



## Caesarean birth experiences. A qualitative study from Sierra Leone

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### ABSTRACT

**Background:** Positive birth experiences lead to better postnatal functioning, and influence mode of delivery choice for subsequent pregnancies. Healthcare workers can influence the birth experience through relevant support and care. This study seeks to explore the experience of Sierra Leonean women in relation to ante-natal, intrapartum and post-partum care with special reference to their experience of caesarean section.

**Methods:** In November 2016, individual semi structured interviews were performed with sixteen women of varying age from different geographical areas, levels of schooling, and parity. The interviews were analysed by systematic text condensation.

**Results:** During interviews, participants mentioned a fear of dying or losing their baby. This fear was managed by praying and putting trust in a higher power. However, placing trust in healthcare workers was also described by some participants. Moreover, the present study demonstrates that women experienced a great deal of pain and discomfort after the caesarean section was performed, and that they found it difficult to return to expected activities. This was managed by a large amount of practical assistance from their social network. Healthcare workers were described as providing medicines, advice, and practical care. Negative experiences in which healthcare workers took money for medicines and refused to help women were also described.

**Conclusions:** This study indicates that women locate resources to cope with pain and fear within themselves, while also utilising extended support from social networks and healthcare workers. This confirms that women from all backgrounds in Sierra Leone have access to resources for health and well-being.

### Introduction

Caesarean section (CS) performed on proper indication, can save women and new-borns from complications and death related to child-birth. The WHO emphasises that national CS rates below 10–15% can result in preventable mortality and morbidity [1]. According to the most recent 2008–2013 census in Sierra Leone [2] the CS rate is 2.9%. The low prevalence of this procedure can be explained by a low number of emergency obstetric care providers in the country [3], a general lack of surgical capacity [4], and possibly the relatively low number of institutional births [3]. Moreover, the acceptance of CS by women is identified as a barrier in other countries within the region [5].

The Sierra Leonean Ministry of Health and Sanitation (MoHS) desires a shift from home births with traditional birth attendants (TBAs) to institutional births with skilled attendants [6]. Therefore, the Free

Health Care Initiative (FHCI) was launched in 2010, making health care – including antenatal clinic (ANC), intrapartum and postpartum care – free for pregnant and lactating women [7,8].

Over 40% of women in Sierra Leone continue to give birth at home [3,9]. Some women do not want to give birth in the health centres or hospitals and refuse to seek help until complications arise. Generally, more trust is given to TBAs than to professional nurses, and additional reasons for avoiding healthcare facilities include the common view that childbirth is a natural process, the long distances between patients and facilities, transportation costs, and the perceived disrespectful treatment and waiting times in health facilities [3,9–11].

The birth experiences of women are diverse, and largely influenced by outcome of the delivery, experience of pain, control, support and care during the process, as well as pre-existing expectations [12]. Birth experience is defined by Larkin [12] as:

**Abbreviations:** CS, Caesarean Section; WHO, World Health Organisation; MoHS, Ministry of Health and Sanitation; TBA, Traditional Birth Attendant; FHCI, Free Health Care Initiative; ANC, Antenatal Clinic; SoC, Sense of Coherence; GRR, Generalised Resistant Resources

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“an individual life event, incorporating interrelated subjective psychological and physiological processes, influenced by social, environmental, organisational and policy contexts”.

Previous research suggests that birth experiences influence mode of delivery choice for subsequent pregnancies [13], and that positive birth experiences lead to better postnatal functioning [14]. Conversely, negative birth experiences are associated with postnatal depression and post-traumatic stress symptoms [12,15,16]. A meta-analysis of studies on women’s experiences with CS, highlighted that experiences with planned and emergency CS were similar [17].

Studies of birth experiences following CS are mainly based on high-income settings. Larkin [12] determined that a focus on birth experiences began following the decrease in maternal and neonatal mortality. In low-income settings, a study revealed that women delivering by CS felt shame and guilt, and experienced lack of information about the need for the procedure [5]. Relatively few studies have been conducted on birth experiences following CS in Sub-Saharan Africa. To fill this gap of knowledge, this study aims to explore the birth experiences of women utilising CS in Sierra Leone, and their experiences with care during pregnancy, birth, and the post-partum period.

### Theoretical framework

During the data analysis process, it became apparent to the research team that the theory of salutogenesis could be clearly related to the emergent themes. The theory of salutogenesis was developed by Aaron Antonovsky [18]. It states that people who manage to maintain health and well-being despite being subjected to stressors can be described as possessing a strong sense of coherence (SoC). SoC is composed of three components: (1) comprehensibility, (2) manageability, and (3) meaningfulness. Comprehensibility is the ability to perceive what occurs in life as ordered and clear, while manageability is the confidence that one has resources within oneself or one’s significant others to cope with what happens, and meaningfulness is related to the importance of an event [18].

Antonovsky identified what he called generalised resistance resources (GRR), that aid in coping with, and maintaining health and well-being during and after stressful and adverse life events. GRRs represent the biological, material, and psychosocial resources that an individual has available to them [18]). Antonovsky viewed his theory as universal, and useful in all cultures [19]. Smith et al. [20] argued for a focus on salutogenesis irrespective of the mode of birth; thus, they believed that women that can find resources for coping, achieving perceived order, and emotional reconciliation, will undergo a salutogenic birth.

### Methods

#### Participants and setting

Participants in this study were selected from the participants list in another study on Maternal and neonatal outcome of caesarean section in Sierra Leone [22], which is a study comparing outcome after CS where the surgeon is either a medical doctor or a Non-physician clinician. During the one-month follow-up in the Maternal and neonatal outcome study, the research nurses recruited participants for the present study. A strategic selection was made to ensure that a diversity of experiences, and as rich a material as possible were included. Sixteen women from ten different towns and villages around the country that delivered in six different hospitals with varying ages, parity, and education levels volunteered to participate in the study. All participants had at least two ANC visits. (Table 1). Inclusion criteria were: (1) healthy women over the age of 18 delivering by CS (emergency and elective), and (2) Delivery of a healthy new-born. Interviews took place in the homes of the participants approximately thirty days after the CS

**Table 1**  
Demographic information.

Study ID	Type of Hospital	Para	Education	ANC	Position	Single or twin	Previous births	Planned or emergency	Indication CS
001	Private non-profit	4	None	2	Breech	Twin	Vaginal, no info on site	Emergency	Twin
002	Governmental district hospital	2	secondary	3 or more	Breech	Twin	CS	Emergency	Failure of progress
003	Private non-profit	6	Primary	3 or more	Transverse	Single	Vaginal, at home	Emergency	Prolonged labour
004	Governmental national referral hospital	2	secondary	3 or more	Cephalic	Single	Vaginal, no info on site	Emergency	Failure to progress
005	Governmental national referral hospital	0	None	3 or more	Cephalic	Single		Emergency	Cephalopelvic disproportion
006	Governmental national referral hospital	0	Primary	3 or more	Cephalic	Single		Emergency	Failure of progress
007	Governmental national referral hospital	1	Higher	3 or more	Cephalic	Single	CS	Emergency	Previous CS
008	Governmental national referral hospital	1	Primary	3 or more	Cephalic	Single	Vaginal, no info on site	Emergency	Fetal distress
009	Governmental national referral hospital	0	Higher	3 or more	Cephalic	Single		Planned	Big baby, post term
010	Governmental national referral hospital	1	Higher	3 or more	Breech	Single	Vaginal, in hospital	Emergency	Placenta previa
011	Governmental district hospital	6	None	3 or more	Transverse	Single	Vaginal, no info on site	Emergency	Transverse
012	Governmental district hospital	2	None	3 or more	Breech	Twin	Vaginal, no info on site	Emergency	Prolonged labour
013	Governmental district hospital	4	None	3 or more	Cephalic	Single	Vaginal, one previous CS	Emergency	Previous CS
014	Governmental district hospital	6	Primary	3 or more	Cephalic	Single	Vaginal, at home	Emergency	Fetal distress
015	Governmental district hospital	0	secondary	3 or more	Breech	Single		Emergency	Breech
016	Governmental district hospital	2	None	3 or more	Cephalic	Twin	Vaginal, no info on site	Emergency	Pre-eclampsia

**Interview guide**

Can you tell me how you experienced this pregnancy?

- How did you feel once you knew you were pregnant?
- Did you attend ANC, and how did you view it?
- Can you tell me about the information you received in the ANC?
- Could you explain more about your experience with the doctors/nurses?
- Did you experience any complications in your pregnancy, and, if so, how did it make you feel?
- What was your plan for delivery?
- You said this.... could you explain this point further?

Can you describe your childbirth experience?

- How did the labour start?
- Who helped you?
- Why did you decide to go to...?
- How did you get there?
- How did the staff receive you?
- Could you describe the information you received?
- How did you feel when they said they would do an operation?
- Why did you become afraid/relieved/happy...?
- How did you feel in the theatre?
- How did the staff respond to you?
- Can you give an example?
- What did you feel when you saw your baby for the first time?
- You said this.... could you explain this point further?
- 

How did you experience the time after the operation?

- Can you describe the first days after the operation?
- Can you explain which information you received in the maternity ward?
- Can you tell me about your relationship to the doctors/nurses?
- Can you describe how it was to come home?
- How did you resolve housework when you came home?
- How did people respond when you told them you had a CS?
- How would you advise another woman coming to you about your experiences with CS?
- If you gave birth vaginally before, can you explain how you experienced the difference between the two birthing methods?
- If you one day will become pregnant again, what do you think about another pregnancy and labour in light of this one?
- You said this... could you explain this point further?

**Fig. 1.** Interview guide.

was performed. Precautions were taken to ensure privacy and minimise disturbance.

#### *Data collection*

Semi-structured interviews [21] were conducted with the participants individually. The interviews were up to 46 min in length and audio recorded. An interview guide was prepared to ensure that all topics were covered during the interviews (Fig. 1). Interviews 1–3 were translated from the Krio language and interview 13 was translated from the Mende language to English by the research nurse from an aforementioned study [22], and interview 4 was translated from Krio to English by a non-nurse fluent in both languages. The remaining interviews were conducted in Krio by the first author who is fluent in Krio, and all interviews were transcribed by the first author in English. All translations were cross-checked by back translation.

#### *Data analysis*

The interviews were analysed by systematic text condensation (STC). STC is a four-step procedure developed by Malterud for thematic cross-case analysis of qualitative research data, particularly inspired by the psychological phenomenological analysis of Amedeo Giorgi [23]. The method is both descriptive and systematic, focusing on the

presentation of participant experiences as they express it themselves, rather than analysing underlying meanings [21].

In the first step, interviews were read with an open mind, striving to bracket out preconceptions in order to obtain first impressions [21,23]. Initial themes were identified and discussed by the research team. At the point in time where no new themes emerged, a few additional interviews in different geographical areas were conducted in order to obtain the most diverse research material possible. The interviews were analysed consecutively, and the interview guide was revised to obtain additional information.

Malterud describes the second step as reading all the transcripts and identifying the units of meaning within the text, then classifying and sorting them into groups related initially to the themes from step one [23]. This step was performed manually by printing all the transcripts out on paper and coding the meaning units using different colours. Gradually, some of the initial themes were changed and collected into one theme. Some themes were left entirely when insufficient material was available to answer the research question. The themes remaining were: “experience of fear”, “coping by relinquishing and taking control”, and “the importance of support”.

The researchers went systematically through the themes one by one, reviewing the meaning units only, and sorting them in under groups as described by Malterud [23]. The meaning was condensed by creating artificial quotes for each code group that captured the essence of all the

units in a language as closely to the participants' language as possible. Then, illustrative quotes from the material that best suited the condensed meaning were identified.

Finally, the text was written as an analytical text in the third person, describing each phenomenon with the condensates as starting points and using the quotes from point three as illustrations. The text was revised multiple times by consulting the transcripts to ensure that the experiences were as close to those expressed by the participants as possible. The headings for each category were chosen to represent the most significant interpretations [23].

### Ethical statement

Prior to the study, ethical approval was obtained by the Sierra Leone Ethics and Scientific Review Committee (SLESRC) under the study "Maternal and neonatal outcome of caesarean section in Sierra Leone" [22]. The research was supported by Norwegian University of Science and Technology, and in addition research data was taken to Norway for analysis. Therefore, the Regional Ethical Committee in Norway was also applied to but did not consider this medical research (2016/981/REK nord) and they referred us to the Norwegian Centre for Research Data (NSD), which approved the project (Ref. no 48960).

Women volunteered to participate in the study after being informed either orally or by writing about the study. They received the information from research nurses in a study on maternal and neonatal outcome after CS in Sierra Leone [22]. Written consent was obtained by signature or thumbprint. Participants were informed that they could withdraw from the study at any time without any consequences. All files were password-protected, and the interviewees were anonymised.

### Findings

#### *The experience of fear*

The first thing that came to mind for most participants when they were told they must have a CS was a fear of dying. Many of them had heard of women that died during CS. These could have been stories they heard before being admitted, though such stories were also reported to have been heard during their hospital stay. Other individuals explained that surgery was perceived as a very serious event in their surroundings, and something that one should not take lightly.

*I was afraid, I was really afraid. That's what made me cry. I felt that when they do an operation on a person, she will leave (= die). (011)*  
*An operation, when you do it, it is a risk. It is life or death, which is what they think. Will God save your life? So when you say operation it is with fear. (014)*

Participants also experienced the fear of something potentially happening to their babies. They had heard of women coming home without their babies. Not all women stated outright that they feared the death of their baby, but the majority expressed gratitude that their babies survived.

*When I saw my baby, I was glad! I was really, really happy! Because at least I did not go through the surgery for nothing. I did not waste energy and all the rest to go through surgery, so at least... (010)*

The participants also expressed a fear of what was unknown to them, and they pointed out that they did not have any previous surgery experiences. They also did not receive information regarding CS in ANC, unless the CS was elective. Due to hospital hygiene rules, the number of people allowed to accompany the participants was limited, and relatives were not allowed in the theatre. Participants expressed that this increased the level of fear.

*I was afraid, my heart was not calm. I had this fear until I reached (the theatre), because I had never gone through an operation until I delivered*

*now. This was my first operation. (008)*

Some of the participants had been through surgery before, with both CS and appendectomy being mentioned. Professional experience from the theatre was also reported. However, these women also reported being afraid. In spite of having survived surgery before, they were still afraid to die. Others were afraid of what was actually known to them; the pain afterwards.

*I was afraid because of the sore, and when you lay down again you feel the pain. That is the fear I had. (002)*

### Coping by relinquishing and taking control

Most participants described how they prayed to God to help them in a difficult situation. They prayed that He would save their and their babies' lives. They decided to believe that God was in control and found comfort in that. In some cases, this strategy was also reinforced by staff and relatives, who either encouraged the participants to pray or prayed with them. Staff praying with patients and the playing of gospel music was described, as was pastors being called upon to come and pray.

*Through the operation, I just prayed to God. Let him save me, me and my child. (005)*

The participants also trusted the doctor's decision. They did not question the reasons to perform CS. They seemed to accept what the doctor told them, though some accepted reluctantly due to fear.

*I really did not feel fine, but what could I do? When they say they need to do an operation... (003)*

It was highlighted that going to the ANC, taking the immunisations and drugs provided, and following doctors' and nurses' advice was a way of doing everything in their power to ensure that their baby would be healthy. Some also went to ANC in multiple places according to what seemed optimal to them regarding price, distance, and securing a familiar place to give birth. It was also evident that participants planned their births to a certain extent. Some planned to give birth in smaller health centres near their homes, while others planned to give birth in larger hospitals. Those that planned to use larger hospitals provided varying justification. Some said it was due to fear of complications that they knew could only be adequately handled in a larger facility. However, difficulties locating someone willing to assist in home births were also mentioned. Having an alternate plan was also described, such as starting out in a smaller health centre with the possibility of referral.

*I had joined the antenatal clinics at both C Hospital and the small hospital over here. So I had planned to deliver here. But if anything happens, they will refer you to C. They will call an ambulance. And that's what they did. (004)*

Some participants had been prepared for the possibility that their delivery might result in CS. These women had gathered information on CS from relatives and friends, and were reassured when they heard of people surviving the surgery.

*When I told people, that's when they came and shared their own experience. So when I went I was not afraid. (001)*

Regardless of the urgency of the CS, the participants or their families were asked for consent to perform the surgery. Some participants left this with their relatives, thereby relinquishing control, though some viewed this as a method of taking control of the situation.

*So, I made my decision in my head, I said: Ok. Let me go immediately. Because I had already bled a lot. I told the doctor: Ok. CS, I have no option. Because I did not want to lose my life, or lose my baby, to go through that pain. (010)*

Some women described how they listened to what the doctors and

nurses told them and actively made the decision to accept the operation, thereby taking greater control of the situation. Other techniques used to remain calm, such as self-reassurance, were also described. The participants listened to information provided by staff and repeated it for themselves.

*Myself also, I encouraged myself until they went and did the operation on me. So, I did not fear again. (015)*

### The importance of support

This main theme describes the importance of support, from both social networks and healthcare workers.

#### Support from social networks

Participants that had previously given birth vaginally were asked to elaborate on how they perceived the difference between vaginal birth and CS. The majority answered that they would have preferred a vaginal birth due to the pain experienced after the CS, and that they felt healthier in a shorter time frame following vaginal birth, and could return to their normal activities. They focused on work that they were unable to perform, and how they still required assistance from other people.

*I am not able to work; I am not able to lift heavy things. Because I am worried. This time I am not able to do laundry, I am not able to do anything! Except to hold and change diapers on my baby. (011)*

The participants all arrived with one or more family members to the hospital. Many reported arriving with their mother, an aunt, or both. Some women also arrived with their husbands. In addition to providing spiritual and emotional support, family members also took part in the decision to accept CS being performed. Much of the support rendered from family and friends was financial and practical in nature. Husbands took loans to cover expenses for transportation, medications, and a place to stay near the hospital. Aunts and sisters stayed with the participants in the hospital, assisting them in holding and cleaning their babies until they were strong enough themselves. Younger brothers and sisters, husbands, aunts, and mothers collected water, did laundry, and cooked for them when they came home. Some of the participants felt bad about having to receive help from others, particularly if the help came from women older than themselves. However, most of the participants stated that their family was happy to help them, and they gave the impression that it was the younger family members' duty to do so. They also explained that they needed assistance in order to follow the doctor's advice for their own health.

*It's not easy, but I have my smaller ones around here. They help me fetch water, launder the dirty clothes, and cook. So it's not difficult either. I know it is for my own good, and I have to stick with that until I feel strong, because I have people around who will help me do the domestic work. And also, some guys here go to the farm and help us. (013)*

#### Support from health care workers

The participants' first contact with the health care system began with the ANC. All participants described being spoken to in a nice manner. They described the physical examinations and being given dietary advice specific to pregnancies.

*I was treated well, I was encouraged, I was given all I was due. My medications and my vaccines were given to me. And I was given a lot of advice from the nurses in the ANC. (013)*

However, it was also described that the nurses could be angry with some participants attending the ANC. Being conscientious with their appointments, always bringing their cards, and taking medicines as

prescribed was seen as a way to ensure that the nurses treated them well.

*The ones that did not go to ANC and did not take treatment, they (the nurses) could be angry with them, and they had a kind of reaction. But me, as I took my drugs and went to all my clinics. No day passed me. Even if rain came, I went. So they had no problem with me. (009)*

Not all participants experienced labour pain prior to the CS. However, it seems that the ones that experienced labour pain saw that the nurses felt sorry for them after they had been in labour for a long time. The nurses were perceived as the connection between the participants and their doctors, and nurses were the ones calling a doctor when they thought participants had suffered enough.

*This was what we were doing for a long time, then sister M felt sorry for me when she had a night shift. Then she called doctor M. They called him and said: Oh this girl, we feel sorry for this girl, she feels pain. (008)*

The nurses and doctors spoke to participants when they saw that they feared the operation. The majority of staff comforted participants by simply saying "don't be afraid, nothing will happen to you". Sometimes they showed participants other patients in the maternity ward that had survived the surgery, while others encouraged spiritual coping. The participants also reported that staff spoke to them during the operation. Sometimes doctors just called their names repeatedly to ensure they had contact, and sometimes they spoke about the baby that was going to be born, or just asked questions about the woman's family. When the child was born, the staff helped bring the woman's attention to the child in order to direct attention away from the operation and related pain.

*But during the time when they prepared me for the operation, the doctor counselled me; he asked me how I felt when he gave me the oxygen. When they did my vitals, they talked to me. So, it calmed your heart down. (010)*

The participants described severe pain following the surgery, after the anaesthesia had left their bodies. They were unable to turn in bed, get out of bed, or even breastfeed their babies, while some described only being able to lie still for hours. Some participants also described how the doctor prescribed painkillers for them, and how the nurses responded to their complaints by giving them medicines that eased their pain. However, some participants did not place too much emphasis on the pain, but rather on the positive effect of the painkillers and their ability to get up and look after their children after a day or two. Most participants reported feeling a little pain and discomfort at the time of the interview – one month after the CS was performed.

*...when I came from the theatre, that pain really bothered me. I was just crying over that pain. But when they gave me that injection, it cooled down. But the injection left and it came back to you. (008)*

Some women described how the hospital staff used humour to release tension and create a good relationship with patients, which was highly appreciated by the participants. It was highlighted that scepticism due to negative rumours about hospitals turned into an unwillingness to leave the hospital. A positive fellowship between staff as well as other patients was described.

*Doctor M was glad with us, he made it fun, and we were laughing. The others, they did not, except the nurse that was there when I came to change my bandage. She could make fun with us in the hospital, she said: Girlfriend, god morning! How did you sleep? How do you feel the pain? Yeah. Doctor M also, he said: Oooh, my babies, how are you doing? We said: We are fine! We made that fun with them. (008)*

The participants received information on what to eat, how to breastfeed, and how to take care of their babies in the maternity ward. They were also told to return to the outpatient unit to change their bandages after discharge. A few participants mentioned receiving

information from the doctor regarding the possibility of having more children. In addition to the information provided, medicines were perceived to be a very important aspect of care from the staff. The participants expressed that they were happy to receive medicine for their pain, and most of them did not need to pay for the most important medicines. Being given food was also highly appreciated.

*They gave me medicine; they gave me injections. Because that day, when they did the operation on me, I was given a drip, and they came and gave me another one. The medicine they did not have; they wrote (a prescription) for me to buy it. (005)*

The participants said that the nurses in the hospital wards, with a few exceptions, treated them well and spoke nicely to them. These exceptions were also described: some nurses refused to help participants when their babies cried in the night and took payment for medicines that were supposed to be free. However, it was underlined by the participants that these were exceptions.

*It was a nurse who worked nightshift. She did not treat us well that day. My pain was bothering me. My child cried. I did not have anyone to hold him. I did not have the strength to come out of bed. That woman, we called her to assist us. Myself, I fought a long time, I prayed to God. I managed to come out of bed. Nobody was there (008)*

A very vivid description of a previous bad birth experience was also provided: not being spoken to in a respectful manner, nurses that did not listen, nurses complaining about the patient to her family, and calling participants rude when she answered them. Having to pay for medication, in spite of the births taking place after the launch of the FHCI, was a part of the story. However, it was different this time:

*But this time around, I was really impressed over them. They really tried – the doctors as well as the nurses. (007)*

## Discussion

### I was afraid. That's why I cried.

The fear of CS described in this study is also described by Somali women in the US [24]. The fear of pain and death related to CS, in addition to religious and sociocultural factors, such as the concern for the economic situation of the family and future pregnancies are observed in other studies from West Africa [5,25,26]. These studies emphasise concerns regarding women refusing to consent to surgery, and the possibility of fatal outcomes as a result of their refusal. It is also shown that women are not always informed about the surgery before being taken to the theatre, and that the information provided is too vague and not understood by the patients [5,25]. However, fear is not only found in studies of CS in developing countries, where the risk of morbidity and mortality is high. In a meta-synthesis, Puia [17] discovered that one of the overarching themes related to CS is being “scared to death”, meaning a woman's fear of dying or losing her baby. The researcher also determined that if the birth experience was regarded negatively by the woman, the woman would fear later births.

According to salutogenic theory, knowledge can be viewed as a GRR [18], which could aid the participants in understanding the information provided, and thus find the situation more comprehensible. This could also lead to reduced fear and improved coping. A study from northern Sierra Leone revealed that overall health knowledge among women was inadequate. However, there was a higher level of knowledge among educated women [27]. Evidence suggests that patients find it difficult to comprehend medical decision making [28]. Providing adequate information adapted to the health literacy level of each individual, may improve their understanding of the situation. It has been demonstrated that providing information prior to, during, and after birth, as well as providing women with adequate support can enhance the birth experience, even in the presence of complications [29].

### I coped by praying to God

Placing trust in a higher power was a common coping method for participants in this study. Similar observations were found in a study from Ghana, where the participants prayed to God to help reduce severe pain [30]. Religion as coping strategy is described in other stressful events in life, such as coping with loss or bereavement. Park [31] found that religion could work as a meaning system, where disruption in a person's global meaning could be reframed, and more benign interpretations could be found. Religion could also provide coping resources such as prayer, and perhaps give way to personal growth. Klaassen et al. [32] describe how religious and spiritual coping strategies help people find meaning in adverse situations, and how these strategies may aid individuals in gaining control of a situation. They conclude that religion is found to be mainly positive as a method of coping with physical symptoms.

Finding meaning in a stressful event is described by Antonovsky [18] as one of the elements in a person's SoC, and perhaps the most important. Childbirth is viewed as a major life event [12]. According to Antonovsky, meaningfulness is related to the importance of the event [18]. Even if the stress of surgery was unwanted among most participants in the study, it was viewed as something worth the energy investment. Religious and spiritual coping strategies aided the participants in finding meaning in the situation, and many thought God was in control. Antonovsky [18] defines both religion and coping strategies as GRRs; thus, praying as a way of coping would represent a GRR. Where the GRRs are sufficient in balancing the stress of a life event, the outcome can be salutary. Healthcare personnel can assist women in achieving a salutogenic birth by supporting meaningfulness, including psychological and pastoral interventions [28].

### Support from family, friends, and staff

The prolonged pain and discomfort following a CS birth, and the inability of women to take up their household chores for prolonged periods were mentioned by most participants. Other studies have revealed that women experienced pain and exhaustion in attempting to care for their infant in the post-operative period [33], and found it difficult to engage in household chores and income-producing activities after CS [25]. Even after elective CS, women were not prepared for the post-operative pain and how it would affect them [34].

From a health promotion perspective, social support is regarded as an important determinant of health ([35] p 20). Seeking support from friends and relatives was a common method of coping with emotional, financial, and practical challenges among the participants in this study, a behaviour also seen in other studies from Sierra Leone [2,10,36]. Roux [33] observed that care from loved ones could mediate negative experiences, relieve some anxiety, and provide participants with a feeling that the negative experiences were more manageable. Manageability, according to Antonovsky, is when one perceives that resources are available at one's disposal when needed [18]. Practical assistance from family and friends appears to be an important GRR that aids participants in coping with challenges. Bull et al. [37] determined that, even in the poorest settings, GRRs or assets for well-being may exist.

Being listened to and spoken to nicely have been mentioned by participants in this study as positive aspects in their relations with hospital staff. According to Puia [17] the intrapartum nurse has an important role in shaping the birth experience. Continuous support and individualised care with constant reassurance could enhance the ability to cope, reduce feelings of vulnerability and loneliness, and create a feeling of safety [38]. Attentive caregiving could mediate a difficult experience, and the staffs' personality, behaviour, and communication skills would aid in processing the experience as well as providing reassurance and comprehensibility [33]. Antonovsky [39] states that if the experience with a health care system is consistent with a load-balance of stimuli and participation in decision-making, the SoC can be maintained or reinforced.

The participants interviewed confirmed that issues remain with attitude problems among healthcare workers in Sierra Leone. The article “Still too far to walk” [40] provides ten reasons why healthcare services are underutilised. One of these reasons includes the perceived attitude and the knowledge of the staff. A systematic review [41] highlights how organisational factors including lack of resources, work overload, low payment, weak supervision, attitudes, beliefs, and prejudice from staff can influence how patients are treated. In particular, staff attitudes and absenteeism are highlighted as factors leading women to avoid giving birth in hospitals in Sierra Leone [3,10,36]. In the most recent version of Human Resources for Health Policy, several actions have been identified to increase the quality of care provided in the public healthcare system, including new curricula for education of healthcare workers, incentives such as improved salaries and courses, and better staffing, monitoring, and clinical surveillance [42].

### Strengths and limitations

Only healthy women with healthy babies were included, which is likely to have influenced the perception of CS by the study cohort in a more positive way.

In qualitative research, the preconceptions of the authors might influence the research process. The first author is a midwife who has lived and worked in Sierra Leone earlier, and is fluent in Krio. The second author is a medical doctor who has also worked in Sierra Leone over years. The third author is a midwife with experience from qualitative research, but no experience from Sierra Leone. The difference in background and continuous discussion in the research team with a focus on bracketing out preconceptions, strengthens the study. The results are also in line with other studies.

The interviewer being a foreigner, might have influenced the openness and focus of the participants. In addition, a male research nurse was present during most interviews to translate or aid with language. Cultural aspects regarding talking about birth experiences could also be a limitation. It is difficult to be aware of all the multicultural factors that can influence the relationship between the interviewer and the interviewee. Although being foreigners, the language skills and some cultural knowledge might also be a strength, in both preparing the interviews, conducting them, as well as analysing the material.

Limited language skills and the need for translation could impair the author’s ability to describe nuances, resulting in misunderstandings. In addition, Krio was not the mother tongue of most study participants, however, its use improved the flow and efficiency of the interviews as it avoided the use of interpreters, which can in themselves negatively affect the interview process due to frequent interruption and interpreter bias.

The questions in the interview guide regarding the impact of the CS on the women’s family or their own future birth choices did not give very rich answers, and were not discussed.

### Conclusion and implications for practice

This study highlights that women can find resources to cope with pain and fear within themselves, while also receiving the extended support of social networks and hospital staff. This indicates that Sierra Leonean women from all back-grounds have access to resources that promote their health and well-being, and that their birth experience can be salutary regardless of their mode of delivery. Further research on CS and vaginal birth experiences in Sierra Leone are needed to continue to improve maternity care. Among areas of interest would be how birth experiences influence the women’s choice of intended place to give birth in consecutive pregnancies. Additionally, we would suggest that more individualised information and emotional support during pregnancy, birth, and the post-natal period should be emphasized in the education of healthcare workers and taken into account during the development of healthcare systems. Lastly, suggestions for clinical

practice may include allowing support from a relative in the surgery theatre and creating the possibility for women to discuss their birth experience with a professionally trained midwife.

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### Authors’ contributions

AEH, AvD and IA conceived the idea and wrote the proposal for the study. AEH collected the data. AEH, AvD and IA analyzed the data. AEH drafted the manuscript and AvD and IA reviewed the manuscript. All authors read and approved the final version of the manuscript.

### Declaration of Competing Interest

The authors declare that they have no competing interests.

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