Patients' experience of postponement of surgery for an elective caesarean delivery

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Declaration

I, Jaimal Ashok Dhulab, herewith declare that this research report is my own, unaided work. It is being submitted for the degree of Master of Medicine at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

Signed

On this 24 day of March 2023

Dedication

This project is dedicated to my family for their patience, understanding and support.

Abstract

Background

Surgical postponement has been shown to be an indicator of quality of care and management of the operating theatre. In South African government hospitals there are many factors that lead to postponement of surgery such as staff shortages and issues relating to infrastructure. Postponement of surgical procedures results in a misuse of valuable scarce resources. Postponement of surgery may have a significant bearing on the parturient. Patients presenting for elective caesarean delivery are known to be at high risk for developing perinatal anxiety. There is limited research into the experiences of obstetric patients that have been postponed for elective caesarean delivery.

O**bjectives**

To identify, explore, and relate experiences of patients who have experienced a postponement of surgery for an elective caesarean delivery.

Methods

A qualitative, exploratory, descriptive and contextual design was followed using phenomenological and observational methods to describe the experience of elective caesarean section delivery patients who were postponed at Rahima Moosa Mother and Child Hospital. Semi-structured, open-ended interviews were undertaken with participants between May 2021 and August 2021. Data saturation was achieved after eight interviews and the data were analysed using inductive thematic analysis.

Results

A complex interlink of six themes was identified revealing poor communication, which resulted in anger and frustration, as well as fear and anxiety. Patients' interactions with healthcare workers also brought to light experiences of guilt and disempowerment. Patients indicated that support structures and coping strategies were utilized to maintain a sense of trust and reassurance in the treatment and care that they received.

Conclusion

Postponement of surgery has detrimental effects on patients presenting for elective caesarean delivery. Early and effective communication may improve patients' experience of postponement. Inter-professional communication and collaboration among doctors and nurses are key to providing quality patient care.

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Conflict of interest

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RMMCH	Rahima Moosa Mother and Child Hospital

Draft Article: Patients' experience of postponement of surgery for an elective caesarean delivery

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Introduction

Patients scheduled for surgery are vulnerable and at risk of altered physiological, psychological, and emotional responses.[1] It is important as healthcare providers to be aware of and mitigate against factors which negatively affect patient's experience of safety, care, and trust perioperatively.[1]

Surgical postponement is an issue in the perioperative period that has profound effects on patients' wellbeing which lasts long after surgery and even hospital discharge.[2] These emotional effects include frustration, anger, anxiety, and depression.[2]

'Day of surgery cancellation' has been shown to be an indicator of quality of care and management of the operating theatre.[3] Cases are commonly postponed as a result of patient, administrative, infrastructure, and financial factors.[4, 5] In some centres, many of these factors that result in postponement are avoidable.[6]

In the obstetric population, perioperative fasting may impact both maternal and foetal well-being.[7] Maternal dehydration and starvation can adversely affect placental weight, foetal growth, and predispose the foetus to cognitive impairment.[7-12] Additionally, fasted patients may be at increased risk of perinatal anxiety.[7]

Caesarean delivery has been found to be a risk factor for developing postnatal anxiety along with being younger, more educated and employed.[13] Elevated anxiety levels may lead to depression which has deleterious effects on breastfeeding, mother-infant interaction, infant temperament and may contribute to adolescent conduct disorders.[13]

Patient-centred management is a core value of high-quality healthcare.[5] Perceived quality of care is of great importance, and a great determinant of patient satisfaction.[5] To evaluate patients' perception, and satisfaction of care requires undertaking quality improvement.[14]

Quality improvement is a continuous process that fosters improved service delivery and patient-centred care by means of cost efficiency, time efficiency and enhanced standards of care which culminates in greater patient satisfaction and value for money.[14,15] Barriers to the implementation of quality improvement projects are often encountered as a result of lack of motivation, lack of training in quality improvement, lack of funding, and the cultural values of staff.[16]

Improving patient care, and satisfaction with treatment may result in reduced maternal anxiety, and improved surgical outcomes.[17] There is limited research available that provides insight into the experiences of obstetric patients that have been postponed for an elective caesarean delivery.

The aim of this study is to describe the experiences of patients who have experienced a postponement of surgery for an elective caesarean delivery. By describing the experiences of these patients, healthcare workers may have a greater understanding of patients' perception of treatment, and which will allow for improved counselling, discussions, patient involvement in decision making, and ultimately greater patient satisfaction.

Methods

Design

A qualitative, exploratory, descriptive, and contextual design was followed using phenomenological and observational methods to describe the experiences of patients who had experienced a postponement of surgery for an elective caesarean section delivery.

Setting and participants

The study population were patients that had been postponed for an elective caesarean delivery at Rahima Moosa Mother and Child Hospital (RMMCH). This 338 bed hospital is a regional level government institution. Specialist obstetric, gynaecological, paediatric and neonatal services are offered. Based in Coronationville Gauteng, RMMCH was previously called Coronation Hospital and was built to serve the surrounding Indian and Coloured communities during apartheid.[18]

A heterogenous purposive sampling method was used to select participants in the antenatal ward. Patients postponed for an elective caesarean delivery, and who were still awaiting surgery were approached to participate in the study.

The researcher used his judgement to identify a variety of participants based on ethnicity, parity, and previous caesarean deliveries to ensure diversity. Of the fifteen patients that were invited to participate in the study, eight patients consented to participate.

Data collection

Data collection consisted of a single interview with each participant and took place between 1 May 2021 and 31 August 2021. The interviews were conducted in a semi-structured, in-depth format that were conversation guided by specific open-ended questions using an interview guide.

The interview guide included questions on the patient's experience of postponement of their caesarean delivery, their feelings about the delay, how the postponement was communicated to them and how they felt about not being able to eat. The interview was supplemented by observations of participants tone, emotions and body language. The interviews lasted on average 20 minutes with the shortest interview lasting 8 minutes and the longest taking 24 minutes. The interviews were conducted by the primary researcher, who is an anaesthesiologist.

Although a translator was available, all participants opted to have the interview conducted in English. Interviews were conducted until the researcher perceived the data to be 'rich' and 'thick', and no new themes arose. As a result, a sense of data saturation was reached at a sample size of eight participants.[19]

Ethical considerations

Ethical clearance to conduct the study was granted by the University of Witwatersrand Human Research Ethics Committee (Medical). Permission to conduct the study at RMMCH was granted by the hospital's research committee.

The study was conducted according to the principles of the Declaration of Helsinki[20] and the South African Guidelines for Good Clinical Practice.[21] Strict confidentiality and anonymity was maintained throughout the study. The measures taken include privacy during the interview, the replacement of patient names with study numbers, removing participant identifying information, and the safe storage of data on password protected devices.

Data analysis

Field notes were typed, paginated, labelled, and filed to become the basis of analytic memos. Audio recordings were transcribed verbatim by a transcriptionist. The researcher then listened to each audio recording whilst simultaneously reading through the transcript in order to ensure accuracy of transcription. Data were coded using MAXQDA® version 12 which is a qualitative data analysis software.

Inductive thematic analysis was used to analyse data, and common themes and sub-themes were identified. To maintain consistency of the data, Braun and Clarke's six-phase approach was used.[22] The phases encompassed reading and re-reading all the transcripts and field notes for the researcher to gain familiarity with the data, systematically generating initial codes, collating all the generated codes into potential themes, validating the themes that emerged by comparing them to the coded extracts and the entire data set, then generating clear definitions and names for each theme, and finally producing a scholarly analysis in relation to existing literature.

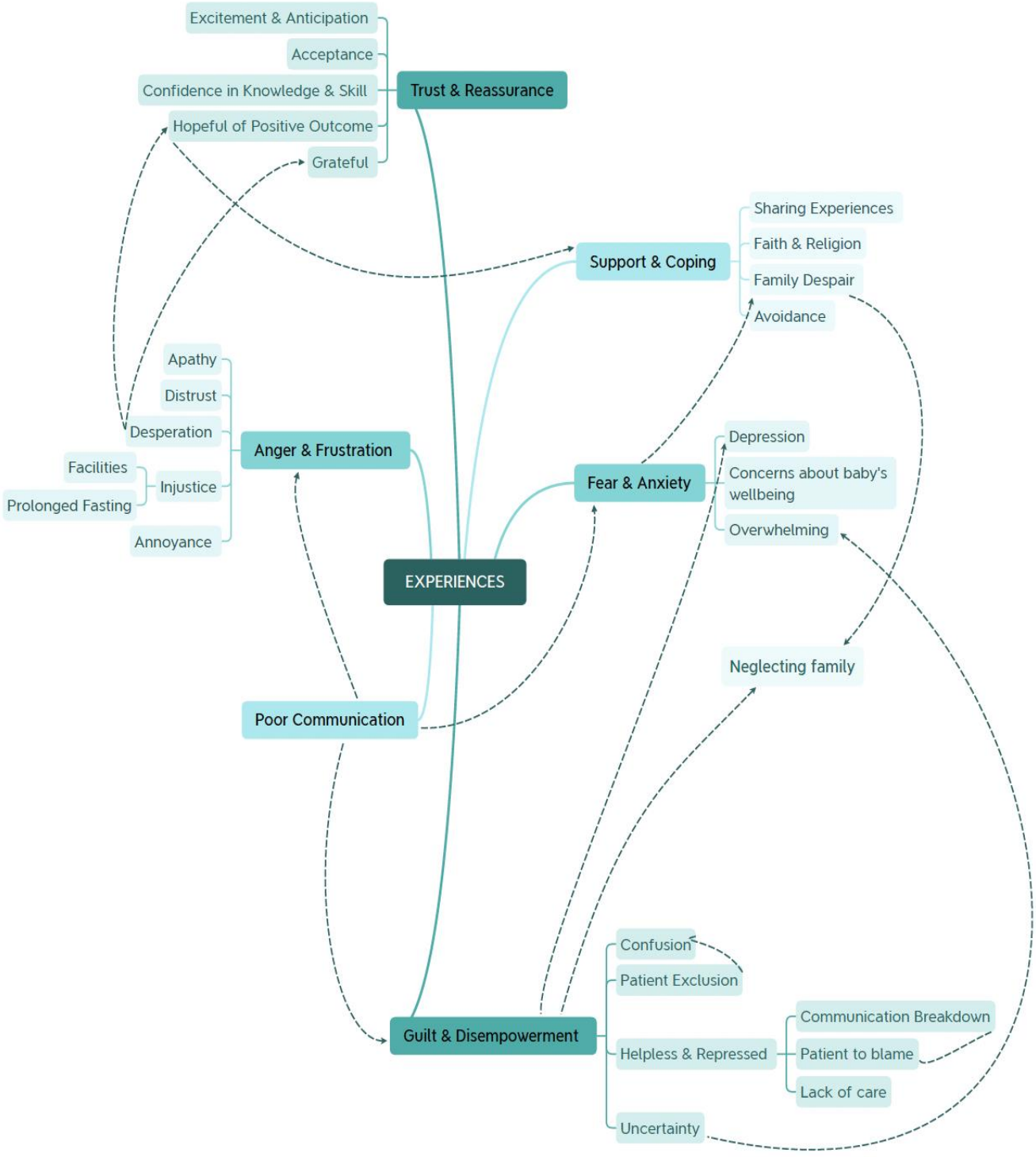
Trustworthiness of the data as described by Guba and Lincoln was maintained.[23] Credibility, transferability, confirmability, and dependability was ensured by having a researcher collect the data who was not involved in the care of the participants. Debriefing sessions and member checking between researchers involved in the study after each interview helped broaden the phenomenon studied and prevent biases by the primary researcher's ideas of the data.

An independent researcher reviewed all the audio recordings, transcriptions as well as the process of thematic analysis, validating that the themes developed represented the data collected. Participants interviewed were of different ethnicities and had varied experience with previous childbirth, surgery and hospitalisation allowing for data triangulation. By employing data triangulation as a test for validity, individual opinions and experiences were compared against each other.

Results

The data obtained from the interviews were coded and organised into themes. Six interlinking themes were formed further emphasising the complexity of the patients' experiences. The most common theme that drove a plethora of negative experiences was poor communication. Interrelated themes and sub-themes are shown in Figure 1.

Figure 1. Interrelated themes and sub-themes



Poor communication

Patients stated that their experiences were dominated by lack of communication with healthcare workers: ‘Nothing was explained properly’ (P1). This fostered emotions of anger and frustration: ‘The least that you can do is at least come and explain to the person you’re not going in today’ (P8). Patients felt that they could be counselled better at admission to alleviate the anxiety they experience when being postponed: ‘Like really like prepare me for this’ (P3).

Patients felt that the lack of communication was a problem among healthcare workers especially among doctors and nurses: ‘The doctor writes the notes and leaves the patient; the nurse comes, she reads the notes, she leaves the patient’ (P8). The lack of inter-professional communication led to perceptions of disempowerment, uncertainty, and abandonment. Patients highlighted that this is a barrier to patient-centric care, and the implementation of performing elective caesarean deliveries afterhours. Patients attributed the nurse’s insensitive behaviour to them being uninvolved, and uninformed, about the decisions made by the doctors in theatre.

Denial, anger and frustration

Patients experienced a myriad of emotions which presented initially as denial, but later anger and frustration: ‘For myself, I’m still waiting because I can’t stay in the hospital’ (P5); ‘Why did they bring me to hospital’ (P7). Patients had an overwhelming sense of frustration with the apathy expressed by healthcare workers: ‘If I didn’t go ask what’s happening, I was still gonna be sitting there, not eating, waiting for something that’s not gonna happen today’ (P8). Poor communication was a recurrent theme as patients described their experiences of prolonged starvation, a particular patient explain that she had not eaten for over 40 hours.

The thoughts that patients encountered as a result made them question the motives and trust they could place in their healthcare workers: ‘The other hospital that I delivered in, they were just honest with me’ (P4), ‘I am really starving and I’m not fine at all’ (P7). Patients described poor experiences regarding postponement as a result of not being informed that they should not eat: ‘When we were eating breakfast there were doctors and nurses in the room, it’s not like they didn’t know…we could have waited that two hours, now we have to wait a whole day’ (P1).

The hospital experiences a significant obstetric patient load as patients described injustices that were perceived as an infringement of their personal dignity: ‘When you come to the ward there’s like there’s no bed, so for the whole night you have to sit on a bench up until the next day’ (P8), ‘At night you find pregnant ladies sleeping, laying on the floor with blankets’ (P3).

The fasting times were a great contributor to patient dissatisfaction with most patients reporting concerns about their health and their baby’s wellbeing: ‘My baby lost out on a whole day of nutrients’ (P8). ‘I’m pregnant and they made me stay 24 hours without eating’ (P4).

The plethora of emotions patients experienced while waiting for their surgery made patients feel desperate, but despite the fear of undergoing surgery and the possible complications that may arise from the procedure, patients indicated that they would be grateful to just have their deliveries done: ‘Just to make an operation and see where it goes’ (P4).

Guilt and disempowerment

Patients described a sense of confusion and an incongruency in what they were told from the nurses they encountered in the ward: ‘So many nurses are in and out of there…who do I listen to, who do I not listen to’ (P1). Most patients perceived a lack of autonomy and felt excluded from the management and treatment decisions.

Patients described a lack of counselling at admission, about their condition and when they would be taken for their surgery: ‘Is my condition not that critical as well?’ (P7). However, some patients said they were grateful for the honest interaction with the doctors that attended to them: ‘You get the straight answer that you waiting for and it's done’ (P3).

Patients did not express feelings of guilt that were linked to the elective nature of the surgery. Elective caesarean deliveries at RMMCH are booked by obstetricians where a clear indication for the procedure exists, and not as a result of direct patient preferences.

Patients experienced various forms of guilt such as an instance where they felt blamed for not being ready for their surgery because they had eaten. Patients displayed unwavering self-control as they fought off thoughts of eating while waiting for their surgery: ‘Not only am I wasting my time but I’m wasting the doctor’s time’ (P3). Postponement led to patients feeling guilty about their children at home: ‘Now I’m neglecting her over nothing’ (P4).

Patients’ guilt was revealed as avoidance when they did not have the answers to tell their spouses and family as to when their surgery will take place. Some patients had resorted to switching off their phones because they could not handle the stress of facing their family: ‘They keep phoning mommy when you coming home’ (P3).

Patients found that the extended waiting time for elective caesarean deliveries was a frustration for the nurses in the ward as well with many patients asking the nurses when they’ll be going for their surgery: ‘It's like a cat fight- a cage with a lot of women inside of it. Just imagine we're ready to scratch and bite and fight with each other’ (P3).

The patients felt that the nurses’ annoyance stemmed from having questions asked by patients regarding their surgery for which the nurses in the ward didn’t have the answers. This resulted in the nurses being guarded, showing a lack of empathy and even responding with animosity as one patient mentioned in an interaction with a nurse: ‘Don't tell us what to do because we are not working in the theatre’ (P6).

The breakdown in communication with the nursing staff in the ward led patients to feel scared and embarrassed to approach the nurses even in life-threatening situations with the fear of being reprimanded: ‘I would rather lay there and die because I don't want to be screamed out at or shouted at as if I'm in grade R or primary school’ (P3).

Fear and anxiety

The patients' body language and low mood depicted that they felt trapped and at the mercy of the hospital they were being treated in: 'I need help, there's nothing I can do' (P2). Many patients had caesarean deliveries during previous pregnancies in other hospitals, some in private hospitals and others in government hospitals, in all cases the patients felt that the hospital facilities, care, and service they received during previous pregnancies were superior: 'They just don't care here' (P4). As a result of their experience, patients were unlikely to return for any future medical care: 'I wouldn't even refer any other family member, friend, colleague to this hospital' (P3).

Patients feared that the prolonged fasting period had negatively affected their health with most patients saying that they experienced headache, dizziness, and weakness: 'I felt like I'm gonna fall down and that isn't healthy for me' (P7). The prolonged fasting had also elevated their concern and anxiety about the wellbeing of their baby as some patients had reported decreased foetal movement the longer they had not eaten: 'I thought maybe the baby died of hunger inside' (P3). The anxiety of surgery was reinforced during interviews and compounded by postponement: 'You can't be excited if you go to an operation' (P5).

All patients were left depressed and despondent that their surgery was postponed citing the excitement and anticipation of meeting their newborn babies and going home to their families: 'I'm miserable because you prepare for this day' (P8). Patients came to the realisation that they had no control over their postponement and relied on the decisions of their healthcare providers: 'Just accept it' (P3).

Support and coping

Patients relied on each other for support as they tried to fend off thoughts about their impending surgery. Some patients tried to keep positive and bolstered their spirits by distracting themselves with gifts and treats: 'It's just here and there we've got some goodies going for ourselves' (P3), and had discussions about worldly matters to keep their minds occupied: 'We speak about our families, work, unemployment' (P3).

Patients used strategies such as reading, watching videos, playing games on their phones, and sleeping to distract themselves from the thoughts of their surgery. Patients also relied on their faith and religious beliefs to see them through as they waited to go to theatre, with some patients using prayer to alleviate the fears and concerns that they experienced with regards to their baby: 'God knows why I'm here, so everything will be fine' (P3).

Some patients had the support and prayers of their family members for the safe delivery and good health of the patient and their baby which allowed the patients to overcome the doubt in their minds and frustrations they experienced. There were instances though, that patients were postponed on consecutive days which lead to despair among the patients as well as their families: 'It's definitely affecting the family' (P3). Often, patients reported that they had young children at home who were the most affected by their absence: 'Mommy, come back home' (P5).

Many patients had cried during the interview describing their experiences of hunger, dizziness, weakness, and the inability to feel foetal movement which led the interviewer to believe that the patients were not coping physically or psychologically with the postponement.

Trust and reassurance

Patients were accepting of the challenges the hospital faced that may have contributed to the postponement of their caesarean delivery such as the lack of water: 'It happens sometimes' (P7), however, they emphasised that it was unfair to be starved for protracted periods of time without receiving any communication: 'I can appreciate but they don't tell me anything' (P6). Despite the myriad of emotions patients experienced as a result of poor communication, patients still had confidence in the knowledge and skill of their healthcare workers: 'I do believe that I'm in good hands' (P3).

Patients were hopeful of a positive outcome, and were eagerly waiting in anticipation for their caesarean delivery: 'I was happy that this weekend, I was going with the child' (P6). Patients mentioned that once they had returned home, they would be grateful for the safe delivery of their baby, and would most likely overlook the setbacks in their treatment: 'I'll leave everything behind' (P7).

Discussion

Surgery is a major source of stress and anxiety for patients.[1] Postponement of surgery is an additional stressor which may affect patients physically and psychologically.[6] The results from this study were described in six interlinking themes.

The themes provided insight into patient's experiences of admission for an elective caesarean delivery, perceived care, surgical postponement, coping methods and pitfalls in their management. These findings bear semblance to international studies very closely in the experiences of patients that have had surgical postponement or cancellation.[24-31]

Patients expressed that the largest hurdle to equitable care was a lack of communication from healthcare providers. Similarly, a study by Ivarsson et al.[26] patients were more likely to be satisfied if a doctor had discussed the postponement with them rather than a nurse.

Correspondingly, in studies by Thorne et al.[27], Bresser et al.[28], Ivarsson et al.[29], patients were understanding and accepting of the reasons that may have led to postponement of their surgery, however, felt that this should have been communicated to them and could have been communicated more timeously. Misinformation may result in a breakdown of trust between patients and their healthcare providers.[30, 31]

Patients experienced a roller coaster of emotions as a result of postponement which may be compared to Elisabeth Kubler-Ross's model on the five stages of dying which she described as denial, anger, bargaining, depression, and acceptance.[32] This was seen during the interviews; some patients were in denial about the postponement and continued to starve despite being advised to eat.

Patients expressed that the nurses were not empowered to make decisions for patients that had not eaten for prolonged periods of time, and relied on the doctors' directives. This showed a lack of collaboration and teamwork among healthcare workers. The importance of interprofessional communication and collaboration between healthcare workers has been thoroughly described in the literature, and has been identified as an indicator of quality of care.[33]

Eligible patients were approached for voluntary participation in the study and consent was taken in the presence of a nurse to mitigate against coercion, however, patients had often declined to participate in the study with the fear that their treatment would be negatively impacted which attests to the sensitive nature of this study.

A confounding factor was the duration of the interviews which are considered short for a phenomenological study. Establishing greater rapport by having multiple interviews with participants may lead to data that is more 'rich and thick'. Often, low risk patients that had been booked for theatre at RMMCH were moved to various other facilities for delivery during the day and could not be followed up.

Conclusion

Postponement of surgery for an elective caesarean delivery has detrimental effects on patients' physical, psychological, and social wellbeing. Early and effective communication with patients about postponement of surgery may improve patients' experience of postponement, and satisfaction with treatment. Inter-professional collaboration and communication between healthcare workers is paramount to providing quality patient care.

References

1. Ingvarsdottir E., Halldorsdottir S. Enhancing patient safety in the operating theatre: from the perspective of experienced operating theatre nurses. Scand J Caring Sci. 2018;32(2):951-60. DOI: 10.1111/scs.12532.
2. Magnusson H., Felländer-Tsai L., Hansson M.G., Ryd L. Cancellations of elective surgery may cause an inferior postoperative course: the 'invisible hand' of health-care prioritization? Clin Ethics. 2011;6(1):27-31. DOI: 10.1258/ce.2011.011005.
3. Kaddoum R., Fadlallah R., Hitti E., El-Jardali F., El Eid G. Causes of cancellations on the day of surgery at a tertiary teaching hospital. BMC Health Serv Res. 2016;16(1):259. DOI: 10.1186/s12913-016-1475-6.
4. Keller A., Ashrafi A., Ali A. Causes of elective surgery cancellation and theatre throughput efficiency in an Australian urology unit. F1000Res. 2014;3:197. DOI: 10.12688/f1000research.4824.1.
5. Hovlid E., von Plessen C., Haug K., Aslaksen A.B., Bukve O. Patient experiences with interventions to reduce surgery cancellations: a qualitative study. BMC Surg. 2013;13(1):30. DOI: 10.1186/1471-2482-13-30.
6. Lankoandé M., Bonkoungou P., K Ki B., Flavien R Kaboré A., Ouangré E., Savadogo Y., et al. Economic and psychological burden of scheduled surgery cancellation in a sub-Saharan country (Burkina Faso). South Afr J Anaesth Analg. 2017;23(6):145-51. DOI: 10.1080/22201181.2017.1379788.
7. Agnew C.L., Ross M.G., Fujino Y., Ervin M.G., Day L., Kullama L.K. Maternal/fetal dehydration: prolonged effects and responses to oral rehydration. Am J Physiol-Reg I. 1993;264(1):R197-R203. DOI: 10.1152/ajpregu.1993.264.1.R197.
8. Gul Z., Rajar S., Shaikh Z.F., Shafique K., Hossain N. Perinatal outcome among fasting and non fasting mothers during the month of Ramadan. Pak J Med Sci. 2018;34(4):989-93. DOI: 10.12669/pjms.344.15654.
9. Chen X. Fetus, fasting, and festival: the persistent effects of in utero social shocks. Int J Health Policy Manag. 2014 Sep;3(4):165-9. DOI: 10.15171/ijhpm.2014.92.
10. Mirghani H.M., Weerasinghe S., Al-Awar S., Abdulla L., Ezimokhai M. The effect of intermittent maternal fasting on computerized fetal heart tracing. J Perinatol. 2005;25(2):90-2. DOI: 10.1038/sj.jp.7211221.
11. Mirghani H.M., Weerasinghe D.S.L., Ezimokhai M., Smith J.R. The effect of maternal fasting on the fetal biophysical profile. Int J Gynecol Obstet. 2003;81(1):17-21. DOI: 10.1016/s0020-7292(02)00398-3.
12. Schraag S., Mandach U., Schweer H., Beinder E. Metabolic changes, hypothalamo-pituitary-adrenal axis and oxidative stress after short-term starvation in healthy pregnant women. J Perinat Med. 2007;35(4):289. DOI: 10.1515/JPM.2007.076.
13. Field T. Postnatal anxiety prevalence, predictors and effects on development: A narrative review. Infant Behav Dev. 2018;51:24-32. DOI: 10.1016/j.infbeh.2018.02.005.
14. Chao S. Advancing Quality Improvement Research: Challenges and Opportunities: Workshop Summary. Washington, DC: The National Academies Press; 2007. 29-50. DOI: 10.17226/11884.
15. Kennedy G.D., Tevis S.E., Kent K.C. Is there a relationship between patient satisfaction and favorable outcomes? Ann Surg. 2014;260(4):592-600. DOI: 10.1097/SLA.0000000000000932.

16. Chao S. 3 Barriers to Quality Improvement and Quality Improvement Research. Washington, DC: The National Academies Press; 2007. 29-50. DOI: 10.17226/11884.
17. Wongkietkachorn A., Wongkietkachorn N., Rhunsiri P. Preoperative needs-based education to reduce anxiety, increase satisfaction, and decrease time spent in day surgery: a randomized controlled trial. World J Surg. 2018;42(3):666-74. DOI: 10.1007/s00268-017-4207-0.
18. Musiker N., Musiker R. A Concise Historical Dictionary of Greater Johannesburg. Cape Town: Francolin; 2000.
19. Guest G, Bunce A, Johnson L. How many interviews are enough?: An experiment with data saturation and variability. Field Methods. 2006;18(1):59-82. DOI: 10.1177/1525822X05279903.
20. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. JAMA. 2013;310(20):2191-4. DOI: 10.1001/jama.2013.281053.
21. Makubalo L.E., Netshidzivhani P., Ratsha-Mothokoa M., Hlongwa K. Guidelines for Good Practice in the Conduct of Clinical Trials with Human Participants in South Africa Pretoria: Department of Health; 2006. [Available from: http://www.kznhealth.gov.za/research/guideline2.pdf. (Accessed: 25/01/2020).
22. Braun V., Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77-101. DOI: 10.1191/1478088706qp063oa.
23. Guba E.G., Lincoln Y.S. Trustworthiness criteria & techniques for establishing them 1985 [Available from: https://www.researchgate.net/figure/Lincoln-Gubas-1985-trustworthiness-criteria-techniques-for-establishing-them_tbl1_260312062. (Accessed: 25/01/2020).
24. Yang N., Elmatite W.M., Elgallad A., Gajdos C., Pourafkari L., Nader N.D. Patient outcomes related to the daytime versus after-hours surgery: A meta-analysis. J Clin Anesth. 2019;54:13-8. DOI: 10.1016/j.jclinane.2018.10.019.
25. Viftrup A., Dreyer P., Nikolajsen L., Holm A. Surgery cancellation: A scoping review of patients' experiences. J Clin Nurs. 2021;30(3-4):357-71. DOI: 10.1111/jocn.15582.
26. Ivarsson B., Ola Kimblad P., Sjöberg T., Larsson S. Patient reactions to cancelled or postponed heart operations. J Nurs Manag. 2002;10(2):75-81. DOI: 10.1046/j.0966-0429.2001.00293.x.
27. Thorne L., Ellamushi H., Mtandari S., McEvoy A.W., Powell M., Kitchen N.D. Auditing patient experience and satisfaction with neurosurgical care: results of a questionnaire survey. Br J Neurosurg. 2002;16(3):243-55. DOI: 10.1080/02688690220148833.
28. Bresser P.J., Sexton D.L., Foell D.W. Patients' Responses to Postponement of Coronary Artery Bypass Graft Surgery. J Nurs Scholarsh. 1993;25(1):5-10. DOI: 10.1111/j.1547-5069.1993.tb00746.x.
29. Ivarsson B., Larsson S., Sjöberg T. Postponed or cancelled heart operations from the patient's perspective. J Nurs Manag. 2004;12(1):28-36. DOI: 10.1111/j.1365-2834.2004.00400.x.
30. Thomas K., Riggs R., Stothart K. The Meaning of Changing Expectations: A Qualitative Descriptive Study. Nurs Sci Q. 2013;26(1):59-67. DOI: 10.1177/0894318412466732.
31. Mehta S., Bryson D., Mangwani J., Cutler L. Communication after cancellations in orthopaedics: The patient perspective. World J. Orthop. 2014;5:45-50. DOI: 10.5312/wjo.v5.i1.45.

32. Tyrrell P., Harberger S., Schoo C., al. e. Kubler-Ross Stages of Dying and Subsequent Models of Grief Treasure Island (FL): StatPearls Publishing; 2022. Available from: https://www.ncbi.nlm.nih.gov/books/NBK507885/. (Accessed: 22/10/2022).
33. Busari J.O., Moll F.M., Duits A.J. Understanding the impact of interprofessional collaboration on the quality of care: a case report from a small-scale resource limited health care environment. J Multidiscip Healthc. 2017;10:227-34. DOI: 10.2147/jmdh.S140042.

Appendix A: Proposal

Patients' experience of postponement of surgery for an elective caesarean delivery

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Co-supervisor:	Dr Brian Gardner Department of Anaesthesiology

Introduction

Day of surgery cancellation has been shown to be an indicator of quality of care and management of the operating theatre (1). Cases are commonly cancelled as a result of patient, medical, administrative, and financial factors (2, 3). Administrative issues associated with cancellations include scheduling errors, overbooked theatre lists, lack of beds, and communication errors (1). In some centers many of these factors that result in cancellation are avoidable (4).

Elective and emergency obstetrics, gynaecology, and paediatric surgeries are performed at Rahima Moosa Mother and Child Hospital (RMMCH) (5). In the previous 6 months (July 2019 to December 2019), a total of 5 356 cases were booked for theatre of which 1123 were postponed. Of the cases that were postponed, 88% were attributed to overbooked elective lists. Most of the patients that were postponed had been booked for elective caesarean sections (5). This is mostly likely a result of high patient loads, and the prioritisation of emergency obstetric cases. Other contributory factors that have been identified include staff shortages and issues relating to infrastructure, for example water and electricity outages (5).

The operating theatre costs account for a significant portion of the hospital budget (4). Postponement of patients results in a significant wastage of time and resources, and may affect productivity (1). Hospitalisation also has significant bearing on the cost to patients as well as to the economy (3, 6). A patient may be the sole breadwinner in their household, with their family and sometimes extended family being reliant on their income for survival. Prolonged hospitalisation may have a significant bearing on patients' financial stability (3, 6).

A patient scheduled for surgery may be anxious and experience a number of emotions especially on the day of surgery (7). Postponement has profound effects on patients' wellbeing which lasts long after surgery and even hospital discharge. These emotional effects include frustration, anger, anxiety, and depression (8). Patients have also reported that their clinical condition was negatively impacted by the postponement (4). Poor communication between healthcare workers and patients, as to the reason for postponement, may result in patients feeling isolated and neglected (3).

At some institutions, patients have been advised to not eat or drink for 6-8 hours prior to surgery. As a result, patients who are postponed, especially if they are postponed multiple times, may be starved for protracted periods (4). Repeated and prolonged fasting due to postponement may be a traumatic experience for patients, and may result in negative physiological effects that could affect wound healing, recovery time, and hospital stay (4).

Maternal dehydration and starvation may have a significant impact on the developing foetus. Gul et al. (9) have found that maternal fasting can adversely affect placental weight and foetal growth. Chen et al. (10) have also stated that other than affecting general growth, fasting may also result in cognitive impairments and may predispose the foetus to the development of diseases later in life.

Fasting has been found to affect placental enzyme development necessary to convert active cortisol into inactive cortisone, the foetus is thus exposed to a significantly elevated amount of cortisol during pregnancy. Excessive cortisol exposure results in a change of the Hypothalamic-Pituitary-Adrenal axis (HPA), which is associated with type 2 diabetes, hypertension, renal disease, and impaired cognition (10). Mirghani, et al. (11) have also found that fasting may adversely affect the foetal heart rate and breathing movements, and may result in a decrease in the number of large accelerations on computerised foetal heart rate tracings (12).

Schraag, et al. (13) have found that after short periods of fasting pregnant patients have higher levels of oxidative stress markers. Hypovolaemia increases maternal plasma osmolality, and arginine vasopressin (AVP), and decrease atrial natriuretic factor (ANF) (14). These hormones promote reabsorption of water in the renal tubules and are important for regulation of blood pressure (14). Unlike maternal osmolality and AVP that improves rapidly with rehydration, foetal osmolality and AVP takes much longer to improve. This signifies a delayed recovery of the foetus (14).

Anxiety can be detrimental to foetal and maternal wellbeing. Perinatal anxiety is common and may be increased in fasted patients (15). Increased anxiety may be associated with the development of postnatal depression and may affect foeto-maternal bonding, breastfeeding, mother-infant interaction, and infant mental development. Maternal anxiety and depression are also associated with the development of adolescent conduct disorders (15).

Patients presenting for elective caesarean delivery are known to be at high risk for developing postnatal anxiety. Postponement, especially repeated postponement, may result in a lack of confidence in the hospital staff and medical personnel attending to them, this may further increase their risk of developing postnatal anxiety and depression (14).

Patient-centered management is a core value of high-quality healthcare (3). A patient is perceived not just as a physical body, but also an emotionally intelligent being. In order to treat patients holistically, healthcare workers need to understand patients' fears, concerns and frustrations so that in addition to treating the physical condition, the psychological aspects may also be addressed.

Quality improvement is a continuous process that should be undertaken at every point of care. It fosters improved service delivery and patient-centered care by means of cost efficiency, time efficiency and enhanced standards of care which culminates in greater patient satisfaction and value for money (16, 17). Perceived quality of care is of great importance and a great determinant of patient satisfaction (3). Improving patient satisfaction may result in reduced anxiety and improved surgical outcomes (18).

Providing quality care, and ensuring patient satisfaction is particularly challenging in resource constrained environments such as South African government hospitals. Barriers to the implementation of quality improvement projects are often encountered as a result of lack of staff motivation, lack of training, lack of funding, and cultural values (16). To ensure quality care and patient satisfaction, creative solutions that are safe, cost effective, time saving, and that meet the expectations of the patients, need to be developed and implemented.

Communication is vital in any successful relationship and especially in healthcare (7). Healthcare workers tend to forget that medical terminology is not well understood by patients. Misunderstandings may create confusion and anxiety for patients. Providing information to patients in a manner that is simplified but comprehensive may lead to greater understanding, involvement, and satisfaction with the provided medical treatment (3).

Numerous studies have been done to identify causes and determine the financial implications of theatre cancellations (4, 6, 19). However, there is limited data on the impact that postponement of surgery as a result of day of surgery cancellation has on patients. This study seeks to describe patients' experience of postponement of surgery for elective caesarean section delivery. The findings of this study may assist in improving the quality of service patients experience by understanding and addressing their plight.

Problem statement

There is a high rate of postponement of elective caesarean sections at RMMCH. Postponement may be associated with adverse maternal and foetal effects, may result in high levels of prenatal maternal anxiety, and may adversely affect patient satisfaction.

Describing the experience of patients booked for elective caesarean section who are postponed may assist with pre-operative counselling strategies which may improve communication with patients, allay anxiety, and result in an improvement in patient satisfaction and ultimately patient outcome.

Aims

The aim of this study is to describe the experience of patients who have experienced a postponement of surgery for an elective caesarean section delivery.

Objectives

The objectives of the study are to:

- Identify, explore, and relate experiences of patients who have experienced a postponement of surgery for an elective caesarean section delivery.
- Understand the impact of patients' experiences due to postponement of surgery for an elective caesarean section delivery.

Research assumptions and definitions

The following definitions will be used in the study.

Anaesthetist: is a qualified doctor working in the Department of Anaesthesiology including interns, medical officers, registrars and consultants.

Patient: is a parturient presenting for elective caesarean section.

Postponement: a deferral or delay that results in surgery taking place at a later date than originally planned.

Cancellation: day of surgery cancellation of a planned surgery due to unforeseen circumstances resulting in postponement.

Demarcation of study field

The study will take place at RMMCH. This a 338 bed regional hospital that caters for female adults undergoing medical procedures related to obstetrics and gynaecology. Pregnant women scheduled for elective caesarean section that were postponed on the day of surgery will be interviewed for the study.

RMMCH is situated in Coronationville. It was built during the apartheid era as Coronation Hospital. The hospital opened in 1944 to serve people classified as Indian and Coloured from local communities of Newclare, Noordgesig and Coronationville (20). The population of these communities, often of Malay descent predominantly spoke Afrikaans. The communities that the hospital serves today remains Afrikaans and English speaking as a result of apartheid segregation (21).

These interviews will take place in a private room in the ward allowing the interview to remain confidential and without prejudice.

Ethical considerations

Ethical clearance will be applied for from the University of Witwatersrand Human Research Ethics Committee (Medical). Permission to conduct the study will be obtained from the research committee of RMMCH (Appendix A).

Eligible patients will be approached and invited to take part in the study. The study will be explained by the researcher. Those who agree to take part will be given an information letter (Appendix B) further explaining the study and will be asked to sign a consent form (Appendix C). The patient will then be asked to sign a second consent form requesting permission to audio record the interview (Appendix D).

All information gathered from the interviews will be treated with the strictest confidentiality. It is not possible to ensure complete anonymity due to the nature of the study, but only the researcher will be aware of the identity of each participant in order to link the data together and draw conclusions. The researcher will thus be aware of the participants' identity however, this will not be publicly known. The participants' real names will be replaced by a study number therefore ensuring their anonymity. A separate list will be kept with the name of the participants, their hospital number, and study number. In order to maintain confidentiality this list will be password protected and only the researcher will have access to it. Data will be stored securely for six years after completion of the study on a password protected database, after which it will be destroyed.

Participants will be allowed to withdraw from the study at any time. Any participant who experiences distress as a result of postponement and requires support emotionally or socially will be referred to the hospital psychology department (Dr Elsabe Jordaan- 011 470 9253) and social worker (Mrs Brenda Goeieman- 011 470 9118). A senior obstetric consultant (Dr Amy Wise- 073 152 7513) will also be informed if any patient requires further management as a result of distress that occurs as a result of postponement of their surgery or of the study. The study will be conducted according to the principles of the Declaration of Helsinki (22) and the South African Guidelines for Good Clinical Practice (23).

Data collection

Research design

The study will use a qualitative research design, and semi-structured interviews will be conducted.

Study population

Pregnant women scheduled for elective caesarean section at RMMCH who are postponed on the day of surgery will be approached for inclusion in the study.

Study sample

Sample method

In this study, a purposive sampling method will be used. Purposive sampling is when personal judgement is used by the researcher in order to choose cases that will help achieve the research objectives. Data collection will take place through semi-structured in-depth interviews.

Patients who have experienced a postponement of surgery for elective caesarean delivery will be identified by checking postponements on the booked theatre lists. Interviews will be conducted on the day after postponement with these patients, in a private room within the ward. Patients will only be interviewed after the initial postponement. Patients that have been postponed more than once or who have been previously interviewed, will not be interviewed again after any subsequent postponement. The interviews will be audio recorded and transcribed. Once transcribed, coding will take place whereby common themes will be identified.

Sample size

Being a qualitative study, the goal of attaining data is to discover a variety of opinions and experiences expressed by participants. The study must be large enough to ensure good quality data.

Therefore, the researcher will continue to conduct interviews until the researcher perceives that the data is “thick” and “rich” and that a point of data saturation has been reached. This is expected to occur at a sample size of 20-30 participants (24).

Inclusion and exclusion criteria

Inclusion criteria:

- Patients scheduled for elective caesarean section that have been postponed on the day of surgery at RMMCH.
- Patients who are postponed for the first time.
- Patients that consent to participation in the study as well as audio recording of the interview.

Exclusion criteria:

- Patients who have been postponed more than once.
- Interviews that are not completed, or where participants decide to withdraw from the study.

Collection of data

Data collection will take place through semi-structured, in-depth interviews. The services of a translator will be available should the patients not wish to conduct the interview in English or Afrikaans. The selection of these languages is as a result of the researchers' language skills. These languages are also representative of the majority of patients that attend RMMCH (25).

Due to the sensitive nature of the study, to maintain confidentiality, and prevent prejudice to the participant, the data will only be collected by the researcher. Semi-structured interviews will take place in the form of a conversation guided by, but not limited to, specific questions. This allows the interviewer to ask additional questions based on the participants' previous answers. The interviews will be conducted on the day following postponement.

The interviews will be conducted in a currently unused on call sleep room in the department of anaesthesia. This room will be rearranged by the researcher to ensure a research conducive environment, and ensure patient comfort. The interviews will be audio recorded and transcribed. The interviews will be transcribed by the researcher.

Data analysis

Data that is transcribed will be checked using the audio recordings to ensure accuracy of transcription. The data will then be coded, and common themes will be determined. Once information is grouped into themes, similarities and differences among participants will be elaborated on and, in conjunction with the available literature, conclusions will be drawn.

Significance of the study

The number of elective surgical procedures that have been postponed has increased over the last decade mostly as a result of mismanagement of resources, insufficient infrastructure, increasing populations, inadequate staffing, and an increase in disease burden (26, 27).

Preoperative anxiety, anticipation of surgery, extended preoperative fasting and social isolation may result in both psychological and physiological sequelae which may be exacerbated by the fear and anger associated with having surgery postponed. Patients may experience anxiety, anger, and confusion, especially if the postponement was as a result of organisational issues.

These mental and physical reactions may be detrimental to the maternal and foetal wellbeing, surgical outcome, and may also affect patients' overall satisfaction. Anxiety during pregnancy and the peripartum period has been shown to affect foeto-maternal bonding, breastfeeding, mother-infant interaction, infant mental development, and is associated with the development of conduct disorders during adolescence (15).

Trustworthiness

Trustworthiness of the data will be found using the four aspects as described by Guba and Lincoln (28).

Credibility: how confident the researcher is in the truth of the findings.
Transferability: how applicable the findings are to other contexts.
Confirmability: the degree of neutrality in the findings.
Dependability: the extent that the study could be repeated in order to find consistent results.

Potential limitations of the study

Findings from the study cannot be generalised to a larger population due to both the small sample size in the study as well as the specific sample population that will be used. Although assumptions will be made about patients answering honestly and reliably, this cannot be guaranteed as answers to questions will be subjective. The research quality will depend largely on the interviewing skill of the researcher.

South Africa is a culturally diverse nation with 11 official languages. Although the participants will be given the option of being interviewed in either English or Afrikaans, neither of these may necessarily be their home language. This may affect the quality of the data that is collected.

Patients that are unable to converse in English or Afrikaans will be excluded from the study, this potentially excludes a substantial amount of the South African population, however, the study remains relevant as majority of the population that are served by RMMCH are English or Afrikaans speaking (20, 21, 25).

Project outline

Activity	Dec '19	Jan '19	Feb '20	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21
Proposal														
Proposal submission														
Postgraduate approval														
Ethics approval														
Data collection														
Data analysis														
Draft article														
Submission														

Financial plan

The Department of Anaesthesiology will bear the cost of printing and paper. Stationery and transport costs will be funded by the researcher.

The researcher will use his personal mobile device, Apple iPhone 6S, for audio recording of the interviews on a free mobile application. The researcher's Apple iPad will be used as a back-up device for audio recordings. The researcher's personal laptop will be used to transcribe the data and to write up the research report.

Budget:

Item	Price per page	Number of pages	Copies	Total
Proposal	R 1	18	6	R 108
Ethics	R 1	10	6	R 60
Postgraduate form	R 1	2	6	R 12
Complete report	R 1	70 (Estimate +/-)	2	R 140
Information letter	R 1	3	20	R 60
Consent form	R 1	2	20	R 40
Consent audio recording form	R 1	2	20	R 40
Grand Total (Estimate)				R 460

References:

1. Kaddoum R., Fadlallah R., Hitti E., El-Jardali F., El Eid G. Causes of cancellations on the day of surgery at a tertiary teaching hospital. BMC Health Serv Res. 2016;16(1):259. DOI: 10.1186/s12913-016-1475-6.
2. Keller A., Ashrafi A., Ali A. Causes of elective surgery cancellation and theatre throughput efficiency in an Australian urology unit. F1000Res. 2014;3:197. DOI: 10.12688/f1000research.4824.1.
3. Hovlid E., von Plessen C., Haug K., Aslaksen A.B., Bukve O. Patient experiences with interventions to reduce surgery cancellations: a qualitative study. BMC Surg. 2013;13(1):30. DOI: 10.1186/1471-2482-13-30.
4. Lankoandé M., Bonkoungou P., Ki B.K., Kaboré F.R., Ouangré E., Savadogo Y., et al. Economic and psychological burden of scheduled surgery cancellation in a sub-Saharan country (Burkina Faso). S Afr J Anaesth Analg. 2017;23(6):145-51. DOI: 10.1080/22201181.2017.1379788.
5. Kleyenstuber T. Rahima Moosa Mother and Child Hospital theatre statistics. [Unpublished statistics]. 2019.
6. Perroca M.G., Jericó M., Facundin S.D. Surgery cancelling at a teaching hospital: implications for cost management. Revista latino-americana de enfermagem. 2007;15(5):1018-24. DOI: 10.1590/s0104-11692007000500021.
7. Ingvarsdottir E., Halldorsdottir S. Enhancing patient safety in the operating theatre: from the perspective of experienced operating theatre nurses. Scand J Caring Sci. 2018;32(2):951-60. DOI: 10.1111/scs.12532.
8. Magnusson H., Felländer-Tsai L., Hansson M.G., Ryd L. Cancellations of elective surgery may cause an inferior postoperative course: the 'invisible hand' of health-care prioritization? Clin Ethics. 2011;6(1):27-31. DOI: 10.1258/ce.2011.011005.
9. Gul Z., Rajar S., Shaikh Z.F., Shafique K., Hossain N. Perinatal outcome among fasting and non fasting mothers during the month of Ramadan. Pak J Med Sci. 2018;34(4):989-93. DOI: 10.12669/pjms.344.15654.
10. Chen X. Fetus, fasting, and festival: the persistent effects of in utero social shocks. Int J Health Policy Manag. 2014 Sep;3(4):165-9. DOI: 10.15171/ijhpm.2014.92.
11. Mirghani H.M., Weerasinghe D.S.L., Ezimokhai M., Smith J.R. The effect of maternal fasting on the fetal biophysical profile. Int J Gynecol Obstet. 2003;81(1):17-21. DOI: 10.1016/s0020-7292(02)00398-3.
12. Mirghani H.M., Weerasinghe S., Al-Awar S., Abdulla L., Ezimokhai M. The effect of intermittent maternal fasting on computerized fetal heart tracing. J Perinatol. 2005;25(2):90-2. DOI: 10.1038/sj.jp.7211221.
13. Schraag S., Mandach U., Schweer H., Beinder E. Metabolic changes, hypothalamo-pituitary-adrenal axis and oxidative stress after short-term starvation in healthy pregnant women. J Perinat Med. 2007;35(4):289. DOI: 10.1515/JPM.2007.076.
14. Agnew C.L., Ross M.G., Fujino Y., Ervin M.G., Day L., Kullama L.K. Maternal/fetal dehydration: prolonged effects and responses to oral rehydration. Am J Physiol-Reg I. 1993;264(1):R197-R203. DOI: 10.1152/ajpregu.1993.264.1.R197.
15. Field T. Postnatal anxiety prevalence, predictors and effects on development: A narrative review. Infant Behav Dev. 2018;51:24-32. DOI: 10.1016/j.infbeh.2018.02.005.
16. Chao S. Advancing Quality Improvement Research: Challenges and Opportunities: Workshop Summary. Washington, DC: The National Academies Press; 2007. 29-50. DOI: 10.17226/11884.

17. Kennedy G.D., Tevis S.E., Kent K.C. Is there a relationship between patient satisfaction and favorable outcomes? Ann Surg. 2014;260(4):592-600. DOI: 10.1097/SLA.0000000000000932.
18. Wongkietkachorn A., Wongkietkachorn N., Rhunsiri P. Preoperative needs-based education to reduce anxiety, increase satisfaction, and decrease time spent in day surgery: a randomized controlled trial. World J Surg. 2018;42(3):666-74. DOI: 10.1007/s00268-017-4207-0.
19. Al Talalwah N., McIltrot K.H. Cancellation of Surgeries: Integrative Review. J Perianesth Nurs. 2019;34(1):86-96. DOI: 10.1016/j.jopan.2017.09.012.
20. Musiker N., Musiker R. A Concise Historical Dictionary of Greater Johannesburg: Cape Town, Francolin; 2000.
21. Badsha O. Johannesburg the Segregated city: South African History Online, 2011. Available from: https://www.sahistory.org.za/article/johannesburg-segregated-city. [Accessed: 04/05/2020].
22. World Medical Association. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. J Am Med Assoc. 2013;310(20):2191-4. DOI: 10.1001/jama.2013.281053.
23. Makubalo L.E., Netshidzivhani P., Ratsaka-Mothokoa M., Hlongwa K. Guidelines for Good Practice in the Conduct of Clinical Trials with Human Participants in South Africa: Pretoria, Department of Health; 2006. Available from: http://www.kznhealth.gov.za/research/guideline2.pdf. [Accessed: 25/01/2020].
24. Guest G, Bunce A, Johnson L. How many interviews are enough?: An experiment with data saturation and variability. Field Method. 2006;18(1):59-82. DOI: 10.1177/1525822X05279903.
25. Wagner J. Labour epidural practice and experience in gauteng [Thesis]. Johannesburg: University of Witwatersrand; 2017.
26. Child K. Gauteng health department is corrupt and broke: Times live; 2018. Available from: https://www.timeslive.co.za/news/south-africa/2018-01-31-gauteng-health-department-is-corrupt-and-broke/. [Accessed: 26/01/2020].
27. World Health Organisation. Statistics South Africa: World Health Organisation. Available from: https://www.who.int/gho/countries/zaf/en/. [Accessed: 26/01/2020].
28. Guba E.G., Lincoln Y.S. Trustworthiness criteria & techniques for establishing them 1985. Available from: https://www.researchgate.net/figure/Lincoln-Gubas-1985-trustworthiness-criteria-techniques-for-establishing-them_tbl1_260312062. [Accessed: 25/01/2020].

Appendix B: Rahima Moosa Mother and Child Hospital CEO Approval

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

RAHIMA MOOSA MOTHER AND CHILD HOSPITAL

Enquiries : Karen Marshall
Tel : (011) 470 9284
Fax : 086 553 4623
Email : Karen.Marshall@wits.ac.za

TITLE OF RESEARCH PROJECT:
"PATIENTS' EXPERIENCE OF POSTPONEMENT OF SURGERY FOR AN ELECTIVE CAESAREAN DELIVERY"

NAME OF RESEARCHER:
DR JAIMAL A. DHULAB
Department of Anaesthesiology
University of the Witwatersrand

NHRD REF NO: GP_202005_025

Dear Dr Dhulab,

Permission is granted for you to conduct the research as indicated in the title above.

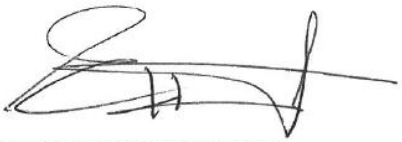
The terms under which this permission is granted is contained in the Researcher Declaration form that you have signed. Failure to comply with these conditions will result in the withdrawal of such permission.

It is crucial for you to inform the Research Coordinator, Karen Marshall of the actual start and end dates of your study. This could be done by e-mail.

Should the study commence more than 12 months after receipt of this approval letter you will have to go through the process of applying again.

You are strongly advised to keep a signed copy of the declaration form so as to ensure that the terms of this agreement are complied with at all times.

Yours sincerely,



ACTING CHIEF EXECUTIVE OFFICER
2020:10:16

ADDRESS: Cnr FUEL & OUDSTHOORN STREET CORONATIONVILLE 2093 / PRIVATE BAG X20 NEWCLARE 2112 JHB

Appendix C: Information sheet

Study Title: "Patients' experience of postponement of surgery for an elective caesarean delivery".

Hello,
My name is Jaimal Dhulab. I am a doctor who is studying to specialise as an anaesthesiologist at the University of the Witwatersrand. An anaesthesiologist is a doctor that gives patients medicine in order to make them sleep or feel no pain for their operation.

For my degree I am doing a research study and I would like to invite you to take part. I am conducting the study in order to try to find out what patients, like you, feel and experience when you have been told that your operation will not be done on the day you were planned to go to theatre. The reason for this study is so that doctors can use this information in the future to try to improve the experience of other patients.

If you agree, I will sit with you and ask you questions about how you feel. This should not take longer than 30 minutes. We will be doing the interview in a private room in the ward. The interview will be audio recorded to keep a record of the questions and answers given.

After you have answered the questions, we can discuss the things that you were asked and I will explain anything that you do not understand. You are free to ask any questions that you have about the study and I will explain further. If you have any questions that you only think of after the interview, you can contact me later.

Being part of this study will not affect the treatment you receive in any way. I will not be able to change when you get to go to theatre for your operation, this is decided by the senior doctor in charge.

If at any point during the interview you feel that you do not want to answer, you do not have to and you can decide not to be in the study at any time. If you do not want to be in the study, you will not be disadvantaged in any way.

If you feel at any point that you are distressed or are not able to cope emotionally then I will refer you to speak to a psychologist (011 470 9253) and/or a social worker (011 470 9118/9121/9120) at Rahima Moosa after the interview. They will be able to provide counselling, at no extra cost to you, and will help you to find ways to cope with your emotions.

If you choose to be involved in the study, you may decide whether you want the interview to be done in English or Afrikaans. The interview will be kept strictly confidential. The only people who will look at the answers to the questions will be myself and my supervisors. I will not be using your name as part of the study and we will be assigning numbers to all the people who are interviewed. No-one will know that you have been interviewed except for me.

The study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand. The function of this committee is to protect the rights and dignity of all people who agree to participate in a research project and the integrity of the research.

If you have any concern over the way the study was done, please contact the Chairperson of this Committee, Professor Clement Penny, who may be contacted on 011 717 2301, or by e-mail on clement.penny@wits.ac.za. The telephone numbers for the Committee secretary are 011 717 2700/1234 and the e-mail addresses are zanele.ndlovu@wits.ac.za and rhulani.mukansi@wits.ac.za. For more information you may contact me on 082 223 8392 or e-mail me at jdhulab@hotmail.com.

You will be given a copy of this form to keep and will be asked to sign consent forms to confirm that you agree to be interviewed and that you agree for the interview to be taped (audio recorded).

Thank you very much for your time.

Appendix D: Informed consent

Informed consent for interview participants

I, _____ (name of participant), confirm that I have read and understood the written information letter, that was attached above, for the study entitled: "Patients' experience of postponement of surgery for an elective caesarean delivery".

- I have asked any questions that I had and am satisfied with the answers.
- I am aware that the researcher will keep all information confidential throughout the study through the use of a study number.
- I am aware that the results of this study may be presented in the form of a written report, an academic presentation, and/or a publication.
- I understand that I do not have to answer questions I am not comfortable with, and that I may withdraw from the study at any time without any disadvantage being held against me.

Participant:
I give my consent to take part in this study.
Participant name: _____
Participant signature: _____
Date: _____

Researcher:
I _____ (name of researcher) hereby confirm that the above participant has been fully informed about the nature, conduct, risks, and benefits of the above study.

Researcher signature: _____
Date: _____

Name of witness: _____
Witness signature: _____
Rank: _____
Date: _____

Appendix E: Consent for audio recording

Informed consent for audio-recording from interview participants

I, _____ (name of participant), confirm that I have read and understood the written information letter, that was attached above, for the study entitled: "Patients' experience of postponement of surgery for an elective caesarean delivery".
I have asked any questions that I had and am satisfied with the answers.

- I am aware that the researcher will audio record the interview on an electronic device and then transcribe the conversation onto a computer.
- I understand that only the researcher will have access to the electronic files.
- I am aware that the researcher will keep all information confidential throughout the study, and that my data will be unidentifiable as I will be assigned a study number.
- I am aware that all recorded information and transcripts will be destroyed after six years of completing the study.

Participant:
I give my consent for the researcher to audio record the interview for this study.
Participant name: _____
Participant signature: _____
Date: _____

Researcher:
I _____ (name of researcher) hereby confirm that the above participant has been fully informed about the nature, conduct, risks, and benefits of the above study.

Researcher signature: _____
Date: _____

Appendix F: Interview guide

Interview Guide

1. When participants arrive, a friendly greeting will be given by the interviewer who will introduce himself. The following details will be collected, and a study number will be allocated to the participant.

Patient Details:

Study number allocated	
Choice of language for interview	
Date of interview	

2. The participant will be given the option of being interviewed in either English or Afrikaans.
3. The participants will be offered refreshments (if applicable).
4. Seating will be arranged in a private room in the ward. The chairs will be arranged in a circle in order to create a comfortable environment for the participant.
5. The participant will be reminded that they can withdraw from the study at any time if they do not wish to continue. If it is deemed necessary during the interview, the participant will be referred for counselling with a psychologist as per hospital referral protocol.
6. The participant will be reminded that they have been invited to take part in the study and their answers will not affect their treatment in any way.
7. The purpose of the study will be explained to the participant, which is to identify and describe their experiences after been postponed.
8. Participants will be encouraged to answer questions honestly, and to express their feelings and experiences in as much detail as possible.
9. They will be asked to sign an informed consent form to participate in the study as well as a consent form to audio record the interview.

Lead questions for the interview:

1. When did you first find out that your operation would not take place?
2. How did it make you feel? (Probe depending on answer given)
3. When you were told that your operation is moved or will not be done on the day you were expecting to go to theatre, what were your thoughts and feelings about this?
4. On the day you were booked for your operation, how were you feeling that morning?
5. How did being postponed affect you, if at all?
6. How did you feel when you were not allowed to eat?
7. How do you think you have handled your feelings before your operation? (Probe: Is there anything that has helped you cope?)

8. When you are allowed to go home, how do you think you will feel?

Summarising questions:

1. How would you describe your overall experience? Why?
2. What do you think the doctors and nurses could do differently to improve the experience?
3. Is there anything else you feel you need to tell me or would like to tell me?

Thank participants and end the interview.
Remember to take field notes: body language, expressions, tone of voice and participant interactions.

Appendix G: Human research ethics committee clearance certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research and Postgraduate Affairs

TO:	Dr J Dhulab School of Clinical Medicine Department of Anaesthesiology Medical School University E-mail: jdhulab@hotmail.com
CC:	Supervisor: Drs J Wagner and B Gardner <drjaninewagner@gmail.com> and <HREC-Medical Research Office@wits.ac.za>
FROM:	Mr Iain Burns Human Research Ethics Committee (Medical) Tel: 011 717 1252 E-mail: Iain.Burns@wits.ac.za
DATE:	2021/01/19
REF:	R14/49
PROTOCOL NO:	**M200935** (This is your ethics application reference number. Please quote it in all enquiries, oral or written, relating to this study.)
PROJECT TITLE:	*Patients' experience of postponement of surgery for an elective caesarean delivery*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

R49 Dr J Dhulab

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M200935

NAME: (Principal Investigator)	Dr J Dhulab
DEPARTMENT:	School of Clinical Medicine Department of Anaesthesiology Medical School University
PROJECT TITLE:	*Patients' experience of postponement of surgery for an elective caesarean delivery*
DATE CONSIDERED:	2020/10/02
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Drs J Wagner and B Gardner
APPROVED BY:	Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	2021/01/19

This Clearance Certificate is valid for 5 years from the date of approval. An extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office secretariat on the 3rd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to submit details to the Committee. **I agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date when the study was initially reviewed. In this case, the study was initially reviewed in **September** and therefore reports and re-certification will be due in the month of **September** each year. Unreported changes to the study may invalidate the clearance given by the HREC (Medical).

Signature of Principal Investigator _____ Date _____

Appendix H: Postgraduate approval of title

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172076

Reference: Mrs Sandra Benn
E-mail: sandra.benn@wits.ac.za

09 February 2021
Person No: 359261
PAG

Dr JA Dhulab
59 Avenues on Broadacres
1 Christine Road
Fourways
2191
South Africa

Dear Dr Jaimal Dhulab

Master of Medicine in Anaesthesia: Approval of Title

We have pleasure in advising that your proposal entitled *Patients' experience of postponement of surgery for an elective caesarean delivery.* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

Appendix I: Permission letter by the Head of Department of Anaesthesiology

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Department of Anaesthesiology
Rahima Moosa Mother and Child Hospital

Tel: (011) 470-9303
Fax: 0865194183
E-mail: kleyenstuber@hotmail.com
Thomas.Kleyenstuber@wits.ac.za

23 January 2020

Attention: The Chair of the Human Research Ethics Committee

Permission to collect data in the Department of Anaesthesia at Rahima Moosa Mother & Child Hospital

I hereby grant permission for data to be collected in the Department of Anaesthesia at Rahima Moosa Mother & Child Hospital for the following MMED research project: Parturients' experience of cancellation or postponement of surgery for an elective caesarean delivery.

Kind Regards

Dr T Kleyenstuber

Head: Clinical Unit - Anaesthesiology
Rahima Moosa Mother and Child Hospital

Appendix J: Permission letter by the Head of Department of Obstetrics and Gynaecology

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Rahima Moosa Mother and Child Hospital
Private Bag X20,
Newclare
2112
Enquiries: Prof H. Lombaard
Tel: 011 470 9090/9091
Fax: 011 470 9092
13 November *2020*

To Whom it May Concern

Re.: Research project by Dr Jaimal Dhulab
Project title: Patients' experience of postponement of surgery for an elective caesarean delivery at Rahima Moosa Mother and Child Hospital.

I give permission for the project at Rahima Moosa Mother and Child Hospital. The permission is under the condition that all other permissions were granted.

Regards

Prof Hennie Lombaard
Adjunct Professor
Academic Head: Obstetrics and Gynecology
University of Witwatersrand
Head of Department: Obstetrics and Gynecology
Rahima Moosa Mother and Child Hospital
Tel.: 011 470 9090
Fax.: 011 470 9090

Appendix K: Permission letter by the Head of Department of Psychology

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

RAHIMA MOOSA MOTHER AND CHILD HOSPITAL

Psychology Department
Rahima Moosa Mother & Child Hospital
Private Bag X 20
Newclare
2112
11 November 2020

To Whom It May Concern

Request for psychological support/intervention potentially required by participants in proposed research study entitled "Patients' experience of postponement of surgery for an elective caesarean delivery", Dr JA Dhulab (359261)

I confirm that the Rahima Moosa Psychology Department agrees to provide psychological services to patients identified as requiring additional psychological intervention/support for participants presenting with adverse psychological reactions and/or symptoms during the course of this proposed research.

Such patients should be referred to the Psychology Department with a referral letter. Patients who are referred should present to the Psychology Department with their hospital file. These patients will be seen on weekdays between 13:00 and 14:00 for consultation, counselling and/or further case management recommendations. (Patients who are referred on weekdays before 13:00 will be seen on the day of referral. If not, they should present at the Psychology Department on the next working day between 13:00 and 14:00, when they willl be seen).

These consultation, counselling and/case management recommendation services will be undertaken by delegated intern clinical psychologists, community service clinical psychologist or clinical psychologists. Psychiatry referrals may be made as part of further case management recommendations.

The contact person is Dr Elsabe Jordaan, Psychology Department, Rahima Moosa Mother & Child Hospital.

Please do not hesitate to contact me in case of queries.

Yours sincerely

Jordaan

Dr Elsabe Jordaan
Clinical Psychologist (PS 0057452)
AD Psychology
Rahima Moosa Mother and Child Hospital

Appendix L: Permission letter by the Head of Nursing

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Rahima Moosa Mother and Child Hospital

Nursing department
Enquiry: M.R. Luphai
Tel. number: 0114709033
Mobile number: 0760431166
Email: Rhona.Luphai@gauteng.gov.za

Date: 02.02.2021

Attention: The Chair of the Human Research Ethics Committee

Permission to collect data in the Department of nursing at Rahima Moosa Mother & Child Hospital

I hereby grant permission for data to be collected in the Department of Nursing at the Rahima Moosa Mother & Child Hospital for the following MMED research project:

Patients' experience of postponement of surgery for an elective caesarean delivery.

Kind Regards,

R. Luphai DD

Matron MR. Luphai

Appendix M: Plagiarism/ turnitin report cover page

Turnitin submission-4.docx

ORIGINALITY REPORT

1%	0%	1%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Keshnee Padayachee. "Joint Effects of Neutralisation Techniques and the Dark Triad of Personality Traits on Gender : An Insider Threat Perspective", 2021 Conference on Information Communications Technology and Society (ICTAS), 2021 Publication	<1%
2	en.m.wikipedia.org Internet Source	<1%
3	Emily Pherson, Meghan Swarthout, Denise Fu, Lauren Barbour, Robert Green, Patricia Ross, Todd Nesbit. " Medication management through services ", JACCP: JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY, 2020 Publication	<1%

Exclude quotes	On	Exclude matches	< 8 words
Exclude bibliography	On		

Appendix N: Journal guidelines to authors

South African Medical Journal (SAMJ) guidelines to authors

SAMJ Policies

Type of articles considered by the SAMJ

The SAMJ will no longer limit the articles accepted to those that have 'general medical content', but is intending to capture the spectrum of medical and health sciences, grouped by relevance to the country's burdens of disease. This content will include research in the social sciences and economics that is relevant to the medical issues around our burden of disease. Please see 'A new vision for the SAMJ – and a call for papers' for a full discussion of the new directions for the SAMJ.

We accept the following types of articles:

- Research
- Reviews
- Clinical trials
- Editorials
- In Practice (Previously Forum incl. Case Reports)
- Correspondence
- Obituaries
- Book reviews
- Ad hoc supplements e.g. guidelines, conference/congress abstracts, Festschrifts*

The following articles are by invitation only:

- Guest editorial
- Continuing Medical Education (CME)

*Contact claudian@hmpg.co.za for information on submitting ad hoc/commissioned supplements, including guidelines, conference/congress abstracts, Festschrifts, etc.

Publication Fees

All articles published in the South African Medical Journal are open access and freely available online upon publication. This is made possible by applying a business model to offset the costs of peer review management, copyediting, design and production, by charging a publication fee of

R7 000 (vat incl.) for each research and In Practice article published. The publication fee is standard and does not vary based on length, colour, figures, or other elements.

The publication fee is payable when your manuscript is editorially accepted and before production commences for publication. The submitting author will be notified that payment is due and given details on the available methods of payment. Prompt payment is advised; the article will not enter into production until payment is received.

Authorship

Named authors must consent to publication. Authorship should be based on: (i) substantial contribution to conceptualisation, design, analysis and interpretation of data; (ii) drafting or critical revision of important scientific content; or (iii) approval of the version to be published. These conditions must all be met (uniform requirements for manuscripts submitted to biomedical journals; refer to www.icmje.org)

If authors' names are added or deleted after submission of an article, or the order of the names is changed, all authors must agree to this in writing.

Please note that co-authors will be requested to verify their contribution upon submission. Non-verification may lead to delays in the processing of submissions.

Author contributions should be listed/described in the manuscript.

Conflicts of interest

Conflicts of interest can derive from any kind of relationship or association that may influence authors' or reviewers' opinions about the subject matter of a paper. The existence of a conflict – whether actual, perceived or potential – does not preclude publication of an article. However, we aim to ensure that, in such cases, readers have all the information they need to enable them to make an informed assessment about a publication's message and conclusions. We require that both authors and reviewers declare all sources of support for their research, any personal or financial relationships (including honoraria, speaking fees, gifts received, etc) with relevant individuals or organisations connected to the topic of the paper, and any association with a product or subject that may constitute a real, perceived or potential conflict of interest. If you are unsure whether a specific relationship constitutes a conflict, please contact the editorial team for advice. If a conflict remains undisclosed and is later brought to the attention of the editorial team, it will be considered a serious issue prompting an investigation with the possibility of retraction.

Research ethics committee approval

Authors must provide evidence of Research Ethics Committee approval of the research where relevant. Ensure the correct, full ethics committee name and reference number is included in the manuscript.

If the study was carried out using data from provincial healthcare facilities, or required active data collection through facility visits or staff interviews, approval should be sought from the relevant provincial authorities. For South African authors, please refer to the guidelines for submission to the National Health Research Database. Research involving human subjects must be conducted according to the principles outlined in the Declaration of Helsinki. Please refer to the National Department of Health's guideline on Ethics in Health research: principles, processes and structuresto ensure that the appropriate requirements for conducting research have been met, and that the HPCSA's General Ethical Guidelines for Health Researchers have been adhered to.

Clinical trials

As per the recommendations published by the International Committee of Medical Journal Editors (ICMJE), clinical trial research is any research that assigns individuals to an intervention, with or without a concurrent comparison/control group to study the cause-and-effect relationship between the intervention and health outcomes. All clinical trials should

be registered with the appropriate national clinical trial registry (or any international primary register, if relevant), and the trial registration number should be cited at the end of the abstract. All clinical trial reports must also contain a data sharing statement as per the recommendations of the ICMJE. Statements are to indicate:

- whether individual deidentified participant data will be shared;
- what data in particular will be shared; whether additional, related documents will be available;
- when the data will become available and for how long; by what access criteria data will be shared.

Please see the ICJME announcement for further details and illustrative examples of data sharing statements: ICMJE Data Sharing Statements for Clinical Trials

Since 1st December 2005, all clinical trials conducted in South Africa have been required to be registered in the South African National Clinical Trials Register. The SAMJ therefore requires that clinical trials be registered in the relevant public trials registry at or before the time of first patient enrollment as a condition for publication. The trial registry name and registration number must be included in the manuscript.

Please refer to the general guidelines for all papers at the top of this article for additional requirements with respect to ethics approval, funding, author contributions, etc. The format of original research articles should be followed for reporting of clinical trial results.

Patient Consent

Information that would enable identification of individual patients should not be published in written descriptions, photographs, and pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) has given informed written consent for publication and distribution. We further recommend that the published article is disseminated not only to the involved researchers but also to the patients/participants from whom the data was drawn. Refer to Protection of Research Participants. The signed consent form should be submitted with the manuscript to enable verification by the editorial team.

Other individuals

Any individual who is identifiable in an image must provide written agreement that the image may be used in that context in the SAMJ.

Copyright notice

Material submitted for publication in the SAMJ is accepted provided it has not been published or submitted for publication elsewhere. Please inform the editorial team if the main findings of your paper have been presented at a conference and published in abstract form, to avoid copyright infringement. All research already published as 'Conference proceedings' needs to be substantially re-written, with a new title, a new abstract and new and important results to back up any study before it will be considered for a new publication. The SAMJ does not hold itself responsible for statements made by the authors.

Previously published images

If an image/figure has been previously published, permission to reproduce or alter it must be obtained by the authors from the original publisher and the figure legend must give full credit to the original source. This credit should be accompanied by a letter indicating that permission to reproduce the image has been granted to the author/s. This letter should be uploaded as a supplementary file during submission.

Privacy statement

The SAMJ is committed to protecting the privacy of its website and submission system users. The names, personal particulars and email addresses entered in the website or submission system will not be made available to third parties without the user's permission or due process. By registering to use the website or submission system, users consent to receive communication from the SAMJ or its publisher SAMA on matters relating to the journal or associated publications. Queries with regard to privacy may be directed to publishing@hmpg.co.za.

Ethnic/race classification

Use of racial or ethnicity classifications in research is fraught with problems. If you choose to use a research design that involves classification of participants based on race or ethnicity, or discuss issues with reference to such classifications, please ensure that you include a detailed rationale for doing so, ensure that the categories you describe are carefully defined, and that socioeconomic, cultural and lifestyle variables that may underlie perceived racial disparities are appropriately controlled for. Please also clearly specify whether race or ethnicity is classified as reported by the patient (self-identifying) or as perceived by the investigators. Please note that is not appropriate to use self-reported or investigator-assigned racial or ethnic categories for genetic studies.

Continuing Professional Development (CPD)

SAMJ is an HPCSA-accredited service provider of CPD materials. Principal authors can earn up to 15 CPD continuing education units (CEUs) for publishing an article; co-authors are eligible to earn up to 5 CEUs; and reviewers of articles can earn 3 CEUs. Each month, SAMJ also publishes a CPD-accredited questionnaire relating to the academic content of the journal. Successful completion of the questionnaire with a pass rate of 70% will earn the reader 3 CEUs. Administration of our CPD programme is managed by Medical Practice Consulting. To complete questionnaires and obtain certificates, please visit MRP Consulting

Manuscript preparation

Preparing an article for anonymous review

To ensure a fair and unbiased review process, all submissions are to include an anonymised version of the manuscript. The exceptions to this are Correspondence, Book reviews and Obituary submissions.

Submitting a manuscript that needs additional blinding can slow down your review process, so please be sure to follow these simple guidelines as much as possible:

- An anonymous version should not contain any author, affiliation or particular institutional details that will enable identification.
- Please remove title page, acknowledgements, contact details, funding grants to a named person, and any running headers of author names.
- Mask self-citations by referring to your own work in third person.

General article format/layout

Accepted manuscripts that are not in the correct format specified in these guidelines will be returned to the author(s) for correction, which will delay publication.

General:

- Manuscripts must be written in UK English.
- The manuscript must be in Microsoft Word format. Text must be single-spaced, in 12-point Times New Roman font, and contain no unnecessary formatting (such as text in boxes).
- Please make your article concise, even if it is below the word limit.
- Qualifications, full affiliation (department, school/faculty, institution, city, country) and contact details of ALL authors must be provided in the manuscript and in the online submission process.
- Abbreviations should be spelt out when first used and thereafter used consistently, e.g. 'intravenous (IV)' or 'Department of Health (DoH)'.
- Include sections on Acknowledgements, Conflict of Interest, Author Contributions and Funding sources. If none is applicable, please state ‘none’.
- Scientific measurements must be expressed in SI units except: blood pressure (mmHg) and haemoglobin (g/dL).
- Litres is denoted with an uppercase L e.g. 'mL' for millilitres).
- Units should be preceded by a space (except for % and ºC), e.g. '40 kg' and '20 cm' but '50%' and '19ºC'.
- Please be sure to insert proper symbols e.g. µ not u for micro, a not a for alpha, b not B for beta, etc.
- Numbers should be written as grouped per thousand-units, i.e. 4 000, 22 160.
- Quotes should be placed in single quotation marks: i.e. The respondent stated: '...'
- Round brackets (parentheses) should be used, as opposed to square brackets, which are reserved for denoting concentrations or insertions in direct quotes.
- If you wish material to be in a box, simply indicate this in the text. You may use the table format –this is the only exception. Please DO NOT use fill, format lines and so on.

SAMJ is a generalist medical journal, therefore for articles covering genetics, it is the responsibility of authors to apply the following:

- Please ensure that all genes are in italics, and proteins/enzymes/hormones are not.
- Ensure that all genes are presented in the correct case e.g. TP53 not Tp53.

**NB: Copyeditors cannot be expected to pick up and correct errors wrt the above, although they will raise queries where concerned.

- Define all genes, proteins and related shorthand terms at first mention, e.g. '188del11' can be glossed as 'an 11 bp deletion at nucleotide 188.'
- Use the latest approved gene or protein symbol as appropriate:
    - Human Gene Mapping Workshop (HGMW): genetic notations and symbols
    - HUGO Gene Nomenclature Committee: approved gene symbols and nomenclature
    - OMIM: Online Mendelian Inheritance in Man (MIM) nomenclature and instructions
    - Bennet et al. Standardized human pedigree nomenclature: Update and assessment of the recommendations of the National Society of Genetic Counselors. J Genet Counsel 2008;17:424-433: standard human pedigree nomenclature.

Research

Guideline word limit: 4 000 words

Research articles describe the background, methods, results and conclusions of an original research study. The article should contain the following sections: introduction, methods, results, discussion and conclusion, and should include a structured abstract (see below). The introduction should be concise – no more than three paragraphs – on the background to the research question, and must include references to other relevant published studies that clearly lay out the rationale for conducting the study. Some common reasons for conducting a study are: to fill a gap in the literature, a logical extension of previous work, or to answer an important clinical question. If other papers related to the same study have been published previously, please make sure to refer to them specifically. Describe the study methods in as much detail as possible so that others would be able to replicate the study should they need to. Results should describe the study sample as well as the findings from the study itself, but all interpretation of findings must be kept in the discussion section, which should consider primary outcomes first before any secondary or tertiary findings or post-hoc analyses. The conclusion should briefly summarise the main message of the paper and provide recommendations for further study.

Select figures and tables for your paper carefully and sparingly. Use only those figures that provided added value to the paper, over and above what is written in the text.

Do not replicate data in tables and in text.

Structured abstract

- This should be 250-400 words, with the following recommended headings:

o Background: why the study is being done and how it relates to other published work.

o Objectives: what the study intends to find out

o Methods: must include study design, number of participants, description of the intervention, primary and secondary outcomes, any specific analyses that were done on the data.

o Results: first sentence must be brief population and sample description; outline the results according to the methods described. Primary outcomes must be described first, even if they are not the most significant findings of the study.

o Conclusion: must be supported by the data, include recommendations for further study/actions.

- Please ensure that the structured abstract is complete, accurate and clear and has been approved by all authors.
- Do not include any references in the abstracts.

Here is an example of a good abstract.

Main article

All articles are to include the following main sections: Introduction/Background, Methods, Results, Discussion, Conclusions.

The following are additional heading or section options that may appear within these:

- Objectives (within Introduction/Background): a clear statement of the main aim of the study and the major hypothesis tested or research question posed
- Design (within Methods): including factors such as prospective, randomisation, blinding, placebo control, case control, crossover, criterion standards for diagnostic tests, etc.
- Setting (within Methods): level of care, e.g. primary, secondary, number of participating centres.
- Participants (instead of patients or subjects; within Methods): numbers entering and completing the study, sex, age and any other biological, behavioural, social or cultural factors (e.g. smoking status, socioeconomic group, educational attainment, co-existing disease indicators, etc)that may have an impact on the study results. Clearly define how participants were enrolled, and describe selection and exclusion criteria.
- Interventions (within Methods): what, how, when and for how long. Typically for randomised controlled trials, crossover trials, and before and after studies.
- Main outcome measures (within Methods): those as planned in the protocol, and those ultimately measured. Explain differences, if any.

Results

- Start with description of the population and sample. Include key characteristics of comparison groups.
- Main results with (for quantitative studies) 95% confidence intervals and, where appropriate, the exact level of statistical significance and the number need to treat/harm. Whenever possible, state absolute rather than relative risks.
- Do not replicate data in tables and in text.
- If presenting mean and standard deviations, specify this clearly. Our house style is to present this as follows:
- E.g.: The mean (SD) birth weight was 2 500 (1 210) g. Do not use the ± symbol for mean (SD).
- Leave interpretation to the Discussion section. The Results section should just report the findings as per the Methods section.

Discussion

Please ensure that the discussion is concise and follows this overall structure – sub-headings are not needed:

- Statement of principal findings
- Strengths and weaknesses of the study
- Contribution to the body of knowledge
- Strengths and weaknesses in relation to other studies
- The meaning of the study – e.g. what this study means to clinicians and policymakers
- Unanswered questions and recommendations for future research

Conclusions

This may be the only section readers look at, therefore write it carefully. Include primary conclusions and their implications, suggesting areas for further research if appropriate. Do not go beyond the data in the article.

Editorials

Guideline word limit: 1 000 words

These opinion or comment articles are usually commissioned but we are happy to consider and peer review unsolicited editorials. Editorials should be accessible and interesting to readers without specialist knowledge of the subject under discussion and should have an element of topicality (why is a comment on this issue relevant now?) There should be a clear message to the piece, supported by evidence.

Please make clear the type of evidence that supports each key statement, e.g.:

- expert opinion
- personal clinical experience
- observational studies
- trials
- systematic reviews.

CME (by invite only)

CME is intended to provide readers with practical, up-to-date information on medical and related matters. It is aimed at those who are not specialists in the field.

From January 2016, all CME articles will be printed in full in the SAMJ. Please try to adhere strictly to the guidelines on word count as we have a page limit for the print issue of the SAMJ. We reserve the right to place some tables and reference lists online if this is necessary for space.

In practice, this means that each CME topic usually covers two issues of the print issue of the SAMJ.

The guest editor, in consultation with the editor, is responsible for convening a team of authors, deciding on the subjects to be covered and for reviewing the manuscripts submitted. The suggestion is for 4 - 5 articles, although there is some room for flexibility contingent on discussions with the editor.

For queries about these guidelines please feel free to contact the CME editor, Dr Bridget Farham, by email (ugqirha@iafrica.com) or telephone (+27 (0)82 452 2860)

Review process

The guest editor reviews the articles and returns them to the CME editor for review and final approval.

Guest editorials

Guideline word limit: 1 000 words

- Include the guest editor's personal details (qualifications, positions, affiliation, e-mail address, and a short personal profile (50words)).
- If possible, include a photograph of the author(s) at high enough resolution for print. It is preferable to provide two guest editorials, one for each issue, so that the content of the articles in each issue is covered.

Articles

Guideline word limit: 2 000 - 3 000 words

- Each article requires an abstract of ±200 words.
- The editor reserves the right to shorten articles but will send a substantially shortened article back for author approval.

Personal details

Please supply: Your qualifications, position and affiliations and MP number (used for CPD points); Address, telephone number and fax number, and your e-mail address; and a short personal profile (50words) and a few words about your current fields of interest.

In Practice

Guideline word limit: 2 000 - 3 000words

This section includes articles that would previously have been accepted into the Forum section, and case reports.

In practice articles are those that draw attention to specific issues of clinical, economic or political interest regarding medicine and healthcare in southern Africa. They are assigned to a topic:

- Case report
- Clinical practice
- Clinical alert
- Issues in medicine
- Issues in public health
- Healthcare delivery
- Medicine and the environment
- Medicine and the law
- Cochrane corner

An In Practice article should follow the following format – sub-headings are not necessary, but may be used for clarity:

- Author affiliations and qualifications: to be the same as for Research. Provide all authors' names and initials, qualifications and full affiliations, and corresponding author.
- Short abstract: does not need to be structured, but should capture the essential features of the article
- Introduction: the reason for the article and the issue being addressed
- Recent research, discussion, local policy around the issue – include your own research where appropriate
- All statements should be referenced and, if opinion only, this should be stated
- Discussion: how this article adds to the discussion around a particular topic
- If a clinical practice or policy point is at issue, this needs to be emphasised, using a box with highlights if appropriate.

Essentially In practice is an opportunity for a more discursive approach to topics of clinical, economic or political importance in southern African health systems. It is not an opportunity to put forward unsubstantiated opinions!

Case reports

The SAMJ has recently started to accept case reports. The cases must come from Africa, preferably southern Africa unless the condition is common to all African countries, and must be either a completely new description of a clinical condition or result (use Google!) or a case that highlights important practice or management issues.

Please use the following format for case reports:

- Title of case: do not include the words 'a case report' in the title
- Summary/abstract: up to 150 words summarising the case presentation and outcome
- Background: why is this case important and why did you write it up?
- Case presentation: presenting features, medical, social, family history as appropriate
- Case management: should be according to best practice, and if not, please explain why
- Investigations, if relevant: save space by simply saying 'normal' if, for example, renal function was completely normal, rather than listing normal results, highlight the abnormal – or indeed the normal if this is clinically significant
- Differential diagnosis, if relevant
- Treatment, if relevant
- Outcome and follow-up
- Discussion – a VERY BRIEF review of similar published cases
- Teaching points: 3 - 5 bullet points
- References: as per the SAMJ house style
- Tables and figures: keep to a minimum. Use clinical images where relevant – we need hi-res versions for print, and identifiable persons must have a consent form
- Patient consent: please include a statement about patient consent to a written case report. This should be uploaded as a supplementary file.

Clinical trials
Guideline word limit: 4000 words

As per the recommendations published by the International Committee of Medical Journal Editors (ICMJE), clinical trial research is any research that assigns individuals to an intervention, with or without a concurrent comparison/control group to study the cause-and-effect relationship between the intervention and health outcomes. All clinical trials should be registered with the appropriate national clinical trial registry (or any international primary register, if relevant), and the trial registration number should be cited at the end of the abstract. Since 1st December 2005, all clinical trials conducted in South Africa have been required to be registered in the South African National Clinical Trials Register.
The SAMJ therefore requires that clinical trials be registered in the relevant public trials registry at or before the time of first patient enrollment as a condition for publication. The trial registry name and registration number must be included in the manuscript.

Please refer to the general guidelines for all papers at the top of this article for additional requirements with respect to ethics approval, funding, author contributions, etc. The format of original research articles should be followed for reporting of clinical trial results.

Review articles
Guideline word limit: 4 000 words

These are welcome, but should be either commissioned or discussed with the Editor before submission. A review article should provide a clear, up-to-date account of the topic and be aimed at non-specialist hospital doctors and general practitioners.

Please ensure that your article includes:

- Abstract: unstructured, of about 100-150 words, explaining the review and why it is important
- Methods: Outline the sources and selection methods, including search strategy and keywords used for identifying references from online bibliographic databases. Discuss the quality of evidence.
- When writing: clarify the evidence you used for key statements and the strength of the evidence. Do not present statements or opinions without such evidence, or if you have to, say that there is little or no evidence and that this is opinion. Avoid specialist jargon and abbreviations, and provide advice specific to southern Africa.
- Personal details: Please supply your qualifications, position and affiliations and MP number (used for CPD points); address, telephone number and fax number, and your e-mail address; and a short personal profile (50 words) and a few words about your current fields of interest.

Correspondence (Letters to the Editor)
Guideline word limit: 500 words

Letters to the editor should relate either to a paper or article published by the SAMJ or to a topical issue of particular relevance to the journal's readership

- May include only one illustration or table
- Must include a correspondence address.

Book reviews
Guideline word limit: 400 words
Should be about 400 words and must be accompanied by the publication details of the book. Provide a hi-res image of the cover if possible (with permission from the copyright holder).

Obituaries
Guideline word limit: 400 words
Should be offered within the first year of the practitioner's death, and may be accompanied by a photograph.

Guidelines
Guidelines should always be discussed with the Editor prior to submission.

Because of the intensive review process required to ensure Guidelines are independent, evidence-based and free from commercial bias, they are usually published as a supplement to the SAMJ, the costs of which must be covered by sponsorship, advertising or payment by the guideline authors/association. We will provide a quote based on the expected length of the guideline and whether it is to appear online only, or in print, which must be accepted by the body putting the guidelines together before submitting the work to the SAMJ.

The Editor reserves the right to determine the scheduling of supplements. Understandably, a delay in publication must be anticipated dependent upon editorial workflow.
All guidelines should include a clear, transparent statement about all sources of funding and an explicit, clear statement of conflicts of interest of any of the participants in the guidelines about industry funding for lectures, research, conference participation etc.
All guidelines should be structured according to Agree II.
Please access this website before putting the guidelines together, download the Agree 11 instrument and use this to put the guidelines together.
All submitted guidelines will be sent to the local Agree II appraisal committee for review and must be endorsed by an appropriate body prior to consideration and all conflicts of interest expressed.

A structured abstract not exceeding 400 words (recommended sub-headings: Background, Recommendations, Conclusion) is required. Sections and sub-sections must be numbered consecutively (e.g. 1. Introduction; 1.1 Definitions; 2.etc.) and summarised in a Table of Contents.

Illustrations/photos/scans

- If illustrations submitted have been published elsewhere, the author(s) should provide consent to republication obtained from the copyright holder.
- Figures must be numbered in Arabic numerals and referred to in the text e.g. '(Fig. 1)'.
- Each figure must have a caption/legend: Fig. 1. Description (any abbreviations in full).
- All images must be of high enough resolution/quality for print.
- All illustrations (graphs, diagrams, charts, etc.) must be in PDF or jpeg form.
- Ensure all graph axes are labelled appropriately, with a heading/description and units (as necessary) indicated. Do not include decimal places if not necessary e.g. 0; 1.0; 2.0; 3.0; 4.0 etc.
- Scans/photos showing a specific feature e.g. Intermediate magnification micrograph of a low malignant potential (LMP) mucinous ovarian tumour. (H&E stain). –include an arrow to show the tumour.
- Each image must be attached individually as a 'supplementary file' upon submission (not solely embedded in the accompanying manuscript) and named Fig. 1, Fig. 2, etc.

Tables

- Tables should be constructed carefully and simply for intelligible data representation. Unnecessarily complicated tables are strongly discouraged.
- Large tables will generally not be accepted for publication in their entirety. Please consider shortening and using the text to highlight specific important sections, or offer a large table as an addendum to the publication, but available in full on request from the author
- Embed/include each table in the manuscript Word file - do not provide separately as supplementary files.
- Number each table in Arabic numerals (Table 1, Table 2, etc.) and refer to consecutively in the text.
- Tables must be cell-based (i.e. not constructed with text boxes or tabs) and editable.
- Ensure each table has a concise title and column headings, and include units where necessary.
- Footnotes must be indicated with consecutive use of the following symbols: * † ‡ § ¶ || then ** †† ‡‡ etc.

Do not: Use [Enter] within a row to make ‘new rows’:

Rather:
Each row of data must have its own proper row:

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Rather:
Combine into one column, n (%):

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Rather:
Use <> symbols or numbers that don't overlap:

References

NB: Only complete, correctly formatted reference lists in Vancouver style will be accepted. Reference lists must be generated manually and not with the use of reference manager software. Endnotes must not be used.

- Authors must verify references from original sources.
- Citations should be inserted in the text as superscript numbers between square brackets, e.g. These regulations are endorsed by the World Health Organization,[2] and others.[3,4-6]
- All references should be listed at the end of the article in numerical order of appearance in the Vancouver style (not alphabetical order).
- Approved abbreviations of journal titles must be used; see the List of Journals in Index Medicus.
- Names and initials of all authors should be given; if there are more than six authors, the first three names should be given followed by et al.
- Volume and issue numbers should be given.
- First and last page, in full, should be given e.g.: 1215-1217 not 1215-17.
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o On the Crossref homepage, paste the article title into the 'Metadata search' box.
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o Click Actions > Cite
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o Provide as follows, e.g.: https://doi.org/10.7196/07294.937.98x

Some examples:

- Journal references: Price NC, Jacobs NN, Roberts DA, et al. Importance of asking about glaucoma. Stat Med 1998;289(1):350-355. http://dx.doi.org/10.1000/hgjr.182
- Book references: Jeffcoate N. Principles of Gynaecology. 4th ed. London: Butterworth, 1975:96-101.
- Chapter/section in a book: Weinstein L, Swartz MN. Pathogenic Properties of Invading Microorganisms. In: Sodeman WA, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974:457-472.
- Internet references: World Health Organization. The World Health Report 2002 - Reducing Risks, Promoting Healthy Life. Geneva: WHO, 2002. http://www.who.int/whr/2002 (accessed 16 January 2010).
- Legal references

- Government Gazettes:

National Department of Health, South Africa. National Policy for Health Act, 1990 (Act No. 116 of 1990). Free primary health care services. Government Gazette No. 17507:1514. 1996.

In this example, 17507 is the Gazette Number. This is followed by :1514 - this is the notice number in this Gazette.

- Provincial Gazettes:

Gauteng Province, South Africa; Department of Agriculture, Conservation, Environment and Land Affairs. Publication of the Gauteng health care waste management draft regulations. Gauteng Provincial Gazette No. 373:3003, 2003.

- Acts:

South Africa. National Health Act No. 61 of 2003.

- Regulations to an Act:

South Africa. National Health Act of 2003. Regulations: Rendering of clinical forensic medicine services. Government Gazette No. 35099, 2012. (Published under Government Notice R176).

- Bills:

South Africa. Traditional Health Practitioners Bill, No. B66B-2003, 2006.

- Green/white papers:

South Africa. Department of Health Green Paper: National Health Insurance in South Africa. 2011.

- Case law:

Rex v Jopp and Another 1949 (4) SA 11 (N)

Rex v Jopp and Another: Name of the parties concerned

1949: Date of decision (or when the case was heard)

(4): Volume number

SA: SA Law Reports

11: Page or section number

(N): In this case Natal - where the case was heard. Similarly, (C) woud indicate Cape, (G) Gauteng, and so on.

NOTE: no . after the v

- Other references (e.g. reports) should follow the same format: Author(s). Title. Publisher place: Publisher name, year; pages.
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- The following are required for your submission to be complete:

o Anonymous manuscript (unless otherwise stated)

o Manuscript

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Peer-review process

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2. The CE copyedits in Word, working on house style, format, spelling/grammar/punctuation, sense and consistency, and preparation for typesetting.
3. If the CE has an author queries, he/she will contact the corresponding author and send them the copyedited Word doc, asking them to solve the queries by means of track changes or comment boxes.
4. The authors are typically asked to respond within 1-3 days. Any comments/changes must be clearly indicated e.g. by means of track changes. Do not work in the original manuscript - work in the copyedited file sent to you and make your changes clear.
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8. The CE implements the authors' and proofreader's mark-ups, finalises the file, and prepares it for the upcoming issue.

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- You may want to make use of the advantages of online publication e.g. specify web links to other sources, images, data or even a short video.

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- An article may be selected for print in a different month from that in which it was published online.
- Research articles will appear in abstract form only, if selected for a print edition.

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Appendix O: Coding strategy

Theme	Subtheme		Quote
Poor communication			‘Nothing was explained properly’ (P1)
Anger and frustration	Apathy		‘They just don't have any passion for what they do’ (P3)
	Distrust		‘Do they deserve to go first?’ (P7)
	Desperation		‘I just want to get home now with my baby’ (P1)
	Injustice	Facilities	‘There was no water in the whole hospital’ (P6)
		Prolonged fasting	‘We the ones suffering’ (P8)
	Annoyance		‘I don't want another child’ (P6)
Guilt and disempowerment	Confusion		‘Everything is just cancelled, and I don't even know why’ (P8)
	Patient exclusion		‘Our life is in their hands; they do whatever they want’ (P5)
	Helpless & repressed	Communication breakdown	‘Learn our language because you come in our country’ (P5)
		Patient to blame	‘One nurse that came in there and was shouting saying why did we eat?’ (P1)
		Lack of care	‘You can lay there and lose your arm’ (P3)
	Uncertainty		‘The nurses should be, should be more informed’ (P4)
Fear and anxiety	Depression		‘I don't want to think about that’ (P5)
	Concerns about baby’s wellbeing		‘I was thinking that something is wrong’ (P2)
	Overwhelming		‘Emotionally, mentally it messes you up completely’ (P8)
Support and coping	Sharing experiences		‘We speak about our families, work, unemployment’ (P3)
	Faith & religion		‘I just kept going, kept praying, kept the faith going’ (P3)
	Family despair		‘Mommy, come back home’ (P5)
	Avoidance		‘Being on my phone’ (P4)
Trust and reassurance	Excitement & anticipation		‘I was happy that this weekend, I was going with the child’ (P6)
	Acceptance		‘It happens sometimes’ (P7)
	Confidence in knowledge & skill		‘I do believe that I'm in good hands’ (P3)
	Hopeful of positive outcome		‘I'm going to hold my baby, I'm gonna be home soon’ (P7)
	Grateful		‘Thank the Lord that I'm home and I'm healthy and baby is healthy’ (P3)