

## Mothers of Multiple Perspectives on Fetal Reduction and Medical Abortion

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### Medical and Non-Medical Reasoning

*The issue of fetal reduction (aborting one or more fetuses in a multiple pregnancy) has received much media attention in Canada (Blackwell), the United States (Hutchison; Padawer 2011b) and the United Kingdom (Newell; Padawer 2011a). Public attention, combined with growing institutional and personal concerns about the high-risk nature of a multiple pregnancy (e.g., for the fetuses, the mother, healthcare resources, and marital strain) create the social foundation for this study. In interviewing 41 mothers of multiples (e.g., mothers of twins and triplets) we sought to explain how decision-making is based on medical and non-medical reasoning. Views of fetal reduction or fetal termination for non-medical reasons (e.g., the decision to terminate a pregnancy for lifestyle or personal reasons) were contrasted with views of fetal reduction or fetal termination for medical reason (i.e., the decision to terminate a pregnancy due to medical “problems”). Participants recognized that decision-making related to selective reduction was a complex issue; however, all disagreed with the selective reduction of a twin to singleton pregnancy for non-medical reasons. A very small number of participants disclosed undergoing fetal reduction.*

Fetal reduction, aborting one or more fetuses in a multiple pregnancy, has been brought to the forefront of social inquiry by numerous media stories in Canada (Blackwell), the United States (Hutchison; Padawer 2011b; Paige) and the United Kingdom (Newell; Padawer 2011a). Mark Evans and David Britt define *fetal reduction* as decreasing the number of fetuses in a pregnancy (e.g., from three fetuses to two) and *fetal termination* as the termination of the “life” of a fetus with abnormalities. For the purpose of this paper, a *fetal reduction for medical reasons* is defined as a choice made by parent(s) to terminate one or more fetus(es) after either learning the child has a high possibility

of being born with medical and/or genetic conditions or due to risk to the mother. Fetal reduction for medical reasons also include the termination of one or more potentially healthy fetuses to reduce risk to the mother (e.g., of complications due to pregnancy) and increase the likelihood that the other fetus(es) will survive, stay in utero longer, and be healthy. *Fetal reduction for non-medical reasons* is defined as the decision to reduce the number of fetuses in multifetal pregnancies by the parent(s) because of lifestyle, financial or other personal (non-medical) reasons.

As part of a research project on multiple pregnancies, parenting multiples and experiences, 41 mothers of twins and triplets were interviewed. A small number of participants had undergone fetal reduction for diverse, often medical, reasons. Given multifetal pregnancies are considered high risk and often highly medicalized (e.g., in many provinces midwives will not oversee multiple pregnancies due to the potential for complications with both the mother and fetuses), interviewees were asked about their views of fetal reduction or termination in pregnancies in light of their experiences carrying multiples. Views of medical and non-medical fetal reduction, contextualized by understandings of risk situated in conceptual and medical frames (Britt and Evans), are presented. The voices of participants (i.e., interview data) are used to extrapolate how mothers of multiples *understand* abortion and fetal reduction (RQ1), what shapes their views (RQ2), and what such knowledge adds to our understanding of reproduction, mothers' decision making, and the complexities of contemporary motherhood (RQ3).

We divide the paper into four parts. We begin with a discussion of the history of fetal reduction, and the social and ethical implications tied to such practices. Then we explain how we found our participants, and collected and analyzed the data. We continue by presenting the impact of religion, medicine, and context-specific factors on the views of mothers of multiples toward fetal reduction versus termination. Finally, we conclude by disambiguating perceived consistencies and inconsistencies in these views.

## History of Fetal Reduction

Recent media reports may highlight fetal reduction in pregnancies with two or more fetuses as a medical option (Blackwell; Hutchison; Newell; Padawer 2011a, 2011b; Paige); but the fetal reduction is not a new procedure. It has been a subject of medical discussion and scholarship since the late 1980s (Berkowitz et al.; Hobbins; Ormont and Shapiro). The first reported case of fetal reduction for medical reasons occurred in 1978, one year after the birth of the first "test-tube" baby (Ormont and Shapiro). The rise in the use of artificial reproductive technologies (e.g., in vitro fertilization, artificial

insemination) that more frequently result in multiple fetus pregnancies correspond to an increase in research and writing about ways to reduce the number of foetuses, albeit with a focus on reducing maternal and fetus risk and improving outcomes (Hobbins; Smith-Levitin et al.). These inquiries confirm that reducing a pregnancy with three or more fetuses to a twin pregnancy improves both maternal and fetal outcomes (Smith-Levitin et al.; Morris and Kilby). For example, Ronald Wapner et al., in describing medical indications for reducing 46 multi-fetal pregnancies, identified three reasons for the procedure: i) to improve perinatal outcome while increasing the chance for an infant, in the multifetal pregnancy, to be born at term (34 cases); ii) to encourage the birth of an infant without a congenitally abnormal coexisting twin fetus (8 cases); and iii) to avoid having an entire pregnancy terminated by preserving a singleton pregnancy (4 cases). The authors presented health and humane reasons, based on risk reduction, to support the use of fetal reduction. They demonstrated how fetal/maternal health outcomes could be improved with fetal reduction.

While improving artificial reproduction techniques and providing guidelines outlining the maximum number of embryos that *should* be implanted makes strides toward reducing the number of multiple pregnancies (AHRC; Braude; Health Canada; Min et al; Morris and Kilby), multifetal reduction remains an option. Cases where the parent(s) has elected to reduce twin pregnancies, for personal or medical reasons, to singleton pregnancies do exist. For example, a largely publicized and controversial media story (Padawer 2011a) discussed parents' who choose to reduce a twin pregnancy to a singleton pregnancy because of their desires and financial situation. A second story printed in the *National Post* (Blackwell) brought forth controversy as a Toronto-based woman and her partner openly admitted they reduced their twin pregnancy because of their desire to have only one child. Nonetheless, the risks of the reduction are only one concern (Morris and Kilby) because with the procedure ethical questions become increasingly complex.

### Medical Justifications

According to law in the United Kingdom, abortion is considered justifiable in two situations: "risk to the physical or mental health of the pregnant woman or to any of her existing children, and the detection of fetal anomalies that would result in a child who is 'seriously handicapped'" (Wagner 93). As this law suggests, there are medical reasons to justify abortion. In the case of multiples, medical abortion or fetal reduction for medical reasons is justified because it improves the outcomes for the mother and the infants. Multiple Births Canada (2011) points out "a multiple pregnancy is nearly always labelled by health care

providers as ‘high risk’” (1). The reasoning behind this label is based on the increased strain born by the mother’s body when carrying multiples and the potential challenges facing fetuses in the shared womb.<sup>1</sup> By reducing the number of fetuses, the goal is to reduce the risk of miscarriage, hypertension and/or pre-eclampsia, gestational diabetes, iron deficiency anaemia, preterm labour and/or preterm delivery, low birth weight, and complication in the pregnancy and delivery since the risks to the mother and each fetus increase with each additional fetus (MBC 2011a, 2011b, 2011c; Min et al.; Smith-Levitin et al.). In this sense, fetal reduction is medically justified under the logic that one or two healthy babies is better than no babies; it “enhances the probability that a health infant (or infants) will be born” (Wapner 90).

### Ethical and Social Implication

R. Katie Morris and Mark Kilby point out that fetal reduction in cases where one twin has “significant anomalies” or could potentially harm the co-twin is “ethically justifiable” (342). Likewise, Evans and Britt state that: “the debate over reducing triplets [to twins] to improve outcomes is largely resolved” (316), with the well-researched and documented medical benefits for both the mother and the infants by reduction outweighing the risks of a triplet pregnancy. This perspective is further evinced in policies encouraging single embryo transfer, which reflect the reduced risk to mother and infant(s) of singleton pregnancies (MBC 2011a, 2011b, 2011c). In pregnancies that begin with three or more fetuses, outcomes, in terms of healthy full-term babies, are generally better after a reduction to two fetuses (Boulot et al.; Smith-Levitin et al.; Wimalasundera). Yet, data is conflicting about the benefits of reduction in a twin to singleton pregnancy. Joseph Hasson et al. claim there are no benefits, while Mark Evans et al. (2004) argue that singleton pregnancies may be worth considering as a way to reduce risk. Fetal reduction of one or more healthy fetuses to improve the outcome for the remaining fetus then becomes a more difficult ethical question.

Often, parents who have chosen to undergo fetal reduction have already faced the stresses of infertility and, after much emotional and financial investment, they must negotiate their feelings as well as the risks of i) continuing a pregnancy with multiple fetuses; or ii) undergoing fetal reduction (Britt and Evans; Grill; Hobbins). Morris and Kirby found that 30 to 70 percent of women who have undergone fetal reduction report experiences of “anxiety, stress and emotional trauma” and that these feelings continued after the birth of their healthy infant(s). In some cases “depressive symptoms mainly sadness and guilt” persisted more than a year after birth (Garel, Stark, Blondel, Lefebvre, Vauthier-Brouzes and Zorn 617). Marian Ormont and Peter Shapiro

recommend counseling and support prior to and following fetal reduction for both the mother and her partner.

Britt and Evans, who interviewed and observed 54 women who had appointments for multifetal pregnancy reduction, reported that women considering fetal reduction viewed their decisions through a combination of three conceptual frames. The first is characterized by a strong commitment to the idea that life begins at conception. The second, a more medical frame, looks at risk, statistics, and outcomes for the patient and uses such information to make decisions in hopes to increase the possibility of positive outcomes for mother and infants. The final frame, based on lifestyle, takes into account the impact of multiples births on the mother or family's potential to have "a 'normal' life in a culture that values both careers and family for women" (Britt and Evans 2344). Regardless of how the issue is framed, "the decision is difficult, and ... there is a high level of emotional turmoil associated with the decision that appears attributable to moral reservations about the reduction" (2344).

### Non-Medical Justifications

While researchers have documented clear health-related reasons for medically justified fetal termination or reduction, some women or families do opt to reduce for non-medical reasons. These choices include reducing from higher order fetuses (e.g., triplets or more) to twins or, situations where women and families are opting to reduce a twin pregnancy to a singleton pregnancy (Blackwell; Evans et al. 2004). The literature about non-medical termination focuses on the reduction from twins to singleton pregnancies because reduction in higher order pregnancies is medical justified, though other factors may also be considered. The reasons behind reductions from a twin to a singleton pregnancy are primarily related to lifestyle and personal situations. Those making such decision indicate that their other commitments (e.g., their other children or careers) require their time and energy thus having and raising twins seem unfeasible or undesirable. In cases where women or couples are using technologies enabling artificial reproduction because of their age (Blackwell; Padawer 2011a) the idea of multiples can be particularly overwhelming and unwelcomed (Evans et al. 2004). Financial motivation for undergoing fetal reduction, including the cost of raising multiples and the potential loss of income if a parent chooses to stay home to care for the children, have been noted as concerns for parents of multiples (see Boulot et al.; Evans et al. 2004; Fisher; Glazebrook, Sheard, Cox, Oates and Ndukewe; MBC 2011a, 2011b, 2011c).

The increasing cases of fetal reduction from twin to singleton pregnancies appears to be largely based on non-medical reasons (Blackwell)—including the mother's or family's concern that she/they cannot parent the multiples, and

possibly their other children, simultaneously. Rather than being “a second-rate mother” (Padawer 2011a), families may choose to have fewer children, while others cite the additional strain on their marriages as a reason for reducing to a singleton pregnancy (Padawer 2011a). In select cases non-life threatening medical conditions affecting the mother or infant are considered in the decision. This reality, again outside the scope this paper, raises questions about whether it is the medical condition or the potential challenge of raising a child with Down’s Syndrome that motivates the decision to reduce/terminate. In the end, quality of life for both the child and the parents are driving considerations (Padawer 2011a).

### **Current Study**

While research on fetal reduction remains scarce, that which does exist has not focused entirely on the perspective of mothers of multiples—those who are most likely to have experienced or been approached by such realities. As such, this project investigates fetal reduction and views of fetal reduction based on medical and non-medical justifications through in-depth semi-structure interviews among a sample of 41 mothers of multiples (e.g., twins, triplets).

### *Method*

In-depth semi-structured face-to-face or telephone interviews were conducted with 41 women who had multiples (i.e., twins or triplets). To be eligible to participate, interviewees had to have given birth to twin or triplets, identify as female, and live in the Greater Toronto Area (GTA). Interviewees ranged in age from 26 to 48 years (two respondents were in their twenties with the majority in their late thirties to mid-forties). Respondents self-reported their race/ethnicity with 88 percent ( $n=36$ ) identifying as White and the other 12 percent ( $n=5$ ) as non-white (i.e., Indian, Asian, Black). Most respondents (85 percent,  $n=35$ ) were legally married when interviewed and had also been when they conceived their multiples (for some it was their second marriage). Only one respondent was single and never married both at conception and when interviewed, three were living common law at conception and when interviewed, and two respondents were no longer in a relationship (divorced or separated) when interviewed although they were in a committed relationship at conception. Few respondents identified as bisexual or lesbian.

The majority of respondents have twins (95 percent;  $n=39$ ) and two respondents have triplets. A total of 24 percent ( $n=10$ ) of the interviewees had monozygotic multiples; and of these women 20 percent ( $n=2$ ) had undergone fertility treatment that resulted in the multiple fetus pregnancy while the other 80 percent ( $n=8$ ) had not used fertility treatment. The other 76 percent

( $n=31$ ) respondents had dizygotic multiples, of which 68 percent ( $n=21$ ) had undergone fertility treatment, while the other 32 percent ( $n=10$ ) had not. Seventeen respondents also had singleton children as well as multiples and two respondents were pregnant when interviewed.

Participant recruitment occurred at the community level and was made possible by diverse parents of multiples associations in Toronto and the GTA that agreed to circulate an email advertising the study to their members. Given the advertisement was emailed to potential participants through a confidential member database we cannot state for certain the number of persons who declined to participate in the study. To counter this limitation we ensured theme saturation was apparent in all reported findings and ceased interviewing at theme saturation despite many persons continuing to show interest. No discernible differences were found between the transcripts of persons interviewed in person and those by telephone; perhaps due to most respondents electing to be interviewed by telephone for the convenience and the flexibility it provided—a choice given to respondents given many suggested it was difficult and costly to find childcare to do the interview in person or preferred to minimize travel time.

Interviews were conducted between February 2011 and April 2011. In-person interviews were conducted in private at the home of the participant or interviewer and sometimes children were present. Interviews ranged in duration from 50 minutes to 150 minutes depending on a variety of factors including: depth of family history, multitude of experiences, and general talkativeness. Interviews were semi-structured; a short open-ended item guide was used. This guide was abandoned once conversation flowed, giving the interviewer flexibility to probe emergent conversational paths.

While interviews were being conducted a number of media stories were published in Canada and United States that focused on cases of fetal reduction. Moreover, some of the participants made mention of these news articles in their interviews and, thus, had media or social exposure to the topic. In some cases, these news stories may have been particularly impactful on the respondents given they may reflect their personal experiences, experiences that some participants may not have shared with friends and family.

Interviews were digitally voice recorded and followed by a verbally administered demographic survey documenting age, number of children, pregnancy related medical history, education, income, religion, ethnicity, and occupation. This particular study emerged entirely from the data as our attention was drawn to the ways participants spoke about the topic in question. Transcripts were coded based on emergent themes. Select coding followed (e.g., less relevant data was omitted) and central themes (composed of multiple respondents describing similar experiences, views, and feelings regarding a topic of interest) became the focus. The interviews were coded and the interviewer, with knowledge of



the data, reviewed the coding to ensure the responses of the participants were interpreted in context.

Informed consent was obtained. Participants were offered an honorarium for their time. This manuscript uses pseudonyms to protect the identities of the respondents. To stay true to the voices of the respondents, quotes are presented with minimal edits. However, to assist with comprehension and flow, some quotes have been edited for speech fillers and grammar.

## Findings

The responses and narratives of women in regard to their views and experiences of fetal reduction for medical and non-medical reasons are analyzed thematically. First, the influence of religion and medicine on the choice to undergo fetal reduction is discussed, with an emphasis on how these competing perspectives influence the mothers' views. Second, how decision-making depends on the unique situation of the family (e.g. siblings, parents' relationship, medical risks) and, third, the specific decision to reduce a twin pregnancy to a singleton pregnancy from the perspective of mothers of multiples are examined.

### *Influences on decision-making: religion and medicine*

Religion and medicine are both seen as influences in the decision making processes of persons contemplating fetal reduction or termination; although, they are often competing influences. Some interviewees use their religious beliefs or upbringing to justify their position: "For me, because I come from a Catholic upbringing, I don't like the idea of playing God." Others state that religion should not be the foundation for such decision-making and instead these decisions should be based on medical information. Cindy, for example, shared her friend's story: the friend was a woman who had delivered a baby she knew would not survive because her Catholic religion prevented her from considering abortion. Cindy continued in stating: "I have a real problem with religion being used in place of medicine in medical decisions". Others were unsure of the decision they would make if they found themselves in such a situation (e.g., when diagnostic testing suggests a congenital abnormality in a fetus). However, as evident in Kim's statement, decision-making for many is associated with religious beliefs, even when the person does not hold strong beliefs: "I'm not particularly religious but I just I don't know."

Medical information, most often genetic screening, is identified as the optimal source of knowledge or tool for making such decisions, however, the medical information is often seen as uncertain and fallible. Many interviewees shared stories of *people* being told their baby(ies) would not survive, would



have Down's Syndrome, or would be physical disabled, only to give birth to a healthy infant(s). Whatever the reason (e.g., being hopeful or having a positive outlook), these women focus on the stories or experiences of others where medicine or medical experts were "proven" wrong. Risks were apparent in both adhering to medical advice and in failing to adhere to such advice, yet, the risk of terminating a healthy pregnancy despite being told otherwise was omnipresent in participant narratives. Interestingly, the reverse was not as prevalent; interviewees never mentioned *people* being told they were likely having a healthy infant only to give birth to an infant who was unhealthy. Perhaps, this was due to the failsafe in medical practice where, under every circumstance, practitioners ensure that patients are aware of the possibilities for negative health outcomes that cannot be controlled for pre-birth. Alternatively, perhaps the mothers of a child or children with 'disabilities', that were previously ruled out by medical practitioners based on screening, choose not to participate in the study—for a variety of reasons including time demands and challenges related to caring.

### *Decisions depending on context*

Some of the women interviewed had been faced with making a decision about fetal reduction or termination and a few did undergo such interventions when pregnant. For example, Vicky had three embryos implanted with the information that one of them was likely not viable. She and her husband had discussed the possibility of fetal reduction:

*We had sort of talked about it and we would be open to that [fetal reduction], because our feelings were sort of [that we were] interfering with nature already. If we were willing to go through this [ART] and, some people don't think you should, would we want to risk the health of all the babies in order to keep all three of them? We really felt that 'no, two of them was kind of our maximum.' We would really reduce because we already had another child as well.*

Indeed, her choice was based on her lifestyle and family responsibilities rather than medical need or risk; she framed her understandings based the risk she identified as related to her marital relationship (e.g., to reduce marital strain) and relationships with her pre-existing child.

A recurring theme among the interviewees was how they acknowledge the difficulties they would undergo if they were ever in the situation where they had to make decisions about fetal reduction for medical or even non-medical reasons. The women acknowledge that decision-making was case-dependent. This was exemplified in Kylee's comment: "I can't imagine having to go through

that. I think it would have to be a case by case type [of decision]”. Participants also admit feeling unable to predict their behaviour without being faced with the specific situation. Elizabeth said, “You know what though? It’s all academic now right. In hindsight it’s easy to say what you would or wouldn’t do, but in the moment probably not.” As one mother stated there is a need for a larger discussion of the implications of multiple births and the ways that risks can be reduced:

*I think that people who are in a fertility situation where they desperately want kids, I’m not sure how open they would be to listening to the information, which is why to some extent we need some laws in place, like single embryo transfer policy.... [Couples] been trying for years and years and years to get pregnant, so when they’re lying on the table with a turkey baster and the guy says, “Do you want me to put in two or three?” Of course, they say three because what if some of them don’t take, and they’re not thinking oh my goodness what if I end up with triplets, right?*

Some women pointed out that becoming a mother, which was often equated with becoming pregnant, changed their perspectives on these questions. For example, Blair pointed out that seeing her babies in an ultrasound affirmed her views on abortion:

*I would say ethically and philosophically, I’m opposed to abortion. Having seen the ultrasounds of my own two in utero at 12 weeks and all the fingers and all the toes are there. There’s no question in my mind that that’s a person.*

Nonetheless, the question of quality of life and risk remained pertinent - an underlying systematically apparent theme in the transcripts.

Participants viewed decisions about fetal reduction and abortion as largely “personal issues” that had to be personally addressed by each family. These women felt that people should not be judged by others who had not faced the same decisions, in the same circumstances:

*I think it’s a personal issue and it’s their own thing that they need to battle with. I don’t think it’s my business to really judge anybody else who has to decide.*

*I think that everybody knows what they can handle.... If you personally couldn’t love and care for that child [who was going to have serious medical issues]. I feel that that’s such an individual [issue]. I would never ever judge anybody for that.... It’s so individualized and everybody knows what they*

*can handle. [They are] so silent. You don't hear a lot of those [cases]... I can imagine what people would say, right.*

The overwhelming majority of women interviewed supported having the option for fetal reduction or termination available for women and families (e.g., “I’m not going to judge someone else, and I’m glad we live in a country where we have those options”), which at least allows families the opportunity to make these difficult decisions. Nonetheless, participants are generally thankful and relieved they did not have to make such decisions themselves. Many discussed avoiding the possibility of even making decisions about medically justified fetal termination by opting not to undergo genetic screening when pregnant. This strategy avoids the stress of false results and the need to make an informed decision. Given the higher risk for inaccurate results with a multiple pregnancy, many felt this was a necessary strategy. Their attitude is simply that you should not find out if you are not prepared to make the decision:

*I think the thing that my doctor said to me was this and that is “if you can't handle the answer don't take the test,” so that's why I never had the one where they stick the needle in [amniocentesis].*

Select others, however, often mothers who previously had a preterm delivery, pregnancy complications, or family histories of genetic abnormalities, opted to have extensive testing done to confirm positive results. However, despite these actions these women were unaware of their true feelings toward fetal reduction and unsure if they would or could have ever acted on medical advice recommending fetal termination or reduction:

*Now, after everything I have experienced with my twins, I don't know if I could have acted on negative news. Thankfully I didn't have to think about it. When I was pregnant I watched my sister-in-law, she was only two weeks further along in her pregnancy than I was, have a medical abortion at 22 weeks gestation and I was terrified that something was wrong with my twins. So, given that experience and my first child's preterm delivery I was covered for extensive testing. Everything was fine with the twins—we had unbelievably positive results. But, it still opened up a lot of fears and concerns. I don't know if I could have gone through with it but I don't think I could have not done the testing. My husband may have wanted to terminate or reduce and I think if that was the case it could have ruined our marriage; the blame, what ifs, uncertainty...*

Participants' support for making fetal reduction and termination available

options alongside their equally strong commitment to not considering such options highlight an important contradiction: Interviewees appeared grateful such options are available yet, often in the next breath, admit they cannot imagine “separating twins” or acting upon such negative news when pregnant. Participants appear—although not always explicated stated—torn between doing what they consider morally or socially acceptable and what they recognize as their own personal desire or limitation (e.g., living with a special need child or for some having multiples or higher-order multiples). Indeed, the lack of social or moral acceptance in opting to reduce or terminate in a pregnancy is evident in that the women interviewed kept such decisions, experiences or even considerations secret and very private.

*When is it okay?*

Interviewees generally agree that women should have the option of fetal reduction. Most commonly, participants cite situations where the health of the fetuses, including risk of a socially defined disability,<sup>2</sup> is at risk because the mother was carrying high-order fetuses as scenarios where fetal termination could be considered. However, although respondents spoke with definite certainty, stating they truly believe they would choose to terminate a fetus or pregnancy, their conviction did not hold for long as in subsequent discussions they articulate less certainty (e.g., imagining if they had terminated one twin, wondering if they would have been able to make the choice). The only thing that the interviewees wholeheartedly and undoubtedly did not support was the decision to reduce from a twin to singleton pregnancy without a valid medical reason:

*I don't agree with [fetal reduction]... You can't tell me that with two, “we reduced the smaller of the two because it has a lesser chance” and stuff like that.*

*Okay, so my first opinion is just that I find it a horrific situation. I think with higher order multiples it's more of a gray area because of all of the risks, so I'm not quite as judgmental there. But fetal reduction with twins down to one, I'm very alarmed by the increase in that recently.*

A respondent did note her own hypocritical tendencies in her views: “Well, I guess I would find it hard to support [fetal reduction from two to one], which I guess is hypocritical 'cause you know I reduced from five to two.” It appeared that among mothers of multiples the idea of reducing a twin pregnancy is particularly troubling; for some it appears rooted in the bond they note in their twins or even their personal experiences and love they felt for their children. Once having, raising, and experiencing twins, these

mothers could not imagine choosing an alternative if given the possibility for healthy multiples.

### *Differences between fetal reduction and abortion*

In discussing fetal reduction versus fetal termination, some women express feeling conflicted in their own responses. This conflict is based on seeing fetal reduction as a way of either valuing or devaluing lives. On one side fetal reduction is thought to decrease risk and improve the chances of a health pregnancy for both the mother and baby(ies). For example, an interviewee was not sure she could undergo a medical abortion, but she had considered the possibility of fetal reduction. She explains her conflict, “abortion wouldn’t be something I could do other than [if] I’m trying to save as many lives in terms of reduction.” While, on the other side fetal reduction was seen as devaluing some lives. This perspective points out that fetal reduction places the value of one life over another; either the mother or the baby(ies)’ lives are set above the life of the fetuses that are reduced:

*I’m kind of torn on that. First of all I’m radically pro-choice so it’s not for me to tell another woman what she should do with her body but if I were the policy maker and in addition to that had to say something else, I would say you have to be able to determine its health.*

Indeed, exemplified above is how Helen feels conflicted, but worried about the social consequences of fetal reduction.

### **Discussion and Conclusion**

The responses of the women in our sample confirm that while they were generally not faced with decisions about medical abortion and fetal reduction, they nonetheless clearly view the situation through conceptual and/or medical frames (Britt and Evans). The presence of a lifestyle frame was less obvious, particularly because there was strong opposition to the idea of reduction from twins to singletons.

Since these decisions are made at the individual level, with input from medical practitioners and/or counselors, the decision making process reflects the individual’s circumstances including their belief and value systems, age and medical situation, family situation, financial and career situations, and ideas about building their family. With the focus on individual cases, the larger social and ethical implications of reduction can be overlooked. However, some participants had considered these larger issues and the general consensus was that decisions about medical abortion and fetal reduction depended on the unique

context of the individual family. Given the consequences of such decisions, and far ranging potential implications (i.e., beyond the family), there needs to be some type of policy (e.g., single embryo transplant as evident in Quebec and recently legislated for coverage in Ontario) to reduce risk and to ensure the decision maker can consider all factors, rather than become trapped in desperate attempts to conceive a child.

The contradictions around these issues are highlighted by the social pressures women feel. Participants indicate feeling reassured and relieved that options like medical abortion and fetal reduction are available; however, they are also hesitant to consider these procedures for themselves. Women who choose fetal reduction because they believe they are unable to raise multiples for financial, or career, or medical reasons acknowledge their desire to ensure their own well-being. Their acknowledgement of the unknown risks of a multiple pregnancy is seen as selfishness and in absolute conflict with culturally accepted norms about mothers as selfless people who put their children's needs first. Indeed, in a society that places extraordinary pressures and expectations of notions of motherhood, the idea that a mother would want to abort or reduce a pregnancy is seemingly incomprehensible and challenges traditional constitutions of motherhood. Particularly in a cultural climate that promotes motherhood as necessary for women by provided additional options (fertility treatment) at a high cost to ensure childbirth remains plausible under all circumstances.

The women in our sample understand medical abortion and fetal reduction as complex issues that require considering both medical and social implications (RQ1). Their views on these issues were shaped by both medical and religious perspectives (RQ2). They recognize that decisions about fetal reduction and medical abortion are both dependent on context and family situation. Although most of these women were not required to make decisions about fetal reduction for whatever reason, they did see the need for information, education, and policies to support women making these decisions. They acknowledge the importance of these issues because of the implications for parents (and families) who are called upon to make such decisions without the benefit of medical training, and in some cases with little warning or time to consider the long-term implications. Since decisions about fetal reduction and medical abortion impact women's health, experiences of motherhood, and have implications for their families, employment and financial situations, women should have sufficient information to make informed choices (RQ3).

Given the greater access to ART to address fertility issues, and with the higher overall rate of multiples birth, information should be made available to women *before* they are faced with decisions about either fetal reduction or medical abortion. They need to be able to make choices about their pregnancies with an understanding of the potential risks a multi-fetus pregnancy poses to

themselves, the fetuses and their babies after they are born. The risk of having one or more children with a disability is significantly higher in multiple pregnancies, and increases with each additional fetus. Therefore, decision-making *must* take into account the long-term consequences of delivering one or more babies with disabilities including medical expenses, loss of income for a parent caring for the child, emotional stress, marital strain, and the impact on other family members (Elster). In the case of multiples, many of the physical challenges the infants face will be due to preterm birth and low birth weight, resulting in extended NICU stays, that often have long term consequences for parents (Ricciardelli) and children, and significant costs for medical services prior to discharge (CIHI). In some cases, the children will “catch up” and there will be minimal additional support required after discharge, but in other cases medical expenses will be ongoing childhood and, potentially, for the individual’s entire life. While the interviewees in our study did acknowledge the potential challenges tied to caring for a child with a disability—abstractly—they may not have fully appreciated the real impact of caring for a disabled child on families.

This information should also be compounded by additional knowledge about decision making outcomes and processes given multiple pregnancies can have long-term health implications for both mother and babies, and financial and marital impacts on families (MBC 2011a, 2011b, 2011c). Contemporary motherhood, through technology, provides women with more information and options about reproduction. Yet, to effectively navigate this knowledge source women need more information, supports, and frameworks to assist in their interpretation of information read (e.g., recognizing the fallibility of online information) and to further support their decision-making (e.g., professional informed human and material resources to provide assistance). Our study provides insights from a specific group of women with multiples, women who recognize the implications of multiples on their long term lived realities and overall familial health. Their perspective is unique in that they are more likely to have experienced situations that would require them to consider or make decisions about fetal reduction or medical abortion.

Such issues are also being raised in conversations within organizations like Assisted Human Reproduction Canada (AHRC) and Human Fertilisation and Embryology Association (HFEA) who provide information about the risk of multiple birth pregnancies and encourage policies like single embryo transfers to decrease risk. By decreasing the risk tied to multiples births—by decrease the possibility for multiple births—the outcomes should improve for both women and their fetuses and the need to make decisions about fetal reduction decrease. Likewise, providing information about reduction and risk prior to assisted reproduction and/or early on in multiple birth pregnancies will support women in understanding the risk and having the resources to make



decisions. Resources like those developed by AHRC's Healthy Singleton Birth Committee acknowledge these risks and actively seek to provide information to families considering assisted reproduction (see AHRC).

While medical research provides significant research to support the improved outcomes for the mother and infant(s) in cases of selected reduction, there are also social and ethical issues that influence decisions about fetal reduction. First, the increase in assisted reproduction has led to increased rates of multiples births with the largest increases in the number of higher order multiples (triplets, quadruplets and more). These pregnancies produce more risks for both mother and infant(s). With advances in technology to help get pregnant, there have been parallel advances in technology to reduce those pregnancies to one, two or even three fetuses. In these cases, the question becomes whether technology is solving problems of infertility or creating new problems. By focusing on mothers of multiples, most of whom did not consider fetal reduction or medical abortion, this study has clear limitations. Families in these situations make up only a small portion of all families considering pregnancy, making decisions about fertility treatments, and/or considering fetal reduction and medical abortion.

## Endnotes

<sup>1</sup>Considerations in fetal reductions include the mother's health and age, her past history of health concerns and pregnancies, the number and zygosity of the fetuses, and whether the fetuses share a placenta and/or amniotic sac.

<sup>2</sup>Twins are ten times more likely than singletons to have Cerebral Palsy. The rate of Cerebral Palsy in triplets is 30 times higher and for quadruplets the chances are 110 times higher than with singletons (Blickstein). There are other risks due to the low birth weight and prematurity (MBC 2011d). Some of these conditions are outline in MBC 2011b.

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