigenous knowledge healers referring patients to clinics or hospitals and a verbal referral mechanism, especially for Indigenous knowledge healers who do not have formal education, via designated Indigenous knowledge healers liaisons at each formal health facility. The current lack of referrals into the Indigenous health sector by the formal health sector made Indigenous knowledge healers feel disrespected, and a pathway for back-referrals was noted as a priority. In addition, Indigenous knowledge healers requested feedback on patients they referred to formal health facilities as important for their own learning and practice. From an implementation and governance perspective, the feasibility of bilateral referral systems will depend on their integration within existing health system structures and regulatory frameworks. In South Africa, Indigenous knowledge healers are

legally recognized; however, formal mechanisms for collaboration with the formal health sector remain limited. Practical approaches such as adapting existing community health worker referral tools, designating Indigenous knowledge healers within clinics, and permitting verbal referrals where literacy is a barrier may enable integration without service interruptions. However, clear governance arrangements, role clarification, and shared accountability will be required to ensure patient safety, confidentiality, and continuity of care. Engaging provincial health authorities and traditional leadership structures will be essential to legitimize and regulate such collaborative models.

While there are a growing number of examples of Indigenous knowledge healers helping individuals access formal health care, our results highlight a desire for bilaterality, a finding echoed in other studies across Sub-Saharan Africa exploring dual health systems[37,38]. Our results suggest many areas in which Indigenous knowledge healers can play a unique role in enhancing surgical care. Holistic, person-centered care is particularly important in the peri-operative period. Individuals undergoing surgery experience heightened fear and uncertainty about safety and how their life may change, and often turn to spiritual intervention[39-41]. This is supported in our study, with individuals seeking out Indigenous knowledge healers prior to operation to perform ancestral protection ceremonies. Spiritual care has been associated with improved postoperative pain, nausea, and vomiting, increased patient resilience, and a reduction in stress, anxiety, and depression[42-46].

There have been efforts to address spiritual aspects of disease in formal healthcare worldwide – from the presence of chaplains in hospitals (now mandated for hospital accreditation in the US) to the rise of culturally contextualized training among healthcare professionals[47]. Indigenous knowledge healers may be able to address this aspect of surgical disease in a culturally appropriate way in rural South Africa. Not only are there benefits to building bridges between the Indigenous and formal health sectors, but also risks associated with maintaining a siloed dual health system. For example, Indigenous medicine has active ingredients that may interact with pharmaceuticals including antibiotics or chemotherapy agents[48-50]. WHO and the South African government are supporting efforts to study and catalogue Indigenous medicines. Encouraging an environment of transparency within the dual health system can help prevent unintended reactions between Indigenous and formal medicine[51,52].

Additionally, dialogue and governance around mutual agreement on what each group should be treating is essential. Surgical care requires training to prevent complications such as infection, disability, or even death. However, each year, dozens of young boys die of septic circumcision performed by non-trained community members[53-55]. In our recent survey, Indigenous knowledge healers did not want to perform operations and referred these to the formal health sector[14]. Given Indigenous knowledge healers are embedded and trusted within communities, they could be instrumental in discouraging operative practices by non-trained personnel[56]. Collaboration between Indigenous knowledge healers and community health workers who work in the same community to identify persons with surgical conditions that need formal health care should be explored.

Limitations

Noting that this study was conducted in the Eastern Cape, a region predominantly inhabited by isiXhosa-speaking people, the current findings may not be generalizable to other rural areas of South Africa. This is due to the diversity of cultural beliefs, contextual differences, and varying exposures, such as the origin of surgical conditions, access to health care, infrastructure, and socioeconomic conditions across rural communities. Furthermore, the findings should be interpreted in light of the relatively small and uneven sample sizes across stakeholder groups. However, as an exploratory qualitative study, the aim was depth of insight rather than representativeness, with thematic saturation guiding data collection and interpretation, and findings intended to be transferable to similar rural contexts rather than statistically generalizable. Therefore, similar studies should be conducted in other rural regions to generate context-specific insights that are relevant and applicable to those communities. Lastly, during discussions, many of the participants were only fluent in either English or isiXhosa. Data loss through translation was minimized by the presence of bilingual and culturally informed, trained researchers including local research assistants.

Conclusion

Our findings demonstrate that despite differences in language, cultural background, and belief systems, the Indigenous and formal health sectors in the Madwaleni area of South Africa are willing and able to work together to improve access to surgical care. Tapping into both the Indigenous and formal healthcare spheres and enabling them to work in concert for individual wellbeing may improve person-centered surgical care. Policymakers can play an active role in enabling and sustaining this partnership by investing in joint referral systems, inclusive training programs, and community-based platforms for dialogue. Such structural support is essential to ensure that pluralistic care is not only recognized but also meaningfully integrated into the health system.

Acknowledgements

We would like to thank the study participants for sharing their perceptions. In addition, we are grateful for Mr Bafana Tonga and the youth leadership of Khaya Youth and Imijeloyophuhliso Foundations for their coordination assistance.

Funding

Research reported in this publication was supported by the South African Medical Research Council under a Self-Initiated Research Grant. The views and opinions expressed are those of the author(s) and do not necessarily represent the official views of the SA MRC.

Conflicts of interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

AI disclosure statement

No artificial intelligence tools were used in the research, creation, or drafting of this article. This content is entirely human authored.

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