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# Exploring maternal and child healthcare projects in South African communities through Ubuntu lens: an appreciative inquiry

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## Abstract

**Background** *Ubuntu*, a Nguni Bantu term meaning “humanity towards other”, embodies a philosophy of collectivism, interconnectedness and mutual respect, which is deeply ingrained in South African culture. Ubuntu led community-based collaborative projects enhance community engagement of several stakeholders to ensure improved health outcomes for the mothers and children in the region. Similarly, collaborations between universities are required to co-create evidence-based interventions with healthcare systems and communities to achieve healthcare objectives. This paper explores maternal and child healthcare (MCH) projects in South African communities through the Ubuntu lens, using an appreciative inquiry approach.

**Methods** A Qualitative approach based on the 5-cycle of Appreciative Inquiry (AI) as proposed by Cooperrider and Srivastava were applied. A purposive sampling method was used to select participants ( $n = 14$ ) who are members of the Ubuntu MCH project. Data was gathered through workshop group discussions. The interviews were audio-taped and transcribed verbatim. Data analysis followed the six steps of narrative analysis.

**Results** Three main themes were identified: Academic growth of personnel; professional empowerment and Ubuntu mentorship.

**Conclusion** This study confirms that the Ubuntu principles emphasises solidarity, cohesion, and collaboration. The study recommends leveraging on Ubuntu principles to strengthen maternal and child healthcare services, suggesting that such this approach can lead to more sustainable and impactful health improvements in South African communities.

**Keywords** Maternal and Child health care, Ubuntu, Appreciative inquiry, South African Communities

## Introduction

MCH forms the heart of healthcare services in ensuring the socio-economic development of nations. The MCH services are rendered by healthcare professionals

to provide quality patient care which is of importance to attain the third sustainable development goal (SDG) [1]. The key indicators are 3.1 and 3.2. SDG 3.1 focused in reducing maternal mortality ratio to less than 70 deaths per 100,000 live births [1, 2]. Whereas 3.2 focused in ending preventable deaths of new born and children to less than 25 per 1000 live births under age five by 2030 [1]. Presently, there are existing challenges in delivering of MCH services that impacts the achievement of the targets for African countries such as Nigeria and South Africa amongst other countries [2]. Some of the greatest challenges MCH services are facing is that patients are

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receiving poor quality of care, inequal access to health-care services, and low utilization of maternal and child health services, inadequate skilled healthcare providers [2, 3].

According to the World Health Organisation's (WHO), MCH services are to be improved through escalating research evidence, supply evidence-based clinical and programmatic guidance [3]. In 2020, the MCH project subunit under the Ubuntu community model in nursing was developed. The project aims at addressing MCH community related challenges experienced in South African communities. The Ubuntu community model in nursing is a 5- year project funded by the National Research Foundation (NRF) which seeks to enhance access to healthcare services amongst underprivileged communities through developing, piloting, and the implementation of Ubuntu- Innovation model [4]. The project is hosted by the University of Pretoria and is implemented in collaboration with four other South African universities namely the University of Venda, Northwest University, University of Johannesburg, and University of Limpopo. These members from various Universities are involved in Ubuntu Community Model in Nursing subproject namely; Traditional and allopathic health care, MCH, TB and HIV management and training, community health, and multi, inter and trans disciplinary knowledge field. For the purpose of this paper, we will report the interventions performed by the MCH project including comprehensive formative research, appreciative inquiry, participatory action research, multi-stakeholder discussion of results and interactions with the project communities to co-design interventions that will address maternal health issues. These projects all incorporate the tenets of Ubuntu philosophy.

The *ubuntu* philosophy within Africa is a dominant ontological system of humanness used to bring all communities and cultures together through its principles [5]. Similarly, *Ubuntu* is a Nguni word, that generally means humanity and respectful treatment of others [5, 6]. Ubuntu is viewed as a caring ethic in the African context [7], and the essence of Ubuntu's philosophy for MCH is the provision of culturally appropriate and respectful maternity care (RMC). Nurses and midwives should display values such as compassion, honesty, trust, and commitment which are also reflected in Ubuntu [5]. Albertina Sisulu who was an icon in the nursing profession in South Africa exemplified the Ubuntu core values in her nursing practice [5].

Furthermore, Ubuntu's philosophy emphasises the essence of shared humanity and collective well-being, co-creation, and solidarity [6]. Central to the philosophy of Ubuntu are its values which are summarised into The R's as follows: mutual respect, reciprocity, responsibility,

relational, and role modelling [8]. It has been previously observed that collaborative projects involving educational institutions and the community had improved MCH through the use of mobile clinics, initiating ways to resolve challenges of poor MCH [9]. Furthermore, the existing body of research on collaborative efforts to improve MCH, suggests that innovative and collaborative models had positive outcomes on MCH services [10].

There are different Ubuntu related activities that are planned for each subgroup. The MCH subunit implemented projects including: The papers that were published were focusing on teenage pregnancy through introduction of sexual education in high schools, the need for collaborating with TBAs when caring for pregnant women and training midwives on point of care ultrasound in African region [11–14]. The team members of the MCH subunit also contributed in writing a chapter in a book entitled: Working with indigenous knowledge: Strategies for health professionals [14]. The outputs of the project include community empowerment and engagement, publishing scientific manuscripts and writing of book chapters. In support, the Stanford Maternal and Child Health Research Institute (MCHRI) fosters transdisciplinary research to improve health of pregnant woman and children [15]. Through MCHRI clinical research components, there is facilitation and promotion of clinical and translational research, supporting research projects. Furthermore, the MCHRI clinical research support office (CRSO) works with research and hospital teams to eliminate MCH challenges [15].

MCH research goal is to investigate, develop, implement, and evaluate interventions and strategies to improve mother and child well-being and reducing the burden of disease and disability through research of evidence-based practices [1, 15]. Amongst other challenges the researchers often identify limited research as a practice gap [15] and there is a need for international and regional continuous research to ensure the MCH research goal is reached [1, 16–18]. Additionally, in South Africa, structural fragmentation related to limited community involvement is seen as a threat. However, investing in community involvement to transfer valuable information and improve referral systems will have positive MCH outcomes [19]. One of the greatest challenges faced by MCH was having different universities working in silos to provide evidence-based research practices. Although there were notable improvements in the MCH services, significant shortcomings related to a lack of acknowledgment of evidence-based research practices in clinical practice [20]. The absence of universities and community collaborative work in the clinical practice will result in compromised MCH services. The experience-based achievements of the MCH subunit under

the 5-year progressive and renewable research project has not been reported. Therefore, this paper sought to explore MCH projects in South African communities through the Ubuntu lens, using an appreciative inquiry approach.

## Methodology

### Study design

The present study utilised an qualitative, explorative and descriptive design applying appreciative inquiry (AI) design to explore and describe ‘what gives life’ and fuel development within the MCH subunit of the Ubuntu community model in nursing [20, 21]. The selected approach is beneficial and suitable for this study because its key strategy acknowledges the strengths and success of both individuals, group, and organizations [22]. AI approach was adopted to gain a detailed understanding of what is functioning well, what is positive and identifying the strength of the group through group members sharing their experiences [21]. AI was conducted through the five-D cyclical phases as proposed by Cooperrider and Srivastava namely: define, discovery, dream, design, and destiny/delivery phases [23, 24].

#### Defining phase:

In this phase, the present study title “Exploring MCH projects in South African communities through the Ubuntu lens, using an appreciative inquiry approach” was clarified when describing the introduction and background.

#### Discovery phase.

In this phase, participants were asked to share their peak moments as members of the committee, as they appreciated the existence of the committee. In this phase the committee members reflected on their experiences in the Ubuntu MCH project, what had happened, and the forces that made it possible. The purpose of this phase was to identify the strengths and achievements of the group.

#### Dreaming phase.

In this phase, the following question was asked:

*“What would be the best and ideal function of the MCH subunit in the Ubuntu project?”*

Participants were asked to imagine the future of the committee and share the change and growth they wish for the future [23, 25]. They were encouraged to envision new and different functions and share what they saw in terms of purpose, values, systems, other members, ways of working, and working relationships.

#### Designing phase.

In this phase, the following question was asked:

*“What are your three wishes in order of priority that*

*would make improvements in MCH become reality?” In this phase, participants were asked to create or design the MCH subunit of the Ubuntu project.*

#### Destiny phase.

In this phase, the participants were asked to share how they would monitor the progress of the imagined future of the committee and sustain it [23, 25].

### Population and sampling

The population of this study comprised of: 12 academics staff members from the five South African Universities working in collaboration, and (1) professional nurse working in MCH sector. All academic staff were specialising in midwifery. A purposive sampling method was used to select participants ( $n=14$ ) of MCH subunit under the ubuntu community model in Nursing that has been working together for three years. The university is having self-paying students, bursary sponsored and those who are on scholarships. There are undergraduate and postgraduates’ students doing practical work in surrounding government hospitals and clinics.

### Study setting

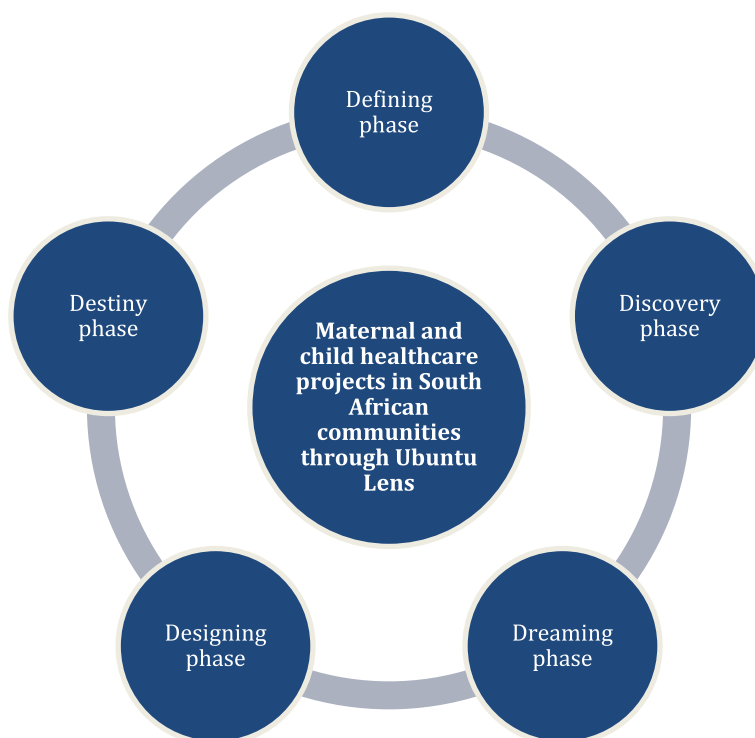
The study was conducted in one of the five collaborating Universities in South Africa, faculty of health, nursing sciences department. At the selected university the participants were interviewed in the board room.

### Data collection

Data was collected during a workshop using group discussion methods which lasted between one hour to one hour and 30 min [26]. The group discussion was based on the work implemented by the Ubuntu MCH subunit from different academic institutions in South African Universities within the three-year cycle of working together. The participants were asked questions related to the 5D model appreciative inquiry, which have been discussed in Fig. 1 above. The interviews were recorded and transcribed verbatim. Field notes were taken during the discussions.

### Data analysis

Data analysis followed six steps of narrative analysis by Holstein and Gubrium namely: 1. Codes of narrative blocks were inductively created by grouping similar positive experiences shared by the participants; 2. all narratives were examined and coded with the same code; 3. similarities and differences were noted down; 4. codes were created and nested according to the story structure of the participants’ positive experiences [27]. 5. Further search into the structure was done by categorising each positive experience based on story structure. 6. Study



**Fig. 1** 5-D cycle of appreciative inquiry [23]

structure was compared by ensuring the overarching narrative was maintained when breaking up the narrative blocks by story structure. 7. The structure that was used and wrote a core narrative that encapsulates the commonalities between what the participants have reported for each life event [27].

#### Trustworthiness

Trustworthiness was achieved by using the four criteria of credibility, transferability, dependability, and confirmability. Credibility was maintained when conducting the interviews through prolonged engagement allowing researchers to build rapport with the participants and gain understanding of their positive experiences. Confirmability was maintained through the researchers' use of bracketing their thoughts and ideas to prevent contaminating the findings of the study. Transferability was maintained through purposive sampling to recruit members of the MCH healthcare groups. To ensure dependability the researchers had fully described the methodology followed to conduct the study.

#### Ethical considerations

The study obtained ethical approval from the University of Pretoria, Research ethics committee approval number: 297/2020 and the participants gave informed consent to participate in this study. The ethical principles used by

the researchers were: the principle of beneficence and the principle of justice. The researchers ensured that there was no harm caused to the participants and they were treated with fairness and equality. Participants were informed that they could withdraw at any time if they felt uncomfortable with the research.

## Results

#### Sociodemographic characteristics

All fourteen (14) participants who agreed to participate were female professional nurses. Of the fourteen participants, five were above 50–60 years, while the other nine were 29–40 years. Educational status of the participants: PhD holders (7) and master's holders (7). The participants held various job titles including four professor, nine lecturers and one professional nurse. All participants had published in a peer reviewed journal. See Table 1 above with summary of participants' demographics. To protect participants identity pseudo names were assigned.

#### Emergent themes and sub-themes

Three main themes emerged from the discussions: academic growth of personnel, professional empowerment, and Ubuntu mentorship, were identified in this study and each theme had its sub-themes as presented in Table 2: Summary of themes and sub themes are listed in the Table 2 below.

**Table 1** Summary of participants' demographics (N = 14)

Characteristics	Frequency (f)/ Percentage (%)
<b>Age (years)</b>	
29–40	5 (35.7%)
50 and above	9 (64.3%)
<b>Education</b>	
PhD degree	7 (50%)
Master's degree	7 (50%)
<b>Job Title</b>	
Professor	4 (28.6%)
Lecturer	9 (64.2%)
Professional nurse	1 (7.14%)

### Theme 1. Academic growth of personnel

This theme describes the realities of each of the participants' journeys within the MCH subunit as they reflect on the defining and discovery of their journey. Participants described their achievements and how they have grown academically through the opportunities that were brought by the different institutions when working together. They reflected on personal and professional growth that improved MCH services..

#### i. Writing of book chapter

Nine of the participants reflected on the achievement of writing a maternal and child book chapter 6 "Titled African Indigenous Beliefs and Practices during Pregnancy, Childbirth, and Afterbirth" as part of the book called "Working with Indigenous Knowledge: Strategies for Health Professionals".

*"One of the highlights for me participating in the MCH subunit was when we were given a task to write a book chapter. As an emergent researcher, this empowered me as my Ph.D. work is now packaged*

*in a book that will be accessible to pregnant women and health professionals sharing with them the indigenous and traditional practices performed by the traditional birth attendants during labour and childbirth" [Participant 14].*

*"Our nursing students will now have access to learn about the indigenous practices associated with pregnancy and childbirth because for long the information on indigenous practices has been condemned as witchcraft and disregarded" [Participant 12].*

#### ii. Individual and group research publication in peer-reviewed and high-impact factor journals

The group conducted a scoping review on the ultrasound point of care. The participants co-authored a manuscript to improve the scope of practice of midwives:

*"The training of midwives on basic ultrasound will assist midwives in remote areas to be able to detect problems on time and refer to the higher level of care timeously, therefore improving maternal and newborn outcomes" [Participant 10]. In addition, the participants expressed their gratitude when explaining their transformative journey of being part of the Ubuntu MCH subunit by leading research papers for publication in high-impact factor journals. Additionally, emerging scholars had an opportunity to lead papers, and publish their first papers in peer-reviewed and high-impact factor journals.*

*"I was excited to learn that the paper I have written with emerging scholars, collaborators, and senior researchers is accepted for publication in high impact factor and quartile 1 journals" [Participant 3].*

The participants had an opportunity to receive comments from their peers and senior researchers and make corrections before uploading their papers to the online

**Table 2** Summary of themes and sub themes

Emergent theme	Subtheme
Theme 1: Academic growth of personnel	i. Writing of book chapter ii. Individual and group publications iii. Established collaborative relationships between the Universities iv. Leading research projects
Theme 2: Professional empowerment	i. Promotion of (RMC) through the incorporation of Ubuntu philosophy ii. Training on CTG and ultrasound point of care for midwives iii. Provision of health education regarding the prevention of teenage pregnancy among different stakeholders
Theme 3 Ubuntu mentorship	i. Mentoring from senior midwives to novice midwives

journal submission system. According to the participants, this practice enabled them to learn from one another, it enhanced their research output and their papers being published in high-impact factor journals. Therefore, based on this, they are of the view of continuing to attend writing retreats and possibly plan to have them every quarter within one year to improve publications in writing retreats. In addition, they indicated the need for planning the number of papers they want to publish within a year. They are also envisaging grooming young academics with writing skills and leading authors for publication.

### **iii. Leading a research project**

The participants expressed that their transformative experience as members of the group provided an opportunity to lead a research project. Participants recounted positive experiences, including the satisfaction of crafting a proposal until its approval by various ethics committees.

*“I started a research project that is advocating for the inclusion of Ubuntu philosophy in MCH and honestly speaking I was so happy to receive ethics approval from my institution and various departments to start with data collection of my project with my other co-researchers” [Participant 5].*

*“I was happy to take the lead and write a proposal that is focusing on the promotion of Ubuntu in MCH to the point of being approved by the ethics committee and the Department of Health” [Participant 1].*

Most of the participants indicated that their dream is to see each member of the group leading her research project within 5 years of working together in this group. To achieve the purpose of leading a research project, other group members indicated that they have already started drafting their research projects for post-doctoral and for achieving their doctoral studies. The purpose of collaborating in research projects that are led by post-doctoral researchers and supervising students collaboratively is to empower and learn from one another. They agreed on the use of online meetings, the use of emails, and attending research supervision training workshops organised by their intuitions to empower themselves.

### **iv. Established collaborative relationships between the universities**

As part of the dream phase of the AI process, the participants indicated that transformation to them in the MCH subunit meant building collaborative lasting relationships between the Universities, for long the Universities operated in silos and now the barriers have been broken and collaboration is facilitated, as supported by the following quotations.

*“The Ubuntu MCH subunit is working collaboratively with different Universities working towards a common ground of improving MCH in South Africa, with the hope to replicate to other African countries” [Participant 4].*

*“The MCH subunit assisted some of us as midwifery lectures to research and supervise students in areas on MCH that will improve patient outcomes and revive the nursing profession” [Participant 6].*

Collaboration across the different universities will assist in improving the image of midwifery care, the collaborations went beyond research and assisted with the teaching activities as well.

## **Theme 2: Professional empowerment**

The participants engaged in the dream and design phase of the AI process and identified some of the accomplished dreams within the Ubuntu MCH unit which includes the existing projects that are currently implemented within the project. The theme is reflected in the sub themes: promotion of (RMC) through the incorporation of Ubuntu philosophy; training on CTG and ultrasound point of care for midwives, and provision of health education regarding the prevention of teenage pregnancy among different stakeholders.

### **i. Promotion of (RMC) through incorporation of Ubuntu philosophy**

The MCH subunit is currently implementing a project towards the promotion of respectful maternity care through the incorporation of Ubuntu philosophy. The group identified the need for the project as currently, the status of midwifery care is not up to standards, the midwives display disrespect to the birthing women and poor attitudes of dehumanising the women. Thus, the project was developed to improve the image of maternity care by introducing Ubuntu philosophy, which is based on humanness and treating others with respect.

*“As part of the unit, we are supervising a master’s degree student implementing the project of promoting respectful maternity care by introducing the principles of ubuntu to the midwives” [Participant 11].*

*“Many of the childbearing women experience obstetric violence during childbirth, where the midwives perform some procedures (such as performing episiotomy) without obtaining informed consent from the women, thus it is important to talk about respectful maternity care with the midwives. Where they need*

*to treat the women the way they would like to be treated which is Ubuntu” [Participant 14].*

The group agreed that all women deserve dignity and respect in the promotion of quality maternity care. Moreover, ensuring the women are free from harm and mistreatment, midwives uphold the ubuntu philosophy values such as humanity, thoughtfulness, caring, and social sensitivity.

#### **ii. Training on CTG and ultrasound point of care for midwives**

The second identified subtheme on the existing projects includes the project on CTG (cardiotocography) and ultrasound point of care for midwives.

*“This project is part of my Ph.D. study where the need to train midwives on daily cardiotocography interpretation was necessary, as I noted some inconsistencies with how midwives interpret the CTG. Some midwives in tertiary hospitals wait for the obstetricians to interpret and sign the CTG trace” [Participant 12].*

*“We teach our students how to interpret the CTG, but when they get to the maternity wards the midwives are reluctant to teach the students. Or if they teach them the interpretation is different from what they are taught at the University” [Participant 8].*

*“We conducted pre- and post-ultrasound training programs for the midwives working in the nearby hospitals as we organised a well-trained sonographer to come to the University and train the midwives to conduct basic ultrasounds, as the midwives are working in the wards with ultrasounds machines and have to wait for a long time before a doctor can come and perform the ultrasound” [Participant 7].*

#### **iii. Provision of health education regarding the prevention of teenage pregnancy among different stakeholders**

One of the activities that were done by the MCH subunit members were giving health education regarding prevention of teenage pregnancy to different stakeholders. Members of this group indicated that what inspired them to provide health education regarding teenage pregnancy amongst these different stakeholders was the way they are being planned and conducted. Participatory action research approaches were used when conducting this community engagement of providing health education amongst different stakeholders.

*“It was good to see members of the community responding positively and being involved about the issues that seemed to be problematic within their*

*areas, for example, teenage pregnancy and its consequences from the planning phase to the end of the session” [Participant 3]. “I have learned about the trans-disciplinarity involvement of different stakeholders needed for the prevention of teenage pregnancy, for a change the community members were involved from the planning phase to implementation of health-related education about the prevention of pregnancy” [Participant 7].*

The participants of this group indicated that the way the community engagement was done in the past three years was very interesting because they learned to combine community engagement and research in which community members were involved from the planning phase. In addition, they have discovered that the community appreciates and opens doors to researchers who are involving them from the planning phase, and implementation phase and respect their opinions. On the other hand, the team members also felt that they were learning a lot from the community on how they are tackling health-related problems within their areas thus making their involvement visible. Also, members of this group indicated that there is a need for teamwork and motivation to conduct community engagements from the planning phase not only when there is a research project that is done for publication.

#### **Theme 3 Ubuntu mentorship**

Theme 3 reflects more on the destiny of the Ubuntu MCH subunit as part of the AI process. The participants reflected on how the subunit has capacitated them to promote empowerment and mentorship of others. One subtheme supports the theme of mentoring from senior midwives to novice midwives.

##### **i. Mentoring from senior midwives to novice midwives**

Four participants explained that one of their transformative journeys in community engagement was to empower healthcare professionals by organising sonography training for midwives. The training was done in collaboration with the selected hospital as part of community engagement to empower midwives in sonography training which is a debated and needed skill for task shifting of scope of practice amongst the midwives. They explained that the empowerment of midwives to perform sonography was done by a licensed sonographer. The part that they enjoyed in this training was the practical component because midwives were not only empowered through teaching them, but they were also allowed to perform sonography after the sonographer had presented the theory to them. The journey in the MCH subunit has assisted the participants in acquiring mentorship skills.

*"I am confident now to show the students how to perform the certain midwifery procedures inward as I have learned the skills of teaching and lifting others and working together from research group" [Participant 13].*

In other instances, the mentorship also took place between the senior lecturer and junior lecturer.

*"The research group has made me a leader and empowered me with the skills of mentoring and helping others with midwifery skills" [Participant 11].*

Additionally, the nursing students studying in a selected University and registered nurses were trained on the application of Ubuntu principles and values when caring for patients in health care systems and maternity wards. The participants of this study also perceived this training as interesting and practical based on the feedback received from nursing students and registered nurses.

*"Most of the registered nurses and nursing students that were trained reported that the trainers used the real case scenarios showing how other nurses are not applying Ubuntu values and principles when caring for their patients in antenatal care, labour, and post-natal care" [Participant 7].*

*"...Also, other case scenarios were practical and realistic on s how other nurses are applying Ubuntu values and principles when caring for their patients in the hospital setting." [Participant 2].*

After the training, registered nurses and nursing students felt that they needed to reflect and strive to apply Ubuntu values and principles when caring for their patients. They were satisfied with the training received from this group and indicated that it reminded them of the basics of nursing and ethos of professional practice that they were taught while studying nursing.

## Discussion

The present study aimed to explore the MCH projects in South African communities through the Ubuntu lens, using an appreciative inquiry approach.

### Theme 1: Academic growth of personnel

This study used the Ubuntu Lens to investigate and describe the experience-based achievements of MCH subunit. The findings of this study demonstrated the pride and sense of achievement reported by the participant as they accomplished writing of book chapters in MCH that focus on indigenous knowledge systems,

as well as teaching nursing students about indigenous practices related to pregnancy and childbirth. There are few books written with an emphasis on indigenous knowledge systems, particularly those focusing on MCH. According to Hlatywayo, indigenous cosmology has received little, if any, attention when it comes to pregnancy and childbirth [28]. Furthermore, Drummond asserted that, in the context of nursing education, Indigenous peoples have consistently recommended improvements in nurse educational preparation for Indigenous peoples' health, as evidenced by numerous national reviews and reports [29]. Despite these recommendations, the implementation of indigenous knowledge system (IKS) in the nursing curriculum, particularly in MCH, is slow in South Africa. As a result, it is critical to address this issue of policy implementation as soon as possible because nurses and midwives must cater to their patients' holistic health needs through incorporating their cultural belief system when caring for patients.

The study findings of this paper revealed that the members of the group indicated that there is a need for them to have individual and group research focus areas addressing MCH issues, particularly through conducting studies that advocate for task shifting the importance of teaching midwives on the use of obstetric basic ultrasound and cardiocography (CTG).

One of the findings of this study is that leading projects that focus on and promote the Ubuntu philosophy in MCH. Participants in this study believe that universities are working in silos to improve MCH in South Africa. The findings highlighted the importance of collaboration among university staff to improve MCH through applying Ubuntu principles. The ubuntu philosophy plays an important role in the history of caring. Ubuntu, which roughly translates as "human kindness," is frequently interpreted as "humanity toward others" [5]. The state of MCH has deteriorated over the years, necessitating the need for midwives to reflect on the history of caring by applying Ubuntu to their patients. It was also stated that most pregnant women face violence in the labour ward, and thus there is a need to provide respectful maternity care to them using Ubuntu. Ndwiga and colleagues also asserted that many women experience uncaring and abusive treatment from health care providers during facility-based labour and delivery [30]. Ubuntu philosophy is defined by the following values: humanity, caring, sharing, respect and compassion, warmth, empathy, giving, commitment and love almsgiving, sympathy, care, sensitivity to others' needs, respect, consideration, patience, and kindness [31, 32].



### Theme 2: Professional empowerment

The findings of this study revealed the need for training midwives on CTG and ultrasound point of care. Midwives are the primary providers of antenatal care and are frequently the first point of contact for many expectant women, so they play an important role in the care of both mothers and babies [33]. Thus, the implementation of ultrasound training programs for all healthcare workers, including midwives, is justified. Ultrasound in pregnancy has been shown to be safe and accurate when used correctly by trained healthcare professionals, and it provides valuable information for diagnosing and managing pregnant patients [12, 33]. As a result, more ultrasound research studies are required to provide evidence that it is indeed and must be carried out by midwives to promote access to health care for pregnant women and to reduce maternal and neonatal morbidity and mortality in low- and middle-income countries such as South Africa.

Cardiotocography (CTG) has long been recognized by midwives as an effective diagnostic tool during the intrapartum period [34]. The goal of intrapartum foetal monitoring is to avoid adverse foetal outcomes, so midwives frequently use CTG to make diagnoses during the critical period of labour [35]. As midwives are the primary caregivers for labouring women, it is critical that they have adequate knowledge of CTG to accurately interpret cardiotocography [35]. While the study findings indicated that MCH could be improved by training midwives on CTG and ultrasound.

On the other hand, it was revealed that there is a need to collaborate with families and community members to plan health education for the prevention of teen pregnancy. A review of the literature revealed that the use of family health strategies with adolescents should be prioritised, particularly in health education practice, to prevent the issue of adolescent pregnancy, which is still common and relevant today, despite being extensively studied [36].

### Theme 3: Ubuntu mentorship

The study participants believed that older midwives should mentor and educate young midwives on the application of Ubuntu principles. Most nurses are female. Previous study found that a mentorship program based on African values such as compassion, cooperation, and love can provide female academics with better knowledge and skills to compete equally with their male counterparts [36, 37]. This mentorship, which incorporates Ubuntu values, may be used by older midwives to mentor young female's midwives and students in both academic and clinical settings to improve their skills and knowledge

of MCH. It is critical to conduct MCH studies to provide evidence-based practices that show Ubuntu could be used as a strategy to improve the standard of care in MCH in low middle-income countries such as South Africa.

### Strengths and limitations

There is a notable strength of the study in the use of AI which gave the participants the ability to share and commemorate achievement-based experience of being a member of the MCH subunit under the Ubuntu Community of Nursing model project. Through the workshop discussions, the research captures the experiences of the various members from the different universities and give reflections from different settings. Furthermore, this MCH project enhances community engagement, by encouraging collective participation and involvement in healthcare projects. Another limitation of appreciative inquiry tends to focus on qualitative data, which may make it difficult to quantify the impact and outcomes of the healthcare project. In future the study population may have representatives from all focus subunits.

### Study implications and recommendations

The findings of this study recommends that the integration of ubuntu principles in MCH projects may encourage their acceptance and support by the community, leading to improved maternal and child outcomes. Appreciative inquiry projects may also enhance capacity building and empowering healthcare providers and community to collaborate in the project aimed at improving healthcare delivery. The study may also inform policies to prioritize the community involvement and promote cultural relevant practices for MCH. In support some of the projects that were led within the MCH subunit included capacity building for midwives to revive the skills on CTG interpretation. Another project that was facilitated included training the midwives working in local communities on point of care ultrasound in the region. This will help with early detection and referral for effective prevention and treatment of conditions and save lives. Overall, this study strengthens the idea that midwives need empowerment regarding the incorporation of Ubuntu philosophy in their working environment to improve their attitude and respect towards patients. The study contributes to our understanding of the importance of collaborative relationships between the universities and clinical practice to improve evidence-based practices and promote quality patient care. The study recommends leveraging Ubuntu principles to strengthen MCH services, suggesting that such an approach can led to more

sustainable and impactful health improvements in South African communities. More research work is needed to support the integration of Ubuntu philosophy and basic CTG in the curriculum for training midwives.

## Conclusion

The use of AI was able to identify the strengths and weakness of the MCH project implemented in one of the South African communities. The study's findings demonstrate that academic researchers were appreciative of how successful and satisfying their transforming experience through the Ubuntu lens was. When it came to writing book chapters, publishing peer-reviewed articles, and locating pertinent high-impact journals, they were capable, self-assured, and empowered. The findings also demonstrated that participants learn how to actively participate in research and engage with the community. By giving midwives the necessary skills, they would be able to take on new responsibilities and make timely clinical judgments that will prevent and minimise obstetrical difficulties while also delivering RMC. Working together as universities and in partnerships with communities to improve the way the Ubuntu Philosophy is integrated.

## Abbreviations

AI	Appreciative inquiry
CTG	Cardio topography
MCH	Maternal and child health care
PhD	Doctor of Philosophy
RMC	Respectful maternal care
SDGs	Sustainable developmental goals
WHO	World Health Organisation
IKS	Indigenous Knowledge system

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## Authors' contributions

S wrote introduction, methodology, layout of manuscript, and reference. N.S wrote introduction, abbreviation list. M.R wrote findings. S.M wrote discussion. R wrote abstract. F.M wrote conclusion. N.V wrote and revised findings and discussion. All authors reviewed the manuscript.

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## Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

## Declarations

### Ethics approval and consent to participate

The research involving human participants in this study was undertaken in accordance with the Declaration of Helsinki. Students were informed about the study, confidentiality and voluntariness of participation, written consent was provided by participants. All participants signed informed consent prior

to participating in the study. The obtained ethics approval from the University of Pretoria, Research ethics committee number: 297/2020.

### Consent for publication

All authors gave consent for publication.

### Competing interests

The authors declare no competing interests.

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