

Exploring Pregnant Women's Choice of Elective Induction of Labour

Geneve L. de Jager

University of Pretoria, South Africa
guineve.dejager@gmail.com

Mariatha Yazbek

<https://orcid.org/0000-0002-9311-5063>
University of Pretoria, South Africa
mariatha.yazbek@up.ac.za

Tanya Heyns

<https://orcid.org/0000-0002-5739-3672>
University of Pretoria, South Africa
tanya.heyns@up.ac.za

Abstract

Elective induction of labour is contraindicated by the World Health Organization as there is no medical benefit. Women are often the primary instigators of elective induction of labour for convenience sake without knowing the potential risks. By exploring pregnant woman's involvement in the decision-making leading to elective induction of labour, it could be established why the women were induced, where they obtained the relevant information, and if they were fully informed and given the opportunity to ask questions. Using a qualitative research approach, this study purposively selected postnatal women who elected to induce labour. These women were interviewed in a one-on-one dialogue in a private hospital in Gauteng, South Africa, until data saturation was reached. Ten interviews were conducted. The participants chose to induce labour based on inadequate or misleading information. Labour was induced ahead of time owing to a large baby size, the perception of a high risk pregnancy, the perception that induced labours are quicker and that pre-term births are acceptable. The participants were not actively involved in the decision-making but chose to induce labour owing to scheduling conflicts, made the decision solely based on their doctor's recommendations, and did not ask questions despite being given the opportunity to do so. Women require sound knowledge of elective labour induction before they can take part in the decision-making process. Antenatal education strategies should provide women with the knowledge of the risks and benefits of elective induction of labour to make an informed decision. Without proper medical reasons, elective induction of labour may lead to more emergency caesarean sections, which are opposite to mothers' original birth plans.

Keywords: decision-making; elective induction of labour; information; knowledge; pregnant women



Introduction and Background Information

Elective inductions of labour are increasing at alarming rates, both internationally and in South Africa. Coulm et al. (2016) report induction of labour rates of 22.6 per cent in France and 21.0 per cent in England in 2010, and 22.8 per cent in the United States of America (USA) in 2013. In addition, elective induction rates are increasing more rapidly in the USA than rates of medically indicated inductions (Jou et al. 2015). No data on elective induction of labour could be found in South Africa. These rates are contrary to the World Health Organization (WHO) recommendations that discourage elective inductions in uncomplicated pregnancies before 41 weeks gestation (WHO 2011) as there is no medical benefit. Induction of labour is indicated when interrupting the pregnancy is thought to be beneficial for the mother or the baby. The WHO recommends that labour is only induced when there is a clear medical indication (WHO 2011). However, elective inductions are performed in the absence of clear maternal or fetal complications before 41 weeks gestation (Vogel et al. 2014) and are convenience driven with no benefit to the mother or the baby compared to that of continued pregnancy (Patterson et al. 2011).

Elective inductions carry severe risks for both mothers and babies and are associated with a greater need for uterogenic drugs post-delivery, a higher risk of requiring a hysterectomy, a greater risk for admission in an intensive care unit and a greater need for analgesia and anaesthetics (Guerra et al. 2011). There is an increased risk for caesarean section, oxytocin augmentation, uterine hyper stimulation, blood loss over 500 ml, and extended hospital stays longer than five days (Selo-Ojeme et al. 2011). Although medical induction from 37 weeks onwards is likely to decrease stillbirths in high risk pregnancies (Hedegaard et al. 2015), neonates between 37 and 38 weeks gestation may have increased rates of postpartum anaemia, an Apgar score of less than five at one minute, and fetal distress that may lead to caesarean section deliveries compared with babies delivered at 39 weeks (Oshiro et al. 2009). High rates of prematurity are found in elective induction of labour (Chang et al. 2013). Other adverse outcomes include neonatal death, respiratory distress syndrome, transient tachypnoea, bronchopulmonary dysplasia, persistent pulmonary hypertension, the need for respiratory support, the use of a surfactant, metabolic complications like hypoglycaemia, hyperbilirubinemia, seizures, necrotising enterocolitis, hypoxic ischemic encephalopathy, periventricular leukomalacia, feeding difficulties and sepsis (Bates et al. 2010).

Not understanding the consequences may be contributing to the rising rates of elective inductions worldwide (Guerra et al. 2011). Women are consenting to elective inductions of labour without comprehending the risks and benefits (Simpson 2014). Jefford and Moore (2008) eloquently states: "Although the patient's signature might represent agreement, it does not imply understanding." Simpson, Newman and Chirino (2010) found that women undergoing an elective induction of labour would have liked more information regarding what to expect. Thompson and Miller (2014) found that between

4 per cent and 60 per cent of women reported that they had not been informed of the benefits and risks of induced labour.

Statement of the Research Problem

The involvement of pregnant women in making decisions leading to elective induction of labour can be difficult (Berger, Schwarz, and Heusser 2015). Patient-clinician interaction is a crucial factor influencing procedure use during childbirth. Patients often rely heavily on the guidance and input of the clinician. Over one-fifth of women who gave birth in USA hospitals perceived pressure from healthcare professionals (Jou et al. 2015). The Society of Obstetricians and Gynaecologists of Canada (2013) suggests that women who are offered an induction of labour should make informed choices about their care and treatment in partnership with their care providers. The care provider should discuss the reason for and the method of induction with the mother to obtain clear consent. Induction should not be proposed solely for the convenience of the care provider or the mother. Including women in the decision-making process may lead to fewer elective inductions. Pregnant women require knowledge of the risks and benefits of various birth methods (for example elective induction, awaiting spontaneous labour, medical induction or caesarean), before choosing a route to follow.

The South African National Patient's Rights Charter (South African Government 1999) supports a patient-centred approach. The charter specifies that informed consent is one of the patients' basic rights. Women are entitled to receive full, accurate information and have the ability to make choices regarding their illness, diagnostics, treatment and costs. Pregnant women should learn about elective inductions in antenatal education programmes. Women's intelligence should be honoured and respected by fully disclosing the associated risks (Simpson, Newman, and Chirino 2010). Women who choose an elective induction should be prepared for any possible outcome, which will counter unrealistic expectations and improve labour satisfaction (Berger, Schwarz, and Heusser 2015; Shetty et al. 2005).

Elective induction of labour carries risks for both the mother and the baby, but currently it is not known who provides this information or whether women are involved in making decisions. The researchers explored women's involvement in making decisions leading to elective labour inductions at a private maternity hospital in South Africa. The South African healthcare system is characterised by public and private healthcare systems, with inequities similar to other developing countries (Victora et al. 2010). Patients accessing private healthcare are able to afford costly health insurance premiums. Pregnant women using private healthcare usually have regular antenatal check-ups with an obstetrician-gynaecologist, regular sonar scans, and should be well-informed and involved in the decision-making process leading to a specific birth outcome. With these expectations in mind, the researchers assessed the extent of information mothers received about elective induction of labour and whether they were satisfied with their level of involvement and the birthing outcomes.

Objective of the Study

The objective of the study was to explore pregnant women's involvement in decision-making leading to elective induction of labour.

Research Methodology

Research Design and Context

A qualitative and explorative research design was used. The context in which the study was conducted was the postnatal unit in a private maternity hospital in Gauteng, South Africa. The hospital specialises in the provision of women's healthcare and childbirth related needs. The hospital has an 11-bed labour ward where all normal deliveries and inductions of labour are done. An operating theatre complex with five operating rooms where caesarean sections are performed is nearby. After delivery, the patients go to one of the two 20-bed postnatal wards.

Population

The target population were postnatal women who elected to induce labour prior to 41 weeks gestation in the private maternity hospital. The inclusion criteria were women who were conversant in English, 18 years or older and between one to two days post-delivery after an elective labour induction. All women who did not elect to induce labour were excluded.

Sampling

Women who met the inclusion criteria were purposively selected. The researchers identified patients who were scheduled for elective inductions of labour from the labour ward diary. Women from different doctors with outcomes that included normal delivery, complicated normal deliveries and caesarean sections, and who had both positive and negative experiences from the elective induction of labour were included. Women who booked for elective inductions were flagged from March to May 2015 and considered for participation in this study. The researchers approached the women a day after delivery, while still admitted in the postnatal ward, to discuss the study and the value thereof. It was assumed that the participants would be both emotionally and physically exhausted after the birth of the baby and the women interviewed therefore volunteered to participate.

Data Gathering

Data were gathered using one-on-one semi-structured interviews. All the interviews were conducted by the first author. Probing and inquiring into the participants' answers were done when information gathered was unclear or incomplete sentences were used. Six of the women opted to have a support person (for example her husband or mother) present during the interview. The interviews lasted less than 10 minutes and were audio-recorded with permission from the participants. Short field notes were made during the

interviews. Directly after each interview the audio recordings were played back to ensure audibility and completeness.

Data Analysis

The data were analysed continually by all the researchers. The transcribed interviews were printed out and the researchers used a line-by-line approach to analyse the data. The data were broken up into smaller, manageable units, which made data access easier. Each phrase or sentence was considered individually to extract meaning within the context of the interview. Categories were created by identifying underlying concepts. Broad concepts were evident and the researchers searched for similar content, symbols or meaning in the units of information. The researchers searched for contrasts that reveal differences among the units of analysis, following Spradley's similarity-and-contrast principle as advised in Polit and Beck (2012). The key concepts were extracted and interviews were reviewed and coded into the previously identified concepts (Sandstrom et al. 2015). After the data had been coded into categories, themes were inferred (Burns and Grove 2011). The four overarching themes that emerged will be discussed under findings.

Trustworthiness

The researchers used the four criteria credibility, dependability, confirmability and transferability (Polit and Beck 2017) to enhance the trustworthiness of the study. Strategies used in credibility included prolonged engagement, and establishing a good rapport with the participants. For confirmability and transferability, member checking followed the interviews, data saturation, comprehensive recording and thick descriptions of the data, using direct verbatim quotations and reflexivity strategies during the data analysis to support the research findings. The researchers kept notes of self-reflection and introspection. For example, during the course of the study two of the researchers were working in the labour ward where elective inductions of labour were routinely performed. For dependability, the researchers had to separate their role as midwives from the role of researchers and not allow their experience to influence the data analysis process or to affect patient care.

Ethical Considerations

Ethics approval was obtained from the University of Pretoria, Faculty of Health Sciences Ethics Committee (414/2014), the hospital group and hospital management (UNIV 2015-0004). The researcher conducting the interviews approached the women a day after delivery, while still admitted in the postnatal ward, to discuss the study and the value thereof. The postnatal women who volunteered to participate were given a participation information leaflet and a consent form to sign. The information leaflet was discussed step-by-step with the patients to confirm their understanding of the research. The researcher answered questions as they arose and scheduled a convenient time for the interviews. The participants were respected and were advised that their management would not be altered if they wished not to participate, that they could withdraw from the

study at any time, and that their confidentiality would be maintained. The participants were protected from exploitation by not exposing them to questions that would cause discomfort (beneficence) and they were assured that the interview would be terminated if any discomfort was experienced. To see to justice, the women were not approached during visiting times. The interviews were conducted in a private room.

Findings of the Research

Demographical Profile

Ten participants were interviewed until data saturation was reached. Table 1 gives an overview of the participants (P1 to P10). The reasons provided for inductions were patient related. The gravidity (G) refers to the number of pregnancies of the participant and parity (P) refers to the number of viable children she has delivered. The gestational age is the number of weeks that the participant was pregnant at the time of the elective induction of labour and delivery. Women from this sample were induced from 38 weeks gestation. The mode of delivery was either a normal vaginal delivery (NVD) or a caesarean section (C/Section).

Table 1: Summary of demographical profile of participants

<i>Interview number</i>	<i>Reason for induction</i>	<i>Gravidity/Parity</i>	<i>Gestational age (weeks)</i>	<i>Delivery</i>
1	Doctor's schedule	G1P1	39	C/Section
2	Too tired	G1P2	39	C/Section
3	Too tired	G3P2	38	C/Section
4	Exams coming up	G1P1	39	NVD
5	Previous early miscarriage	G2P2	38	NVD
6	Husband works overseas	G2P2	39	NVD
7	Doctor's schedule	G2P2	39	NVD
8	Too tired	G2P2	38	NVD
9	Faster than spontaneous labour	G2P2	38	NVD
10	Big baby	G3P3	39	NVD

Findings

The involvement of women in making decisions during the elective induction of labour was linked to the patient and care provider. The reasoning involved in decision-making was underpinned by their knowledge and the sources of their knowledge. Secondly, the researcher established if women were given an opportunity to ask questions and finally, who decided on the elective induction.

Theme 1: Reasons for Induction

Patients may choose to have an elective induction based on patient-related factors, care provider factors (the obstetrician) and organisational factors. The researchers focussed on women-related factors which deal with communication, patient convenience and external influences. External influences are the participants' sources of the knowledge about elective induction of labour which was obtained from the obstetrician. Patients seemed to have limited comprehension of risks and poor perception of the safe gestational age to deliver, which indicates poor communication from healthcare providers:

I was just like exhausted and couldn't take it anymore. If the doctor says it is ok at 38 weeks to take the baby out, then I was like, why not? (P8)

Deficient Knowledge on Induction

Patients seemed to be misinformed about their own decision-making rights, which suggests a lack of psychological preparation for the reality of labour and birth:

Cramps kept coming so I chose the induction because I think it was the fastest. (P9)

One patient was misinformed about her pregnancy being high risk owing to a previous early miscarriage, which led her to have an elective induction of labour:

I had a high risk pregnancy that's why I had to go under induction, I had a previous miscarriage. (P5)

Another patient was misinformed, believing that she had to have an elective induction owing to the fear of having a big baby:

The baby was big and I was worried, um, that I was 39 weeks and the baby was 4 kilos, so I was worried if I should wait until 42 baby might be bigger, so that is why the doctor suggested that we do the induction. (P10)

Self-informed Understanding of Induction

Patient convenience and relief from pregnancy discomforts was a contributing factor influencing most women's decisions to induce labour:

I decided to go for the induction otherwise I would have waited, but I guess also you get like, uh, tired towards the end. I was too heavy and you feel uncomfortable all the time. (P2)

This sentiment was echoed by another participant who said:

I was tired. I was really having pains and the baby was so heavy and it was difficult for me to walk and the waiting was just killing me, so I just thought no I wouldn't make it, it was too much. (P3)

Pressure from Social Commitments

Several women decided on an elective induction of labour to plan their birth around travel, work and studies, which is reflected by:

I was going back to school and so the tests were coming up soon, so then I thought it would be better, had other priorities. (P4)

My husband is working overseas, um, we only have a month together at a time every three months, so I asked the doctor if everything is in order if we can do it, um, just to give my husband a bit of time with the baby as well and to help me settle in and so. (P6)

Induction Based on Provider Schedule

Delivering with a specific provider was a contributing factor. Two participants had elective inductions because of their doctors' schedules and wanted to ensure that their doctors would be available to attend their births:

Doctor's schedule and stuff that came up unexpectedly. (P1)

He won't be available. He will be on holidays so he had to induce me, that's when I found out about the induction. (P7)

Theme 2: Sources of Information on Induction

External influences such as media portrayal of pregnancy and birth, family and friends, and the Internet may lead to elective induction of labour.

Information from Immediate Other

Most patients in our study obtained their information about elective induction of labour from external influences. Many participants revealed the source of their information to be family and friends, for example:

I contact other people around me to find out and they told me about their experiences. (P10)

Other women that have information passed on especially through family members. (P1)

My cousin had her baby induced, whatever she just told me. (P2)

Information from Healthcare Providers

The participants verbalised that their doctors were their main source of information and chose to have an elective induction of labour based solely on the doctor's opinion:

I didn't research into anything. (P1)

When I visited the doctor then he told me that there was another option instead of having to wait. (P3)

Internet as a Source of Information

Some participants consulted more than one source to access more information than the doctor had given them. In today's age of technology, the Internet provides a source of information for participants looking to find out more, and this was evident from the participants in this study. For example:

Because obviously when you talk to a doctor or nurse you are going to hear more of the technical terms of stuff. (P1)

What I've learned from doctors is they don't tell you everything, they only tell you certain things. So then I had to go and do my own research. I used Baby Bump and Baby Centre. (P10)

I just went on the Internet and read about things. (P2)

I tried to look on the Internet. (P3)

Well I read a few articles on the Internet, some Baby Centre and Moms to be. (P4)

The information accessed on the Internet was not used during the decision-making process, but rather to understand the consequences or outcome of the procedure to follow after the decision was made to electively induce:

I did some reading up on the Internet, I used Google and medical journals as well. (P5)

Theme 3: Opportunity to Ask Questions

Women were asked if they had an opportunity to ask questions about the elective induction of labour when presented with the option by their doctors.

Limited Opportunity

Some participants indicated that they did not have an opportunity to clarify information:

Um, not really. I think so because, um, I just felt that he was rushing like whenever you consult with him, it is always rushed. Maybe it's because of the number of patients he's got. (P3)

No Questions Posed

Although many women were given the opportunity to ask questions, they did not know what to ask. The following responses were recorded when the participants were asked if they had an opportunity to ask the doctor questions:

Yeah, but I didn't. (P1)

No, not really. (P4)

Yes, she did, but I didn't have any. (P5)

One participant felt that previous experience meant that no questions needed to be asked:

I didn't have any questions because I did it with the first two so it was just kind of going the same way just getting it done. (P9)

Theme 4: Induction Decision Maker

The women were asked to identify the person or people who made the decision to electively induce labour.

Consent from Partner

A few women said that they had decided together with their partners after being offered an elective induction of labour:

I decided and also because I was quite far in my pregnancy, I decided to do this one at 39 weeks, me and my husband decided together. (P6)

So me and my partner, my husband, we actually decided, I actually informed him that I'm comfortable, we can go ahead with it. (P3)

Healthcare Provider Decision

More women responded that the decision to induce electively was mostly dependent on the doctor. This indicates a situation where the decision to electively induce labour is seen as the next step in the normal management of pregnancy, rather than a crossroad for a decision to be made in response to a medical risk. Some of the participant responses included:

I decided with the doctor. (P1)

They have to ask you, it was my decision, just me and the doctor. (P2)

Me and the doctor. (P8)

Discussion

In the private maternity hospital, where this study was conducted, there were on average 312 babies born per month in 2014 and 2015, with approximately 93 (30%) normal deliveries and about 318 (70%) caesarean sections per month. An average of 43 (14%) elective inductions of labour were performed per month which is higher than in other developing countries. These statistics compare well with those of the study by Vogel, Souza and Gülmezoglu (2013), who found that elective induction rates are increasing disproportionately and account for 10 to 30 per cent of inductions in some countries. In America, 16 per cent of all deliveries are induced (Clark et al. 2009), and a Latin American study indicated elective induction rates of 10 per cent, which are similar to those in other developing countries (Guerra et al. 2011, 662).

The researchers explored women's involvement in decision-making with regard to elective induction of labour in terms of their reasons for choosing early induction. The researchers assessed if they had opportunities for asking questions and if they felt that they had made the final decision. South African women in our study are consenting to the procedure without understanding all the risks and benefits involved, and are therefore not making informed decisions (Berger, Schwarz, and Heusser 2015). Women in Germany were also lacking support and information regarding the induction of labour (Schwarz et al. 2016).

Theme 1: Reasons for the Induction

Moore and Low (2012) identified a need to understand the factors that contribute to electing inductions without evidence-based guidelines. The levels of information concerning the patient, the care provider and the organisation may lead to elective inductions (Moore and Low 2012). The study assessed patient-related factors, as care provider and organisational factors were beyond the scope of this study. In this study the women relied on communication from their doctors, implicitly trusting their providers and consenting to elective induction of labour solely on the doctor's opinion. This may be violating the rights of the women.

Patient convenience for the relief from pregnancy discomforts or for planning the time of birth to fit in with travel, work and studies may influence the decision to induce labour (Simpson, Newman, and Chirino 2010). Most of the participants in this study mentioned that the relief from pregnancy discomforts influenced their decision.

There is evidence that women welcome the induction of labour because of physical discomfort or for social reasons (Gammie and Key 2014). In a study conducted by Shetty et al. (2005), 30 per cent of women ranked their main reason for choosing an induction as being tired of waiting for labour to start, and 34 per cent for getting too uncomfortable. Simpson, Newman, and Chirino (2010) compared elective induction rates between women who received educational material about the risks of elective inductions during antenatal classes and those who did not. While antenatal classes were

effective in reducing elective inductions, of the women who had elective inductions, 3.1 per cent wanted to “time the birth for personal reasons” and 9.1 per cent wanted relief from pregnancy discomforts (Simpson, Newman, and Chirino 2010). The women in this study also wanted to time their births to ensure that they deliver with their doctors in attendance.

Theme 2: Sources of Information on Induction

The portrayal of pregnancy and birth by the media, influence from family and friends, the Internet and the use of technology can influence the choice for elective induction (Moore and Low 2012). Information received from family and friends was most frequently identified as the most helpful (Simpson 2014). Shetty et al. (2005) found that 8.9 per cent of the respondents cited their family and friends as important sources of information. Electronic media resources such as social networking, apps, blogs and Internet websites are sources of external influence with regard to elective induction of labour (Declercq, Sakala, and Corry 2013). In the Listening-to-Mothers survey, 97 per cent of the women used the Internet for information regarding pregnancy and childbirth, and participants considered this information reliable (Declercq, Sakala, and Corry 2013). The media and the Internet could be a useful route for the education of pregnant women, as they seem to be influential information sources. In this study, most patients obtained their information from family and friends, and the Internet.

Simpson, Newman, and Chirino (2010) found that 15.8 per cent of patients who attended childbirth classes reported that their physician was the important source of information in preparing for childbirth and labour as opposed to 32.2 per cent of patients who did not attend the classes. Shetty et al. (2005) found that patients considered the community or hospital midwife (50%) to be a more important source of information than the obstetrician (16.9%) when it came to learning about elective inductions. This study was conducted in the United Kingdom where a midwifery-based model of childbirth was used. In the South African context, an obstetrician is usually the primary caregiver to pregnant women in the private sector, and in 75 per cent of cases it is the physician who offers the option to electively induce labour (Moore and Low 2012).

Theme 3: Opportunity to Ask Questions

Patients need information from their physicians about their treatment options, risks and benefits and the likelihood of these occurring to make informed decision about their treatment (Shepherd et al. 2011). Over one-fifth of women giving birth in United States hospitals may perceive pressure from a clinician to induce labour (Jou et al. 2015). Ågård, Hermerén and Herlitz (2002) examined the decision-making process and found that patients were generally satisfied with the information they received despite having unanswered questions and low levels of knowledge regarding their treatment. Patients may refrain from asking questions because their providers seemed rushed or antenatal consultations do not allow time for patients to ask questions (Simpson 2014). Women, considering elective induction, describe their conversations with their doctors as having

minimal dialogue (Moore and Low 2012). Their encounters are brief without opportunities to ask questions or express concerns (Moore and Low 2012). Asking the following three questions “(1) What are my options? (2) What are the possible benefits and harms of those options? (3) How likely are the benefits and harms of each option to occur?” may empower patients with enough knowledge to be involved in the decision-making process (Shepherd et al. 2011). Encouraging patients to ask these three questions when presented with the option of electively inducing labour may result in improved communication and quality of care without lengthening consultation times (Shepherd et al. 2011).

Theme 4: Induction Decision Maker

According to Gal and Bullinger (2012), family is often a factor in decision-making. Patient activities range from not discussing the decision with anyone else, to merely informing others of their decision and full discussions to confirm the decision with others. While some participants shared the decision-making with family members, most women reported that the decision to induce was made by the doctor (this study). Physicians may not always directly involve pregnant women in the decision-making process (Simpson, Newman, and Chirino 2010). Many women undergoing elective inductions require more involvement with the decision to induce their labour, and more information on the actual process of induction (Schwarz et al. 2016). Shetty et al. (2005) found in a study conducted in the United Kingdom that 91.7 per cent of their respondents felt that it was important to be involved in the decision to induce labour, yet 28.3 per cent were not completely happy with their degree of involvement. Schwarz et al. (2016) conducted an online survey assessing induction of labour in Germany. Almost half of the participants reported disappointment owing to being poorly informed and not involved in decision-making (Schwarz et al. 2016). Participation in the decision-making process may be influenced by demographic factors such as age, education level, gender, previous experience with the phenomenon, the patients’ health status, their relationship with the healthcare provider, and the present context (Gal and Bullinger 2012).

Patients’ decision-making may be “active and engaged” or “passive and indifferent” (Gal and Bullinger 2012). Patients who are active in decision-making may raise concerns regarding side effects, whereas passive decision-making is associated with not identifying difficult decisions and leaving decisions to the doctor (Gal and Bullinger 2012). Patients’ decision-making can be swayed by their trust and confidence in the doctor’s knowledge if they perceive high levels of involvement from the doctor (Gal and Bullinger 2012). Patients rely on professionals to know what the best treatment is, and therefore follow the doctors recommendations without question (Ågård, Hermerén, and Herlitz 2004).

In three separate studies, it was found that patients perceived offers of an option as advice to have an induction (Simpson 2014). Women consistently cited their trust in their physician to be the most important element in their agreement to be induced

(Moore and Low 2012), thus making the physician a powerful influence. Physicians offered elective inductions to nearly 70 per cent of the patients in the study by Simpson, Newman, and Chirino (2010), yet patients do not feel comfortable saying no, despite childbirth preparation classes. One of the respondents in the study by Moore and Low (2012) stated that antenatal education classes should empower women to be able to say no when faced with an option to electively induce labour. Moore and Low (2012) found that an offer from the physician was a strong predictor that the woman would accept the offer to be induced. The option of doing nothing when appropriate is not always presented to the patient, despite being a reasonable path forward in a healthy pregnancy (Barry and Edgman-Levitan 2012). “Watchful waiting” includes fetal monitoring, assessing fetal movements and assessing amniotic fluid levels (Berger, Schwarz, and Heusser 2015). In the context of prenatal appointments, instead of offering an induction as a first-line response to a woman’s concerns about the discomforts of pregnancy, other comfort measures such as massage, use of hot water, exercise and social support can be offered first (Moore and Low 2012).

Although the women desired more information, the researchers do not know if more information from the physician would have altered their decision to be induced. More information sharing may create opportunities for discussion of treatment options. Shared decision-making is an ongoing, interactive process between women and their care providers. To make fully informed decisions, women need to receive complete objective information based on the best available research (Carter et al. 2010) and doctors should encourage patients to be actively involved in their medical care (Simpson 2014). Most women show a lack of informed decision-making, which is based on logistic information rather than the risks of elective induction of labour (Moore and Low 2012).

Recommendations

The researchers believe that including elective induction of labour information in antenatal patient education programmes will equip women with the knowledge to make informed decisions when presented with the option of undergoing an elective induction of labour. As there is limited information material and decision aids on elective induction of labour, the findings of this study may contribute to the development of antenatal education programmes to aid women in decision-making regarding elective induction of labour. It is important to obtain informed consent from women for elective induction of labour. A section for that could therefore be added to existing antenatal care documentation. The responses of these women give reason for concern and the findings could be explored in a further research project. If women are involved in decision-making leading to induction of labour, fewer elective inductions may occur and their rights are not violated.

Conclusions

Elective induction of labour occurs more frequently in South African private hospitals. South African women's knowledge on elective induction of labour and their role in decision-making seem to be similar to other developed countries. Women voiced that they had limited comprehension of the risks and benefits of the procedure to make informed decisions and were not actively involved in the decision-making process. Healthcare professionals and especially the obstetricians involved should recognise that women have a need for knowledge enabling them to be actively involved in the decision-making process. The obstetricians in turn should also become more sensitive to women's requests, perceptions and feelings and be aware that a woman's rights may be violated if she is induced without a medical indication.

Acknowledgements

The authors are grateful to the women who participated in the study in order to improve education for future generations, and also to Dr Cheryl Tosh for the editing assistance.

References

- Ågård, A., G. Hermerén, and J. Herlitz. 2004. "When is a Patient with Heart Failure Adequately Informed? A Study of Patients' Knowledge of and Attitudes toward Medical Information." *Heart and Lung* 33 (4): 219–26.
<https://doi.org/10.1016/j.hrtlng.2004.02.003>.
- Barry, M. J., and S. Edgman-Levitan. 2012. "Shared Decision Making – The Pinnacle of Patient-Centred Care." *New England Journal of Medicine* 366:780–781.
<https://doi.org/10.1056/NEJMp1109283>.
- Bates, E., D. J. Rouse, M. L. Mann, V. Chapman, W. A. Carlo, and A. T. N. Tita. 2010. "Neonatal Outcomes after Demonstrated Fetal Lung Maturity before 39 Weeks Gestation." *Obstetrics and Gynecology* 116 (6): 1288–95.
<https://doi.org/10.1097/AOG.0b013e3181fb7ece>.
- Berger, B., C. Schwarz, and P. Heusser. 2015. "Watchful Waiting or Induction of Labour – A Matter of Informed Choice: Identification, Analysis and Critical Appraisal of Decision Aids and Patient Information regarding Care Options for Women with Uncomplicated Singleton Late and Post Term Pregnancies: A Review." *BMC Complementary and Alternative Medicine* 15:143–155. <https://doi.org/10.1186/s12906-015-0663-y>.
- Burns, N., and S. Grove. 2011. *Understanding Nursing Research: Building an Evidence Based Practice*. 5th ed. Maryland Heights: Elsevier.
- Carter, M. C., M. Corry, S. Delbanco, T. C. Foster, R. Friedland, R. Gabel, T. Gipson, R. Jolivet, E. Main, C. Sakla, P. Simkin, and K. Simpson. 2010. "2020 Vision for a High-Quality, High-Value Maternity Care System." *Women's Health Issues* 20 (1): s7–s17.
<https://doi.org/10.1016/j.whi.2009.11.006>.

- Chang, H. H., J. Larson, H. Blencowe, C. Y. Spong, C. P. Howson, S. Cairns-Smith, E. M. Lackritz, S. K. Lee, E. Mason, A. C. Serazin, S. Walani, J. L. Simpson, and J. E. Lawn. 2013. "Preventing Preterm Births: Analysis of Trends and Potential Reductions with Interventions in 39 Countries with very High Human Development Index. *Lancet* 381 (9862): 223–34. [https://doi.org/10.1016/S0140-6736\(12\)61856-X](https://doi.org/10.1016/S0140-6736(12)61856-X).
- Clark, S. L., D. D. Miller, M. A. Belfort, G. A. Dildy, D. K. Frye, and J. A. Meyers. 2009. "Neonatal and Maternal Outcomes Associated with Elective Term Delivery." *American Journal of Obstetrics and Gynecology* 200 (2): 156.e1–156.e4. <https://doi.org/10.1016/j.ajog.2008.08.068>.
- Coulm, B., B. Blondel, S. Alexander, M. Boulvain, and C. le Ray. 2016. "Elective Induction of Labour and Maternal Request: A National Population-Based Study." *BJOG: An International Journal of Obstetrics and Gynaecology* 123 (13): 2191–7. <https://doi.org/10.1111/1471-0528.13805>.
- Declercq, E. R., C. Sakala, and M. P. Corry. 2014. "Major Survey Findings of Listening to Mothers (SM) III: Pregnancy and Birth: Report of the Third National U.S. Survey of Women's Childbearing Experiences. *Journal of Perinatal Education* 23 (1): 9–16. <https://doi.org/10.1891/1058-1243.23.1.9>.
- Gal, C. S., and J. M. Bullinger. 2012. *A Theoretical Framework for Patient Decision-Making: The Case of Implantable Cardiac Defibrillators*. LAIR Lab Technical Paper.
- Gammie, N., and S. Key. 2014. "Time's Up! Women's Experience of Induction of Labour." *Practising Midwife* 17 (4): 15–18.
- Guerra, G. V., J. G. Cecatti, J. P. Souza, A. Faundes, S. S. Morais, A. M. Gulmezoglo, R. Passini, M. A. Parpinelli, and G. Carroli. 2011. "Elective Induction versus Spontaneous Labour in Latin America." *Bulletin of the World Health Organization* 89:657–65. <https://dx.doi.org/10.2471/BLT.08.061226>.
- Hedegaard, M., Ø. Lidegaard, C. Skovlund, L. Mørch, and M. Hedegaard. 2015. "Perinatal Outcomes Following an Earlier Post-Term Labour Induction Policy: A Historical Cohort Study." *BJOG: International Journal of Obstetrics and Gynaecology* 122 (10): 1377–85. <https://doi.org/10.1111/1471-0528.13299>.
- Jefford, M., and R. Moore. 2008. "Improvement of Informed Consent and the Quality of Consent Documents." *Lancet Oncology* 9 (5): 485–93. [https://doi.org/10.1016/S1470-2045\(08\)70128-1](https://doi.org/10.1016/S1470-2045(08)70128-1).
- Jou, J., K. B. Kozhimannil, P. J. Johnson, and C. Sakala. 2015. "Patient-Perceived Pressure from Clinicians for Labor Induction and Cesarean Delivery: A Population-Based Survey of US Women." *Health Services Research* 50 (4): 961–81. <https://doi.org/10.1111/1475-6773.12231>.

- Moore, J., and L. K. Low. 2012. "Factors that Influence the Practice of Elective Induction of Labour." *Journal of Perinatal and Neonatal Nursing* 26 (3): 242–50. <https://doi.org/10.1097/JPN.0b013e31826288a9>.
- Oshiro, B. T., E. Henry, J. Wilson, W. Branch, and M. W. Varner. 2009. "Decreasing Elective Deliveries before 39 Weeks of Gestation in an Integrated Health Care System." *Obstetrics and Gynaecology* 113 (4): 804–11. <https://doi.org/10.1097/AOG.0b013e31819b5c8c>.
- Patterson, J. A., C. L. Roberts, J. B. Ford, and J. M. Morris. 2011. "Trends and Outcomes of Induction of Labour among Nullipara at Term." *Australian and New Zealand Journal of Obstetrics and Gynaecology* 51 (6): 510–70. <https://doi.org/10.1111/j.1479-828X.2011.01339.x>.
- Polit, D. F., and C. T. Beck. 2012. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 9th ed. Philadelphia: Lippincott Williams and Wilkins.
- Polit, D. F., and C. T. Beck. 2017. *Nursing Research: Generating and Assessing evidence for Nursing Practice*. 10th ed. Philadelphia: Lippincott Williams and Wilkins.
- Sandstrom, B., A. Willman, B. Svensson, and G. Borglin. 2015. "Perceptions of National Guidelines and their (Non) Implementation in Mental Healthcare: A Deductive and Inductive Content Analysis." *Implementation Science* 10:43. <https://doi.org/10.1186/s13012-015-0234-0>.
- Schwarz, C., M. M. Gross, P. Heusser, and B. Berger. 2016. "Women's Perceptions of Induction of Labour Outcomes: Results of an Online-Survey in Germany." *Midwifery* 35:3–10. <http://dx.doi.org/10.1016/j.midw.2016.02.002>.
- Selo-Ojeme, D., C. Rogers, A. Mohanty, N. Zaidi, R. Villar, and P. Shangans. 2011. "Is Induced Labour in the Nullipara Associated with more Maternal and Perinatal Morbidity?" *Archives of Gynecology and Obstetrics* 284 (2): 337–41. <https://doi.org/10.1007/s00404-010-1671-2>.
- Shepherd, H. L., A. Barrat, L. J. Trevena, K. McGeechan, K. Carey, R. M. Epstein, P. N. Butow, C. B. Del Mar, V. Entwistle, and M. H. N. Tattersall. 2011. "Three Questions that Patients can Ask to Improve the Quality of Information Physicians Give about Treatment Options: A Crossover Trial." *Patient Education and Counseling* 84 (3): 370–85. <https://doi.org/10.1016/j.pec.2011.07.022>.
- Shetty, A., R. Burt, P. Rice, and A. Templeton. 2005. "Women's Perceptions, Expectations and Satisfaction with Induced Labour – A Questionnaire-Based Study." *European Journal of Obstetrics and Gynecology and Reproductive Biology* 123 (1): 56–61. <https://doi.org/10.1016/j.ejogrb.2005.03.004>.
- Simpson, K. R. 2014. "Patient Education for Elective Induction of Labor." *Clinical Obstetrics and Gynecology* 57 (2): 415–25. <https://doi.org/10.1097/GRF.0000000000000025>.

- Simpson, K. R., G. Newman, and O. R. Chirino. 2010. "Patients' Perspectives on the Role of Prepared Childbirth Education in Decision Making regarding Elective Labour Induction." *Journal of Perinatal Education* 19 (3): 21–32. <https://doi.org/10.1624/105812410X514396>.
- Society of Obstetricians and Gynaecologists of Canada. 2013. "Clinical Guidelines for Induction of Labour." <http://sogc.org/guidelines/induction-labour-replaces-107-aug-2001/>.
- South African Government. 1999. "The Patient's Rights Charter, Fact Sheet." Accessed 18 May 2014. <http://www.justice.gov.za/vc/docs/policy/Patient%20Rights%20Charter.pdf>.
- Thompson, R., and Y. D. Miller. 2014. "Birth Control: To what Extent do Women Report being Informed and Involved in Decisions about Pregnancy and Birth Procedures?" *BMC Pregnancy Childbirth* 14:62–71. <https://doi.org/10.1186/1471-2393-14-62>.
- Victoria, C., A. Matijasevich, M. Silveira, I. Santos, A. Barros, and F. Barros. 2010. "Socio-Economic and Ethnic Group Inequities in Antenatal Care Quality in the Public and Private Sector in Brazil." *Health Policy and Planning* 25 (4): 253–61. <https://doi.org/10.1093/heapol/czp065>.
- Vogel, J. P., A. M. Gulmezoglu, G. J. Hofmeyr, Z. Mrcog, and M. Temmerman. 2014. "Global Perspectives on Elective Induction of Labor." *Clinical Obstetrics and Gynecology* 57 (2): 331–42. <https://doi.org/10.1097/GRF.0000000000000031>.
- Vogel, J. P., J. P. Souza, A. M. Gülmezoglu. 2013. "Patterns and Outcomes of Induction of Labour in Africa and Asia: A Secondary Analysis of the WHO Global Survey on Maternal and Neonatal Health." *PLoS ON* 8 (6): e65612. <https://doi.org/10.1371/journal.pone.0065612>.
- WHO (World Health Organization). 2011. "Recommendations for Induction of Labour." http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/9789241501156/en/.