Women’s experiences of postpartum contraceptive services when elective caesarean section is the method of birth: a qualitative study

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ABSTRACT

Background The unmet need for postpartum contraception is a global challenge. Postpartum placement of an intrauterine device (IUD) within 48 hours of vaginal delivery is available in many settings worldwide, but is not routinely practised in Sweden. To improve contraceptive services and facilitate the informed choice of IUD placement at the time of a caesarean section (CS), we performed this study to identify and describe women’s experiences of contraceptive services before, during and after an elective CS.

Methods A qualitative design and methodology was used. We interviewed 20 women aged 28–42 years who underwent elective CS in Sweden. Interviews were analysed using reflexive thematic analysis.

Results The three main themes found were (1) receptivity to contraceptive counselling in the context of CS, (2) communication and decision-making about postpartum contraception before CS and (3) lack of support and guidance to receive contraceptive services before and after CS. The participants described readiness and interest regarding postpartum contraception. They preferred counselling from around 25 weeks of gestation. Despite this finding, antenatal communication and contraceptive decision-making seemed rare. Participants reported a lack of support and guidance which necessitated a need by women to navigate the contraceptive services themselves in order to receive information about contraception before CS and to receive postpartum support.

Conclusions Antenatal contraceptive counselling including information about IUD placement during CS was appreciated and welcomed by women with elective CS as their birth method. Most of the women whom we interviewed would prefer to receive contraception counselling on postpartum use during the second half of their pregnancy.
leading to a birth for 18 months for risk reduction, in particular uterine rupture, during a subsequent pregnancy.\(^3\)

The period after childbirth is important, as many women wish to restart or initiate contraceptive use in order to avoid unintended pregnancy. In Sweden there is still an unmet need for contraception despite the fact that contraceptives are subsidised up to 26 years of age.\(^1\) Use of contraception is found to depend on perceptions of motherhood, likelihood of pregnancy, and attitudes from partner and family but also on the characteristics of the contraceptive methods and services, perceived side effects and health risk, as well as the capability to make decisions.\(^6\) Thus providers should\(^7\) offer individualised contraceptive counselling postpartum and make highly effective contraception easily available after childbirth regardless of the method of birth.\(^8\) In Sweden, midwives in the Maternity Healthcare system prescribe and administer all contraceptive methods, including long-acting reversible contraception (LARC) methods, for healthy women. Thus all methods are available and depend solely on medical eligibility criteria.\(^9\)

LARC methods, including intrauterine devices (IUDs) and subdermal implants, are associated with lower contraceptive failure rates compared with other methods.\(^10\)-\(^12\) An IUD can be placed immediately during an elective CS\(^13\)-\(^15\) which entails immediate uptake of a highly effective and generally acceptable contraceptive method at the time of delivery. Contraceptive counselling services before, during and after CS therefore offer key opportunities to strengthen women’s recovery, prevent unintended pregnancies, and facilitate access to immediate postpartum contraception. There is limited knowledge about the experiences and needs of women regarding contraceptive services in the context of CS. In order to improve the quality and availability of contraceptive services and informed choice of IUD placement at the time of a CS for women who actively chose to use an IUD postpartum, we undertook this qualitative study that aimed to identify and describe women’s experiences of contraceptive services before, during and after an elective CS.

METHODS

Study design

A qualitative design and methodology using reflexive thematic analysis was chosen to study the phenomenon of contraceptive services in the context of CS, and to enable a deeper understanding of participants’ preferences and needs.\(^16\) The results are reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (online supplemental material).\(^17\)

Setting

This interview study is part of a broader quality improvement programme, serving women with IUD placement during elective CS in Sweden. The study was conducted from November 2021 to June 2022 and was performed at Danderyd Hospital, which was the first hospital in Sweden to implement this service. At Danderyd Hospital there were approximately 794 elective CS out of 6611 births in 2021.\(^18\)

The Maternity Healthcare system in Sweden is a well-established part of primary care that reaches almost every pregnant woman.\(^18\) The main providers are nurse midwives and gynaecologists. Midwives provide the antenatal care including most of the contraceptive counselling and provision.\(^9\) A consultation with an obstetrician/gynaecologist is mandatory for pregnant women needing or wanting an elective CS. Fear of vaginal birth is one fundamental reason for wanting a CS as the birth method, and for this group of women the necessity to identify individualised needs regarding contraceptive counselling is a delicate matter in view of the possibility of co-existing fear of vaginal examination and thus placement of an IUD. The rate of elective CS in Sweden was 8.0% in 2021 and 7.6% in 2022 when the study was conducted.\(^18\)\(^19\)

Participants

Theoretical and purposive sampling was used\(^16\) to include participants who had chosen and who had not chosen to have an IUD placed during elective CS. In the group of participants who had not chosen an IUD, there were participants who antenatally had not received information about the possibility of IUD placement during CS. Women in the study had access to the same contraceptive services as other women at the time the study was conducted. Swedish-speaking women >18 years of age who underwent elective CS were invited to participate (n=33). Women with complications such as conversion to an emergency CS, complicated CS, blood loss >1000 mL or severe neonatal adverse outcome before enrollment were not invited to participate. A member of the research team invited women who matched the inclusion criteria (and who did not meet any of the exclusion criteria) in person within 3 days after the CS in the delivery ward and provided oral and written information about the study. Women who agreed to participate signed informed consent and were invited for an interview within 6 weeks of the CS. Of 33 invited women, four declined to participate and 29 signed informed consent. Of these 29 participants, nine participants could not be contacted for the interview. The final sample of study participants therefore comprised 20 women.

Data collection

A semi-structured interview guide was developed and created by means of literature review and discussion within the research group (the “interview guide”, online supplemental material). After signing informed consent, two pilot interviews were performed to test the interview questions, with the intention of including
these interviews if they contained sufficient valuable qualitative information. The interview data were considered to contain rich information and were therefore included in the study. Interviews were conducted by KLL through Microsoft Teams at locations and times chosen by the women and were of 20–55 min (median 37 min) duration. No non-participants were present during the interviews. The interviews were digitally recorded, de-identified, transcribed verbatim and kept in a secure location.

Analyses
The transcripts were analysed using the six steps in reflexive thematic analysis according to Braun and Clarke.20 The analysis included a recursive process whereby the movement was back and forth through all the steps using the researchers’ pre-understanding and interpretation of the dataset. Two researchers read the data to familiarise themselves with the content and to identify patterns in the data. Relevant data extracts were then labelled and coded by KLL. Preliminary codes were then organised into 16 initial themes and were discussed and grouped together. In the next step, the 16 initial themes generated eight subthemes. Finally, the three main themes were discussed in the researcher group until consensus was reached (figure 1).

Patient and public involvement
There was no public or patient involvement in the planning of the study but the interview guide was piloted and changed after input from participants.

Ethical considerations
This study was conducted in accordance with the Helsinki Declaration, including the provision of written informed consent by all participants. The study was approved by the Swedish Ethical Review Authority (No. 2021–00065).

RESULTS
We interviewed 20 women. The characteristics of participants are described in table 1.

In the analysis we identified three main themes: (1) Receptivity to contraceptive counselling in the context of CS, (2) Communication and decision-making about postpartum contraception before CS and (3) Lack of support and guidance to receive contraceptive services before and after CS. Quotes are referred to in the Results section to illustrate the connection between the themes and the statements from the interview transcripts (table 2).

Receptivity to contraceptive counselling in the context of CS
Participants generally had limited awareness about contraceptive methods. The contraceptive method that was once chosen, sometimes years previously, was often resumed after the CS even if satisfaction was not high (table 2, Quote 1 (Q1)).

Participants explained that medial information, along with attitudes in society and among friends or family, sometimes influenced the choice of contraception more than the provider’s expertise. Many participants desired more information about contraception as they found their knowledge was not up to date.

Most often a physician informed the participants about the possibility of IUD placement during the CS. Participants who wanted elective CS based on fear of vaginal birth reported feeling afraid of not getting acceptance for the CS and being un receptive to questions about contraception (Q2). Participants who had
used an IUD previously were usually more likely to accept the offer.

During the first months of pregnancy, participants described low receptivity to discussing contraception. They described a “time window” from around 25 weeks of gestation to the planned CS, when it would be appropriate and even welcome to communicate about contraception (Q3, Q4). Participants suggested that the conversation about contraception should be broached a few times during the last months of pregnancy so as to have time to consider the possible options. Some participants had wished to include their partner in the discussion, and to have had more time to communicate and make a decision about contraception before CS.

**Communication and decision-making about postpartum contraception before CS**

A trustful relationship between the woman and nurse midwife was described as valuable for many participants (Q5). They appreciated communicating with their nurse midwife about contraception rather than having a short consultation with a provider they had not met previously. Many participants had received sparse or no communication about postpartum contraception before CS, and stated that they would have needed more informative counselling. They wished for a broad, up-date session on contraceptive methods, including information about effects, pros and cons, and potential side effects (Q6). Several participants suggested improvements such as written information to be distributed or alternative audiovisual ways of receiving information.

Being informed and involved in the decision about contraception was described as central. Participants described having too little time to communicate and ask questions about the contraceptive method when CS was the method of birth. The participants who decided to have an IUD placed during CS were usually content with the decision and reflected on the positive effects of having made a decision about contraception before delivery, since the time postpartum repeatedly was referred to as a “tough time”. Many of the participants who did not choose to have an IUD placed during CS described it as “a missed opportunity” (Q7, Q8).

**Lack of support and guidance to receive contraceptive services before and after CS**

A predictable system for communication and coordination, in which the involved parts of the medical care system cooperate as a unit, was mentioned as being important but as functioning suboptimally. In the context of CS, many participants reported how they needed to navigate the contraceptive services by themselves in order to receive information and counselling about contraception before the CS. They also struggled to receive follow-up support postpartum and described how the suboptimal system negatively affected their use of effective contraception due to lack of information and easy access to initiation of postpartum IUD. Participants described a need to seek advice and information outside the professional healthcare system, for example from social media or by talking to friends. In particular, participants who had experienced CS and also had concurrent diseases or special needs requiring advice from a specialised physician reported receiving insufficient counselling. They were often advised to seek a consultation with a physician by themselves, something that they often failed to pursue and thus lacked counselling from medical healthcare personnel. Others found it difficult to establish communication with professionals (Q9). Some participants received incorrect information about IUD placement and some reported being unaware of the recommended visit to check IUD strings 2–3 weeks after having an IUD placed during the CS (Q10).

**DISCUSSION**

The most consistent finding was that participants mentioned that they generally did not receive contraceptive counselling that matched their needs in the context of CS. Participants found counselling for postpartum contraception sparse or even non-existent. Although participants would have appreciated contraceptive counselling during pregnancy and found it highly relevant and appropriate, few participants...
had expected counselling to be part of the antenatal programme. In a Scottish study, the majority of participants reported antenatal counselling about postpartum contraception to be either “very” or “quite helpful”. Antenatal contraceptive counselling at 22 weeks of gestation about the use of postpartum LARC has been reported to be highly acceptable to women at the chosen timepoint. In our study, the timing of counselling was also important. Most participants stated that they would have been prepared to talk about contraception during the second half of their pregnancy. Furthermore, the theme “Communication and decision-making about postpartum contraception before CS” supports communication about contraception antenatally initiating the process that leads to a decision about contraception also when CS is the method of birth.

Our study included women who chose not to access immediate CS IUD placement as well as those who did. Many of the participants who did not choose to have an IUD placed during CS described it as “a missed opportunity”. Our findings confirm that an antenatal decision should be seen as a prerequisite to enable placement of an IUD during CS for women who wish to use an IUD postpartum. A review investigating the effectiveness of counselling strategies found evidence that counselling during pregnancy led to increased uptake of contraception postpartum. In our study, in particular participants who had not used an IUD previously often found the information given to be too sparse, and to be provided too close to the CS for them to be able to make an informed decision.

Women giving birth by planned CS may differ in characteristics and preferences from women who give birth vaginally. Therefore, exploring women’s experiences of IUD in the context of CS can provide new insights into these women’s preferences. Participants valued a trustful relationship with their nurse midwife, and other preferences like being engaged in the decision, as fundamental, and in line with the model of “shared decision-making” about contraceptive counselling. Similar findings have been
described regarding postpartum contraception after vaginal birth.26 27

Our findings highlight women’s need for predictable and adaptive contraceptive services in order to initiate a method during and after CS. The coordinating units in Maternal Healthcare that should integrate around the woman are insufficiently adapted to women’s needs and changed conditions. With improved techniques such as IUD placement during CS new challenges arise, and highlight the need for co-designed contraceptive services that take women’s perspectives into account to improve quality and safety.28 29

Some women had not received sufficient information about recommendations after IUD placement during CS. Furthermore, participants with concurrent diseases and those needing specialised contraceptive counselling by a physician were sometimes advised to seek counselling by themselves, which often resulted in a lack of counselling, advice and initiation of contraception. Improving coordination and structure regarding contraceptive counselling would probably have a great value and impact on contraception usage postpartum, especially for this group of women who often have an increased need for effective contraception.

Methodological considerations
This study’s major strength is that it contributes new knowledge about women’s lived experiences of contraceptive services before and after caesarean delivery. Furthermore, the study provides insight into how these women’s experiences affect IUD use postpartum since it included women who chose not to access immediate IUD placement as well as those who did.

A limitation is that the majority of the participants included in our study were >28 years old, had undertaken higher education, had to be Swedish-speaking, and were cohabiting or married. This might limit the understanding regarding preferences and needs of contraceptive services for younger women, those with a lower level of education, and those with more challenging social conditions.

Our sample size is in line with the recommendations for qualitative studies. We define the audit trail and present quotes to illustrate the relationship between the interview transcripts and the study findings, in order to strengthen the study’s trustworthiness.30

Implications of results and future research
To update and to also include antenatal sessions on contraceptive counselling as part of the Maternal Health programme might improve informed choice about postpartum contraception and facilitate access to LARC methods for women experiencing elective CS. Future studies should focus on how to co-design antenatal sessions about counselling and services to assist women who wish to have an IUD placed during CS and for women who have other preferences. A future direction could be to explore the views on CS IUD for women undergoing elective CS based on fear of vaginal birth, and regarding women undergoing repeated CS.

CONCLUSIONS
Offering antenatal contraceptive counselling including information of IUD placement during CS was appreciated and appropriate for women with elective CS as their birth method. Most of the women whom we interviewed would prefer to receive information and communication about postpartum contraception during the second half of their pregnancy.

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REFERENCES