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Confronting the Taboo of Multifetal Pregnancy Reduction: A Qualitative Study of Maternal Decision-Making in Triplet Pregnancies

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ABSTRACT

Objective: To explore the personal experiences of women faced with the decision to continue a triplet pregnancy or undergo multifetal pregnancy reduction.

Methods: A qualitative study with semi-structured interviews was conducted between October 2021 and April 2023. Participants included women who continued a triplet pregnancy, and those who underwent multifetal pregnancy reduction from triplet to twins or singletons, 1–6 years post-decision. Interviews focused on: (1) the decision-making process, and (2) the emotional aspects and psychological impact of the decision. Thematic analysis was used to identify patterns, involving familiarization, defining themes, and producing the final report.

Results: Data saturation was achieved after 16 interviews, revealing two main themes: (1) maternal intuition as a guiding force, and (2) navigating the crossroads: coping and reflection on the decision. These themes illustrate an interplay between maternal intuition and intrinsic feelings in the decision whether to perform multifetal pregnancy reduction, seemingly less influenced by external factors. Mothers who adhere to their intuition (15/16) have a low likelihood of experiencing regret. Despite the inclination to share and seek support, a persistent taboo surrounds the topic of multifetal pregnancy reduction. The findings also emphasize a considerable gap in aftercare for women, regardless of their decision.

Conclusion: There is a need for improved care and support for parents facing the decision of continuing a triplet pregnancy or deciding on multifetal pregnancy reduction. Efforts should focus on fostering open societal dialog about this taboo subject, and addressing the gap in aftercare to provide comprehensive support to women post-decision and post-birth, thereby establishing a more supportive and compassionate framework.

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Summary

- What's already known about this topic?
 - Multifetal pregnancy reduction aims to improve the health outcomes of both the remaining fetus(es) and the mother in a multifetal pregnancy.
 - The decision-making process of multifetal pregnancy reduction involves navigating medical aspects alongside personal factors, social-economic circumstances, and belief systems while also considering the psychological impact of either caring for triplets or reducing the pregnancy.
- What does this study add?
 - For mothers considering multifetal pregnancy reduction in triplet pregnancies, a mother's intuition plays a pivotal role in the decision-making process, and the chance of regret appears to be low when mothers follow their gut feeling.
 - Efforts should focus on fostering open societal dialog about this taboo subject, and addressing the gap in aftercare to provide comprehensive support to women post-decision and post-birth.

1 | Introduction

Multifetal pregnancy reduction (MFPR) aims to improve the health outcomes of both the remaining fetus(es) and the mother [1, 2], by reducing one or more fetuses in a multifetal pregnancy [3]. Some parents may choose MFPR based on medical rationales, psychological or socio-economic factors [4–6], while in other instances reduction may be necessary due to congenital abnormalities (i.e. selective termination).

Recent research has shown the potential of MFPR to improve pregnancy outcomes by decreasing the risk of preterm birth [7–12] and hypertensive disorders of pregnancies [13], as well as increasing neonatal birthweight at delivery [7, 8, 11, 12]. However, it appears that MFPR in triplets does not entirely eliminate adverse outcomes, such as pregnancy loss < 24 weeks [7, 9, 14, 15]. Some researchers argue that with increased experience and expertise, there is clear evidence that MFPR in triplets reduces the risk of procedure-related pregnancy loss < 24 weeks [12, 16, 17], leading to a lower risk of pregnancy loss in reduced compared to ongoing triplet pregnancies. This ongoing debate highlights the need for further evaluation of the medical benefits of MFPR in triplet pregnancies. Additionally, it has not been thoroughly investigated whether factors such as a systematic protocolized approach or extensive experience in invasive procedures influence the occurrence of procedure-related complications, such as pregnancy loss.

The MFPR decision presents a unique challenge for women, partners and healthcare providers [3, 18], especially given the background of infertility treatments to achieve a highly desired pregnancy, which increases the risk of multifetal pregnancies [19]. The challenge involves navigating medical aspects, including pregnancy risks, alongside personal factors, social-economic circumstances, and belief systems while also considering the psychological impact of caring for triplets or deciding on MFPR. Healthcare providers play a critical role in the decision-making process, necessitating a comprehensive understanding

of the multifaceted factors that influence the decision to continue a triplet pregnancy or perform MFPR. To enhance this understanding, and to assess the emotional and behavioral responses following such a decision, a more detailed knowledge is needed on how women decide to either maintain or reduce their triplet pregnancy. Therefore, this study aims to explore the personal experiences of women faced with the decision to continue a triplet pregnancy or to decide on MFPR.

2 | Methods

2.1 | Setting

This is a qualitative study using semi-structured interviews, conducted at a regional secondary care hospital (OLVG), in collaboration with a tertiary care hospital (Amsterdam University Medical Center, Amsterdam UMC) in Amsterdam, The Netherlands.

At Amsterdam UMC, all expectant parents of triplets are informed about the implications and risks associated with carrying a triplet pregnancy. This includes the potential for preterm delivery, fetal growth restriction or low birthweight, hypertensive disorders of pregnancy, and other adverse pregnancy outcomes. After confirming the triplet pregnancy, parents are informed about the option of MFPR, which in some cases may have already been discussed at a secondary hospital where the triplet pregnancy was initially diagnosed. For those open to considering MFPR, comprehensive pre-decision counseling is provided, offering detailed information about the potential benefits and risks of the procedure. This counseling emphasizes that while MFPR can improve certain pregnancy outcomes, it may carry a small risk of a procedure-related pregnancy loss. Parents are also made aware of the potential emotional impact, including feelings of guilt or regret that may arise following MFPR. Conversely, feelings of regret can also arise from the decision not to undergo MFPR as caring for triplets can significantly impact parents' daily lives, especially when one or more children have disabilities. A consultation with a hospital social worker is facilitated to assist in the decision-making, and to address long-term psychological issues that might occur, and this is mandatory for parents seriously considering the option of MFPR. Some women are referred back to secondary care as pregnancy progresses since twin and singleton pregnancies after MFPR or triplet pregnancies with a gestational age > 32 weeks can be under care in a secondary care hospital.

2.2 | Participants

In 2021, all women from Amsterdam UMC with a history of a triplet pregnancy within the past 1–6 years were invited by letter and e-mail to participate in this study. An update of eligible participants was conducted in 2022 with the objective of collecting a comprehensive data set. Data collection continued until reaching a saturation point, where further acquisition ceased to yield new insights or perspectives. The women's partners were invited to participate as well, and were the subject of our previous published work [20].

2.3 | Data Collection

Data collection was conducted between October 2021 and April 2023 by two female authors (P.M.v.B. and M.G.v.P.) along with a student mastering in Medicine (R.A.). P.M.v.B. is currently pursuing a PhD in obstetrics and underwent a specialized training in qualitative research and interview techniques. M.G.v.P. is a gynecologist with a broad background in the psychological aspects of obstetrics. Semi-structured interviews were held either at OLVG or at participants' homes based on their preferences, with one interview conducted via video conference due to personal circumstances. All participants were apprised of the purpose and motivation behind the research topic. A pre-defined question guide (Table S1) was used for all interviews (not pilot tested), and the interviewers had no involvement in the participants' prenatal care. Prior to the interviews, all women completed a demographic questionnaire and the Hospital Anxiety and Depression Scale (HADS) [21] via Castor EDC to detect psychological symptoms influencing recall bias. Any deviations in HADS scores (i.e. subscale score ≥ 8 for anxiety or depression) were discussed with the participants, with options for psychological support provided if needed.

Within 2 weeks after their interview, all women were contacted by telephone to assess their study experience and identify any psychological discomfort, with follow-up care facilitated if required through referral to a healthcare provider via their general practitioner.

2.4 | Data Analysis

All interviews were audiotape recorded, transcribed verbatim and anonymized prior to the coding process and data analysis. Thematic analysis was used as the methodological approach to gain insights into patterns within the women's data, offering a systematic and rigorous examination of the interview transcripts. This process involved a thorough reading of all transcripts, from which initial codes emerged. Subsequently, P.M.v.B. and R.A. applied these codes to the transcripts using ATLAS.ti software. The codes were sorted into overarching main themes and corresponding sub-themes in a thematic map (Figure S1). To ensure development traceability, uphold objectivity, and reduce the risk of potential bias, themes and sub-themes underwent extensive discussion involving four authors (P.M.v.B., R.A., B.F.P.B. and M.G.v.P.), each bringing expertise in Obstetrics, Fetal medicine, Psychology, and Psychiatry. This collaborative approach enriched the analysis and strengthened the robustness of the analytical framework. Illustrative quotes were incorporated to deepen the context of the findings.

2.5 | Ethical Considerations

The study protocol was reviewed and approved by the Institutional Review Board of the VU University Medical Center (METc VUmc 2020.406). This study adheres to the COREQ

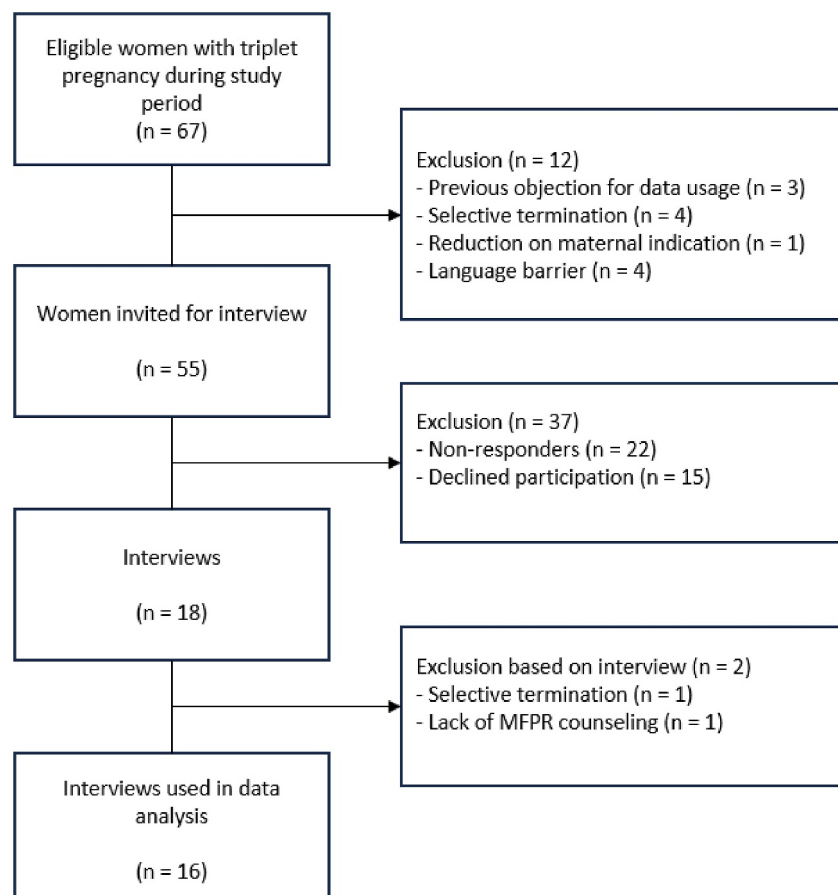


FIGURE 1 | Flowchart of participant inclusion. [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

checklist for qualitative studies (Table S2) [22]. Written informed consent was obtained from all participants.

3 | Results

Figure 1 illustrates the flow and number of participants included in the study. A total of 55 eligible women received information about the study. Recruitment persisted until interviews no longer yielded novel insights [23]. Ultimately, 15 women chose not to participate; in several cases, this decision was influenced by finding it too emotional to talk about this sensitive topic, while contact could not be established with 22 others. A total of 18 women participated in this study. After two interviews, two participants were excluded from the data analysis. One interview lacked counseling for MFPR, while the other involved MFPR due to suspected congenital abnormality. Interview time ranged from 31 to 55 min (mean 43 min).

Baseline characteristics can be found in Table 1. We included five (31%) women who underwent MFPR (numbered as MFPR1-5); four from a trichorionic triamniotic triplet to a twin pregnancy and one from a dichorionic triamniotic triplet to a

TABLE 1 | Baseline characteristics.

Total participants, <i>n</i>	16
Interviews	
Triplet, <i>n</i>	11
MFPR, <i>n</i>	5
Triplet to twin, <i>n</i>	4
Triplet to singleton, <i>n</i>	1
Parity	
Nulliparous, <i>n</i>	12
Multiparous, <i>n</i>	4
Conception	
Spontaneous, <i>n</i>	3
ART, <i>n</i>	13
OI, <i>n</i>	4
IUI after OI, <i>n</i>	8
IVF, <i>n</i>	1
Duration of the attempt to conceive in ART pregnancies	
< 1 year, <i>n</i>	3
≥ 1 year, <i>n</i>	4
≥ 2 years, <i>n</i>	4
≥ 3 years, <i>n</i>	2
Participants' age at conception (years), mean (range)	32.5 (26–38)
Relationship status at decision with partner, <i>n</i>	16
Time from conception to interview (years), mean (range)	4.0 (1.1–5.9)

Abbreviations: ART, assisted reproductive technology; IUI, intra-uterine insemination; IVF, in vitro fertilization; MFPR, multifetal pregnancy reduction; OI, ovulation induction.

singleton pregnancy, while the remaining 11 (69%) chose to maintain their triplet pregnancy (numbered as Triplet1-11). Table S3 shows information on psychological status (see Table S3. Psychological history, HADS results and relationship status). Among all women, 11 (69%) scored below the cutoff of 8 for both the anxiety and depression subscales on the HADS. Six (38%) had received psychological therapy. The relationship status of 15 (94%) mothers was unchanged compared to the moment of conception. Pregnancy details can be found in Table 2. In one case (Triplet3), there were no surviving children after an extremely preterm birth.

Two main themes were identified: (1) maternal intuition as a guiding force, and (2) navigating the crossroads: coping and reflection on the decision (Figure S1).

3.1 | Theme 1: Maternal Intuition as a Guiding Force

This theme includes the initial response of the mother upon establishment of the triplet pregnancy, their tendencies prior to the counseling whether to perform MFPR, involving an interplay between intrinsic and external factors shaping maternal decisions. Mothers often rely on intuition and have strong intrinsic feelings in their decision-making. They eventually seek validation from other sources to affirm their decision. Figure 2 visually illustrates the layers of influence in the decision-making process. Table S4 illustrates how this theory has been built based on the mothers' interview answers.

3.2 | Subtheme 1.1: Initial Responses

Illustrative quotes can be found in Table 3. Mothers' first reactions at revealing the triplet pregnancy were highly diverse. Some mothers expressed enthusiasm towards having triplets (Quote 1, Triplet8; Quote 2, Triplet10), considering that some mothers had already experienced a prolonged journey of subfertility and/or fertility treatment. Others were more reserved or negative (Quote 3, MFPR2; Quote 4, Triplet2). Following these initial responses, almost all mothers immediately had a strong inclination either for MFPR (Quote 5, MFPR1) or maintaining their triplet (Quote 6, Triplet5; Quote 7, Triplet4). One mother was “*the happiest girl in the world*” upon knowing that she was pregnant with triplets but has been influenced by her partner, mother, and mother-in-law to choose MFPR (MFPR4). Another mother initially leaned towards MFPR but gradually found confirmation in counseling and conversation with a social worker to keep the triplets (Triplet1). Importantly, the interviews revealed that mothers who promptly expressed their opposition to MFPR received less extensive counseling about the procedure's pros and cons compared with mothers who were seriously considering MFPR.

3.3 | Subtheme 1.2: Maternal Intrinsic Versus External Factors

For the majority of the mothers, their intuition and intrinsic feelings outweigh external practical factors in decision-making

TABLE 2 | Pregnancy outcome.

Participant	Year of conception	GA at birth (weeks ^{±days})	Mode of birth	Complications during pregnancy or after birth	Birthweight (g)			Surviving children	Subsequent pregnancies with liveborn child after multifetal pregnancy
					Child 1	Child 2	Child 3		
MFPR1	2020	37 ⁺⁰	Planned CS	Anemia in pregnancy	2808	2472	—	2/2	0
Triplet1	2019	33 ⁺⁵	Planned CS	GDM, PTB	1709	1988	2200	3/3	0
Triplet2	2017	35 ⁺⁶	Planned CS	GDM, PTB	1895	2010	2455	3/3	0
Triplet3	2018	22 ⁺⁵ /22 ^{±6}	VD	Cervical cerclage for cervical insufficiency, recurrent candidiasis, EPTB, perinatal death	595	515	580	0/3	1
Triplet4	2018	34 ⁺⁰	Planned CS	PE, FGR, GDM, PTB	1186	1384	1366	3/3	0
MFPR2	2016	31 ⁺⁵	VD	Vaginal blood loss during pregnancy, PTB	1510	1500	—	2/2	0
Triplet5	2018	35 ⁺⁴	Planned CS	Cholestasis of pregnancy, PTB, severe PPH (B-lymph, embolization aa uterine)	2720	2655	2120	3/3	0
MFPR3	2017	33 ⁺⁶	VD	Severe HG, PTB	2050	2110	—	2/2	0
Triplet6	2017	33 ⁺¹	Planned CS	PTB	1679	1825	1720	3/3	0
Triplet7	2021	30 ⁺⁰	Planned CS	Severe HG, PTB	1430	1450	1290	3/3	0
Triplet8	2021	34 ⁺²	Planned CS	FGR, PTB, PPH	2300	2000	1620	3/3	0
MFPR4	2017	37 ⁺⁰	VD	PE, assisted instrumental birth (child 1 vacuum assisted, child 2 version and extraction operation ward), PPH	2505	2325	—	2/2	0
Triplet9	2019	32 ⁺²	Unplanned CS	PE, FGR, GDM, PTB, postpartum admission maternal intensive care unit due to renal insufficiency (HUS)	1530	1270	1291	3/3	0
MFPR5	2020	38 ⁺⁰	VD	GH, GDM	3490	—	—	1/1	0
Triplet10	2016	31 ⁺¹	Planned CS	PTB	1385	1245	1545	3/3	0
Triplet11	2018	32 ⁺⁶	Planned CS	PEH, FGR, PTB	1700	1565	1325	3/3	0

Abbreviations: CS, cesarean section; EPTB, extremely preterm birth; GA, gestational age; GDM, gestational diabetes; GH, gestational hypertension; HG, hyperemesis gravidarum; HUS, hemolytic uremic syndrome; MFPR, multifetal pregnancy reduction; PEH, pre-existing hypertension; PPH, postpartum hemorrhage; PTB, preterm birth; VD, vaginal delivery.

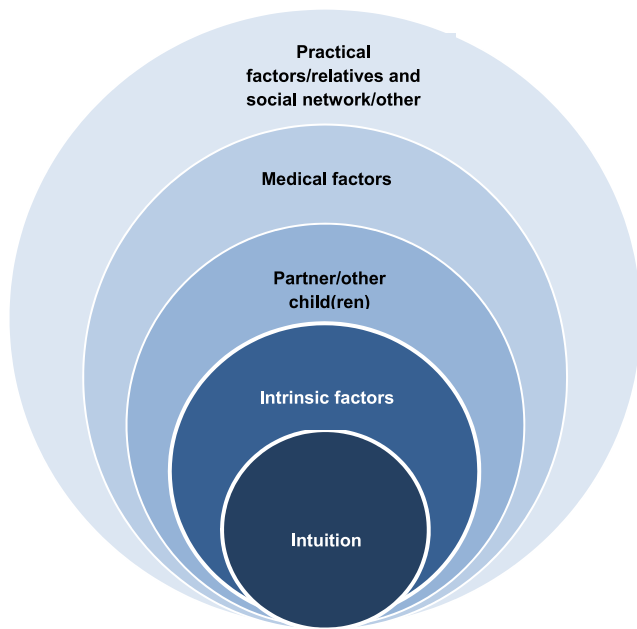


FIGURE 2 | Layers of influence: unraveling the decision-making process of multifetal pregnancy reduction in mothers. [Colour figure can be viewed at wileyonlinelibrary.com]

(Quote 8, Triplet9). Personal experiences, such as a prolonged struggle to conceive (Quote 9, Triplet11), and emotional connections with unborn children (Quote 10, Triplet3), can strongly influence the decision to proceed with triplets. Optimistic intrinsic perspectives can shape decisions, as expressed by mothers who believe that there is nothing in their way to raise three children (Quote 11, Triplet10). Several mothers expressed concern about justifying the reduction to the liveborn child(ren) and explaining that there were others (Quote 12, Triplet4). The profound impact on the existing family dynamic (i.e. other child(ren)) emerged as a significant factor in decision-making (Quote 13, Triplet4; Quote 14, Triplet8). Some mothers grappled with the profound ethical implications, as reflected in the sentiment, “*You decide about life and death, so what are we really talking about? That we need a different car?*” (Quote 15, Triplet9). While most mothers extensively discussed all aspects of the decision with their partners and indicated that they were making the decision together, ultimately, the decision seems to rest on the mother (i.e. her body, her choice) (Quote 16, MFPR1; Quote 17, MFPR2). In advice to other triplet mothers, many suggested “*listening to your own body*” and “*trusting your own feelings*,” implying that these intrinsic factors play a crucial role.

3.4 | Subtheme 1.3: Exploring the Medical Ramifications

Several mothers expressed a challenge in finding ample time to delve into crucial medical information, highlighting a lack of reliable resources (Quote 18, Triplet7). For those opting for MFPR, the emphasis was on the opportunity for *two* children to be born healthy (Quote 19, MFPR3), trying to avoid early preterm birth (Quote 20, MFPR5). Conversely, some mothers stressed the visibility of the health of three embryos at early ultrasound as a compelling reason not to terminate any (Quote 21, Triplet6),

alongside considerations of potential risk of termination of the entire pregnancy after MFPR (Quote 22, Triplet5; Quote 23, Triplet1). Several mothers indicated that during counseling appointments, the figures of complications were well explained (Quote 24, Triplet4). However, skepticism about the statistical evidence available for MFPR was also voiced (Quote 25, Triplet11). Notably, many women sought experiences on social media platforms dedicated to triplets/multiples, such as Facebook, contributing to a collective understanding of various perspectives. Additionally, it is noteworthy that three women, after counseling at Amsterdam UMC, sought a second opinion in another academic hospital, underscoring the thorough and comprehensive nature of their decision-making process (Triplet2; MFPR3; Triplet8). One of these mothers indicated a discrepancy in the reported incidences of complications between the different hospitals (Triplet8).

3.5 | Theme 2: Navigating the Crossroads: Coping and Reflection on the Decision

This theme encompasses how mothers deal with the inherent uncertainties after the decision, examines the introspective process following their choice, and offers a nuanced exploration of the influence of external support structures in shaping coping mechanisms. Illustrative quotes can be found in Table 4.

3.6 | Subtheme 2.1: Navigating the Uncertainty

This reflects the emotional rollercoaster that ensues, capturing the profound impact on the mothers involved. One mother vividly recalls the persistent fear and self-doubt, waking up every night for the first two weeks after the establishment of the triplet, questioning her ability to handle the situation both physically and emotionally (Quote 26, Triplet11). Many mothers described the tension following MFPR as intense and frightening, with the procedure itself viewed as drastic (Quote 27, MFPR1). For both women after MFPR and those continuing with triplets, a sense of tension extended into the pregnancy, manifested as a fear of potential loss (Quote 28, MFPR4), and a need for increased monitoring through frequent ultrasounds (Quote 29, Triplet2). The emotional toll is palpable, with an acknowledgment that even routine activities such as using the toilet become sources of dread due to the fear of blood loss (Quote 30, MFPR3). Conversations surrounding the potential outcomes of very early premature birth highlight the harsh reality of a 50% chance of survival and, for those who do survive, a subsequent 50% chance of severe disability (Quote 31, Triplet1). Throughout this turbulent journey, the participants express the challenge of coping with uncertainty (Quote 32, Triplet5) and the importance of managing stress to navigate the crossroads.

3.7 | Subtheme 2.2: Reflection After a Life Event

Table 4 presents a curated selection of quotes pertaining to this subtheme. Notably, all mothers, with the exception of one, expressed during the interviews that they believe they have made the right decision—whether it was opting for reduction or

TABLE 3 | Illustrative quotes theme 1: Maternal intuition as a guiding force.

Number	Quote
Initial responses	
1	<i>"That was the initial reaction: ..., this [triplet pregnancy] is fantastic." (Triplet8)</i>
2	<i>"You are pregnant... after a very long time, so that is also something to be very happy about." (Triplet10)</i>
3	<i>"I cried, from emotion, both from shock and joy. Because you are finally pregnant, but this was not exactly the plan." (MFPR2)</i>
4	<i>"A triplet. That was not my ideal picture..." (Triplet2)</i>
5	<i>"That just cannot. That was my initial feeling..., not even very rational or anything, but just really my feeling of: that just will not work, that just will not fit in my body." (MFPR1)</i>
6	<i>"I simply found reduction not an option for us." (Triplet5)</i>
7	<i>"...we thought this is happening to us, then we must fully commit to it." (Triplet4)</i>
Maternal intrinsic versus external factors	
8	<i>"Why would we perform reduction? Well, initially, we panicked and said, 'This is not what we wanted.' But then, what are the objections to having triplets? Yes... that you need a completely different kind of car. Yes, can we handle it? Yes, of course, we can handle it. ... Yes, we actually lack one bedroom. Then we said: what we are talking about is all materialistic and practical. But, can we live with the idea of removing one? Will we not always wonder: would that third one have been a boy or a girl? Or when you see the other two walking and you think: there should actually be one more. Then, at some point, we said: let's just go for it." (Triplet9)</i>
9	<i>"We spent three years trying to get pregnant, yes, then you just go for it." (Triplet11)</i>
10	<i>"I had embraced all three at one point. And the thought that there would then be one or two less... yes, which one then? Who should you choose? ... I could not bring myself to do that." (Triplet3)</i>
11	<i>"There is nothing in our way to raise three children. We both generally have a positive outlook on life. Perhaps a bit naive at times... I have a strong body, take good care of myself, and we are just going for it." (Triplet10)</i>
12	<i>"... then we thought: can we later justify it to ourselves, having to tell that one remaining child: you could have had two more brothers or sisters, but they are no longer here. We found that particularly difficult." (Triplet4)</i>
13	<i>"I have thought a lot about the impact on our eldest child. Because suddenly, she got three sisters all at once. ... I did worry about that. How am I going to give all four of them enough attention?" (Triplet4)</i>
14	<i>"She [other child] was the reason we seriously considered reduction." (Triplet8)</i>
15	<i>"You decide about life and death, so what are we really talking about? That we need a different car?" (Triplet9)</i>
16	<i>"He said, that choice ultimately lies with you. If we cannot come to an agreement on that, then the decision is yours." (MFPR1)</i>
17	<i>"It is my body, and I am the one that needs to manage it." (MFPR2)</i>
Exploring the medical ramifications	
18	<i>"... because we have medical backgrounds, we can look up and research things ourselves. That does help because otherwise, I think people might really be lacking." (Triplet7)</i>
19	<i>"I wanted to give the chance for two children to be born healthy." (MFPR3)</i>
20	<i>"What played a role is the risk that things could go wrong. The risk that the children would be born too early, with all possible consequences." (MFPR5)</i>

(Continues)

TABLE 3 | (Continued)

Number	Quote
21	<i>"There are three healthy embryos visible. For us, it is not a reason to terminate. Not one. Not two."</i> (Triplet6)
22	<i>"So if you choose reduction, there is, of course, also a chance that you terminate the entire pregnancy."</i> (Triplet5)
23	<i>"We have three, and if we remove one, and then the others also go... that is intense."</i> (Triplet1)
24	<i>"... we were armed with statistics to be able to make that decision."</i> (Triplet4)
25	<i>"The risk, let's say, for the survival of the other children, I did not find that significant enough to reduce one child. I thought: if it gives me a 5% advantage, ... that percentage would have been higher for me to consider it. I found the numbers to be really too small, and also based on too few cases."</i> (Triplet11)

maintaining the triplet pregnancy. The sole mother expressing regret attributed her sentiments to the considerable impact of societal expectations and external pressures (Quote 33, MFPR4), underscoring the interplay between individual autonomy and external influences. The significance of counseling is underscored as crucial, particularly in situations involving severe pregnancy complications (Quote 34, Triplet8). Nevertheless, the unforeseeable nature of facing the loss of children is emphasized, highlighting unpredictable emotional challenges (Quote 35, Triplet3). Several mothers indicated that their reflection process is influenced by the outcome (i.e. healthy liveborn) (Quote 36, Triplet4). Some mothers found value in discussing their decision with a social worker, while others perceived it as lacking substance. Interviews with mothers who underwent MFPR conveyed the emotional burden of the reduction process (Quote 37, MFPR1; Quote 38, MFPR5). However, the prevailing sentiment among most was a sense of confidence in their decision-making (Quote 39 MFPR2; Quote 40, Triplet6).

The interviews revealed a challenge for mothers in discussing their decisions with others. The presence of a taboo surrounding this topic seems to make these conversations difficult (Quote 41, Triplet9; Quote 42, MFPR4; Quote 43, MFPR3). Additionally, the interviews highlighted the struggle faced by mothers who grapple with the realization that everyone seems to hold an opinion on such a deeply personal and complex decision (Quote 44, MFPR5; Quote 45, Triplet5).

3.8 | Subtheme 2.3: Role of Support System

Nearly all mothers have described the initial years post-birth as a period demanding mutual support, underscoring the role of a robust relationship in navigating this life-altering event (Quote 46, Triplet7). Additionally, several mothers highlighted the significance of their family network as a vital component of their support system, along with the assistance of various types of nannies, helpful neighbors, and/or friends (Quote 47, Triplet1; Quote 48, Triplet2). Some mothers shared the challenge of the silence that can follow (Quote 49, MFPR1), while others spoke about closer bonding with family members after their life events (Quote 50, Triplet3). Most triplet mothers remained active participants in the dedicated Facebook group for triplets/multiples, underscoring the need to engage with

fellow parents about their shared experiences. Notably, only a few mothers reported receiving post-birth aftercare appointments from the hospital where they delivered, and none of the MFPR mothers were offered such appointments by the caregiver who performed the reduction.

3.9 | Telephone Appointment After interview

Every mother reported a positive experience when discussing the subject, citing its helpfulness in navigating the process. None of the mothers indicated a requirement for further aftercare arranged by the study team.

4 | Discussion

In this qualitative study, two main themes emerged as substantial in the decision-making process of continuing a triplet pregnancy or choosing MFPR in mothers: (1) maternal intuition as a guiding force, and (2) navigating the crossroads: coping and reflection on the decision. These themes highlight a multifaceted interplay between maternal intuition and intrinsic feelings, with less influence from external factors. The pivotal role of a mother's gut feeling emerges as central and the chance of regret seems to be low when mothers stick to their intuition.

Mothers of triplets receive comprehensive counseling on pregnancy risks. However, concerns arise regarding limited information provision when mothers express a preference against MFPR, potentially leading to unintentional ignorance about its potential benefits in mitigating adverse pregnancy outcomes. Socio-economic, psychological, and relational consequences may also go unaddressed. Improving information dissemination ensures that receptive women can make informed decisions and seek validation from healthcare providers [24]. After deciding, mothers often seek validation from family and, if open to it, other relatives, but social media platforms like Facebook can also serve as a source of solace and support due to persistent societal taboos surrounding MFPR. Additionally, significant gaps exist in aftercare for both women who undergo MFPR and those continuing with triplets, highlighting the need for improved support services.

TABLE 4 | Illustrative quotes theme 2: Navigating the crossroads: Coping and reflection on the decision.

Number	Quote
Navigating the uncertainty	
26	<i>"I remember that for the first two weeks, I woke up every night startled, thinking: can I handle this? Can my body handle this?" (Triplet11)</i>
27	<i>"After the reduction, you have a few weeks of really intense tension. I was terribly scared. I found it such a drastic procedure. I kept thinking: I hope I have done this for the other two, I just hope the other two will do well now." (MFPR1)</i>
28	<i>"After the reduction, ... during my pregnancy, I was afraid of losing multiple children, and that fear persisted even after giving birth. ... so I became very cautious." (MFPR4)</i>
29	<i>"I insisted a lot that I could go to the hospital for an ultrasound every two weeks. Because they initially wanted to schedule appointments every month. And then I said: that is really too infrequent for me, it makes me really anxious. And I do not want to have that stress." (Triplet2)</i>
30	<i>"Every time I sat on the toilet, I found it dreadful [fear of blood loss]." (MFPR3)</i>
31	<i>"[During threatening premature birth]; That was intense. That we thought: yes, then we are going to lose them. ... We discussed: what happens if they are born? ... Then it was a 50% chance of survival. And of those who survive, there is still a 50% chance of a severe disability. That was really tough." (Triplet1)</i>
32	<i>"I was constantly reminded of the negative aspects like; 'you know things can go wrong,' 'oh, what if...', and 'we are afraid you will not make it to 30 weeks'. Very negative. While it is good to be realistically aware of potential issues, I do not think it helps a mother to make her feel very uncertain during her pregnancy." (Triplet5)</i>
Reflection after a life event	
33	<i>"I let myself be influenced in the choice by my surroundings. But well, I could not make the choice alone either." ... "If I really look from my heart, then maybe I would have preferred not to do it [reduction]" (MFPR4)</i>
34	<i>"The counseling beforehand is, I think, essential for when things go wrong." (Triplet8)</i>
35	<i>"I never for a moment thought I would be the woman who loses her children. That is always someone else." (Triplet3)</i>
36	<i>"Hindsight, we really had some luck. If I had been in a different situation, and something had gone wrong, you would have received very different answers. Fortunately, for us, things turned out quite well." (Triplet4)</i>
37	<i>"During the reduction, I thought: this just is not right. That I have to do this now as a mother. ... I found it truly dreadful. Absolutely dreadful." (MFPR1)</i>
38	<i>"A needle goes into your belly to end your child's life. So yes, be 100.000% sure of your decision." (MFPR5)</i>
39	<i>"I truly know deep down that I made the right decision." (MFPR2)</i>
40	<i>"... after four years of caring for those children, I experienced a mommy burnout. Because you give so much of yourself. But it is not like at that moment, I thought: did we ever needed to make the decision to reduce." (Triplet6)</i>
41	<i>"We know that there is quite a taboo on it [reduction]." (Triplet9)</i>
42	<i>"I do not share with the outside world that I had a reduction. Mostly because the fact is not widely accepted." (MFPR4)</i>
43	<i>"Some friends said afterward: we struggled with the fact that you had chosen to undergo reduction, but we did not address it at that time." (MFPR3)</i>
44	<i>"Actually, our family is the only ones who know. For the rest, nobody knows. ... Everyone probably has an opinion about it. I do not care that much." (MFPR5)</i>

(Continues)

TABLE 4 | (Continued)

Number	Quote
45	<i>“Well, it is, of course, nice to talk to a lot of people about it, but there are also a lot of opinions that come with that.” (Triplet5)</i>
Role of support system	
46	<i>“... you need to have a stable relationship to be able to handle it.” (Triplet7)</i>
47	<i>“I have to say: I could not have done it on my own.” (Triplet1)</i>
48	<i>“We received a lot of help from my parents.” (Triplet2)</i>
49	<i>“After that, it is never spoken of again.” (MFPR1)</i>
50	<i>“I think it has also brought my family closer together.” (Triplet3)</i>

4.1 | Strengths and Limitations

This study offers a thorough qualitative exploration of the MFPR decision-making process, featuring diverse experiences and 50 quotes to enrich understanding. Our thematic approach provides a nuanced perspective on individuals' experiences with MFPR decisions.

This study also has notable limitations. First, the interviews were conducted 1–6 years after the decision on MFPR, potentially introducing recall bias. Additionally, the authors of this study observed that a longer time since the event might contribute to a more thorough processing of the (emotional) responses from our participants. Second, it is important to note that the small sample size might limit our ability to draw definitive conclusions. Third, this study is conducted in a specific region, so the findings may not be generalizable to a broader international context where counseling structures, healthcare systems, cultural attitudes, and support frameworks may differ. Fourth, in our study, there was no respondent validation, which could have provided an additional layer of confirmation and authenticity of the gathered data. Fifth, interpretation of qualitative data is inherently subjective, and different researchers might derive varied conclusions from the same dataset. However, the extensive collaboration within our study group and complementary backgrounds bringing in various perspectives may mitigate this issue. Sixth, the participants in the study may not fully represent the entire population of mothers facing the decision of MFPR, as those who declined participation might have unique perspectives; their declination to participation is potentially influenced by avoidance after experiencing severe pregnancy complications such as loss of children. Finally, the demographic questionnaire lacked information on factors such as ethnicity, educational level, or financial status, limiting our ability to assess the representativeness of our study group.

4.2 | Interpretation

A few previous studies have reported that parents can experience a range of emotions and other psychological responses in relation to MFPR [25–29]. The procedure of MFPR is considered as a stressful procedure [26, 28]. However when pregnancy outcome is successful, women do not seem to be at an increased risk for mental health problems [28]. Conversely, in a 2-year

follow-up study, Garel et al. found that mothers of triplets are more at risk for anxiety and depressive disorders compared to mothers after reduction [26]. Kanhai et al. reported on psychological evaluation after MFPR of couples 9 months and 6 years after delivery and found that only a few couples experienced feelings of grief and mourning in relation to the procedure, although in the end no couples regretted their decision [27], which is in line with the results of our study. However, no previous studies have reported on the personal experiences of mothers during the decision-making process, and therefore, the findings of this study contribute to the existing knowledge in this area.

In our previous work [20], we explored fathers' experiences and found that deciding whether to maintain or reduce a triplet pregnancy is a highly emotional process for them, with lasting repercussions extending several years post-pregnancy. Furthermore, practical considerations in decision-making play a more crucial role for fathers, such as the need for another house or a bigger car when keeping the triplets. Comparing these insights with the current study, focusing on mothers' experiences, we observe that practical considerations hold less significance for mothers. While mothers also undergo an emotionally burdensome life event, trusting their instincts and seeking validation, coupled with potential emotional support from relatives (if open to it), position them better to develop a form of resilience in response to this life event. The time elapsed since the event was comparable in both studies. Nevertheless, it is important to note that the small sample sizes limit our ability to draw definitive conclusions.

5 | Conclusion

This qualitative study offers insights into the decision-making process of MFPR in mothers, highlighting areas for improving care and support for parents facing triplets. While most women rely on intuition when deciding on MFPR, thorough counseling remains crucial to prevent unconscious incompetence. Efforts to foster open social discourse on the subject are essential, as the decision is often taboo. Addressing the gap in aftercare is imperative, ensuring women to receive appropriate support post-decision and post-birth regardless of their choice of continuing a triplet pregnancy or choosing MFPR. By addressing these areas, we can create a more informed, supportive, and compassionate framework for parents facing the complexities of

triplet pregnancies. Future studies may focus on long-term follow-up to assess enduring psychological impacts and explore family well-being and evolving societal dynamics, guiding the development of targeted support systems.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data underlying this article will be shared on reasonable request to the corresponding author.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.