Chapter 6

Women Encounter Fetal Reduction

// Twould reduce only one, and keep two." Stella assertively told I me her decision during our lunch, before we headed to the clinic together in the beautiful autumn of 2017. When I had learned several days earlier that she and her partner Jackie planned to travel with their three-year-old daughter on the high-speed rail from southern Taiwan to metropolitan Taipei for fetal reduction, I had volunteered to babysit for them during the procedure, and we all had lunch together after arriving in Taipei. Amid joyfully feeding their toddler in the restaurant, Jackie sighed when Stella raised the topic of how many fetuses to reduce. She believed that a twin pregnancy would be too difficult for Stella, whose previous singleton pregnancy had already been very eventful. "Teacher, please persuade her to keep only one," Jackie implored me, looked more worried than I had ever seen her since first meeting the lovely couple several years earlier. Stella explained her rationale to me: "We did not do PGT [preimplantation genetic testing] for the embryos, so what if only the one [that is not reduced] has something wrong?" Whereas Jackie was concerned that Stella would have to bear the burden of a twin pregnancy, Stella viewed keeping two fetuses as a safe way to guarantee giving birth to at least one healthy baby—or two. As outlined in chapter 5, Stella had already overcome many hurdles in Taiwan and also Thailand to reach the couple's goal of expanding their family, so she viewed conservative fetal reduction as her new task to help ensure the health of the new family member(s).

The doctor at the maternity hospital where Stella received prenatal care had advised Stella, pregnant with triplets, to have fetal reduction, but he would not perform the procedure himself. The maternity hospital, which is also an accredited IVF center, does not offer fetal reduction. The couple researched some options on the internet and quickly found that most women who needed the procedure went to a popular clinic in Taipei that mainly offers genetic testing, including amniocentesis, and fetal reduction.

After lunch, we took the short walk to the clinic. The receptionist first asked Stella to fill out a form, including a consent form to be signed by her spouse. Stella calmly said that she was single, so that there was no spouse to fill out in the form. The staff member empathetically accepted this answer and guided Stella, Jackie, and me to see the doctor. The doctor explained the procedure and pointed out the cross-tabulation of statistics on the desk: it showed the prevalence of cerebral palsy (CP), the most common motor disability for newborns, as 0.23 percent, 1.46 percent, and 4.48 percent for single, twin, and triplet pregnancies, respectively, while neonatal mortality is three to six times higher for twins than for singletons and five to fifteen times higher for triplets. Stella had no qualms about undergoing fetal reduction; instead, the problem was the number of fetuses to reduce. The doctor asked her height, which was less than five feet, so he suggested that reducing to a singleton was better. Stella insisted on keeping two. The negotiation did not last long, and the fetal reduction began in accordance with Stella's stated wishes. The observant staff member soon figured out that Jackie, holding the three-year-old child, was Stella's partner and greeted her in a friendly way, praising her for being a supportive one. This was five months after Taiwan's Constitutional Court ruled in favor of samesex marriage. The whole island had gone through heated debate about the human rights of gays and lesbians. You could easily tell that the staff were particularly caring toward this couple. On that Monday afternoon, most other clients came to the clinic alone, without any companion.

There were three rooms for the operation. Stella first had an ultrasound examination and then moved to a neighboring room for fetal reduction. While we waited outside, I patted Jackie's shoulder to comfort her, only to find that I myself was almost in tears. I could hear from the lounge that the doctor was telling Stella not to look at the monitor, explaining that he had reduced the smallest fetus. The procedure took only a few minutes. Stella needed to rest for twenty minutes. Then, the doctor confirmed with ultrasonographic imaging that the reduced one was now almost invisible on the monitor and that the remaining twins looked lively. Two ultrasound images of the twins were printed to give to Stella, each one showing one fetus.

Holding the two images, Jackie looked relieved and even excited, cheerfully explaining to their cute toddler that "Mommy is having twin babies."

Fetal reduction has emerged as a new hurdle that women carrying multiples need to jump over, mainly during the first trimester. Its primary purpose is to prevent the health risks of a multiple pregnancy. Cases like Stella's triplet pregnancy are predicted to have preterm labor and various maternal and fetal health risks. Fetal reduction is viewed as a preventive measure by its proponents. In practice, however, to reduce or not to reduce, and how many fetuses to reduce, are not easy questions. Almost all the women I interviewed who had been pregnant with quadruplets, triplets, or even twins had needed to take time, short or long, easy or complicated, to face the option. Even as a companion for a short time on Stella and Jackie's journey of fetal reduction, I felt myself go through some emotional disturbance. Several empirical studies have examined women's fetal reduction experiences, and all recognize the difficulty and complexity of how women go through it in Taiwan (e.g., P.-Y. Chiu 2004; Yu 2015) and in North America (e.g., Britt and Evans 2007a, 2007b; Kelland and Ricciardelli 2015). The repeated keywords are "anxiety" and "ambivalence." Such experiences are shared by other women who use various prenatal testing procedures, such as ultrasound genetic diagnosis to "prevent or allow the birth of certain kinds of children," the main feature of selective reproductive technologies (Gammeltoft and Wahlberg 2014: 201).

Built upon these important research findings, I will discuss the anticipatory labor of women encountering fetal reduction. The essential part of the work at this stage is to collect information on fetal reduction, make sense of the procedure, and come to a decision within a few weeks. The clinic visit, as described above for Stella's family, may only take a couple of hours, during which medical practitioners do most of the work. The decision-making prior to the visit is, however, much more complicated, and it is often women who take up this task. Most research to date has focused on women's "personal value system" and socioeconomic status to understand their experiences. Dimensions such as religious belief, ethical considerations, perceived care responsibility, and estimated financial burden play important roles. Little research has been done, however, about how women evaluate and encounter the medical technology and system itself, which is the ultimate force that initiates the roller-coaster experiences that many women go through. Therefore, in contrast to earlier studies, I focus on (1) how women critically evaluate fetal reduction, and (2) how they navigate the conflicting information about it, including the different opinions among various forms of available guidance. Women in the end sometimes need to rebuild the network of fetal reduction, which is very often disassembled by doctors themselves, in the context of Taiwan.

Detecting the Multiple Fetuses

The early reveal of multiple pregnancy has become possible with the blood test and the routine use of ultrasonography during prenatal care. The level of human chorionic gonadotropin (hCG), or pregnancy hormone, rises quickly from the fourth week from the last menstrual period, or two weeks after the embryo transfer during IVF. A much higher hCG value indicates the possibility of multiple pregnancy, compared with that of a singleton (Chung et al. 2006; Seeber 2012). Doctors tend to follow hCG closely for signs of pregnancy in women who undergo fertility treatment. For example, Yi-Wen, who started IVF at age thirty-one, vividly remembered that she was informed that she might have a twin pregnancy as early as at the fourth week because "the technician told me that the value skyrocketed."

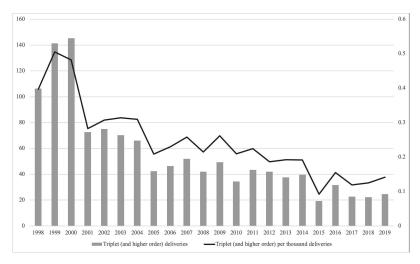
Confirmation of the number of fetuses relies on ultrasound examination as well as on the passage of time. As early as at the fifth postmenstrual week, the number of chorionic sacs can be detected through ultrasound imaging (Timor-Tritsch and Monteagudo 2005). Experts suggest that it is possible to determine the number of fetuses by detecting the number of heartbeats around the sixth week (ibid.: 293). For Yi-Wen, Stella, and some others, a notification of twin pregnancy was later replaced by confirmation of triplets, mainly due to the limitations of the blood test and sonography at the earliest stage. Some opposite situations may happen too. Spontaneous fetal loss, or the so-called vanishing twin or triplet, occurs quite frequently (Landy and Keith 2006). A woman might be informed that she is pregnant with four fetuses in the seventh week but later find out that only one remains. Overall, women who see ultrasound images of more than one sac within the womb have some time to figure out whether or not to undergo fetal reduction around the tenth to fourteenth week.

Never before has it been possible so early in pregnancy for women to view images and hear internal sounds of the multiple fetuses they are carrying. In the millennia before ultrasonography was available, women might not be aware of a twin pregnancy until after the babies were delivered. A woman I interviewed who gave birth in a midwife's clinic in the 1970s recalled that, after the birth of the first twin, the midwife announced that there was another baby about to be born. The mother suddenly realized that it was "no wonder my belly was so large." How large? She described that while she was sitting on a stool, bending over to handwash clothes, her belly was so big that it reached the floor. Still, she and her family members did not suspect a twin pregnancy. In the past, twins might be detected by experienced midwives' delicate hands touching two little baby bottoms under the belly, or with the assistance of a fetoscope and stethoscope that detected two heartbeats. Twins could be detected in the late second trimester at the earliest. The number of fetuses gestating within a woman's womb was simply information to receive, not something about which there was the room for negotiation.

Fetal Reduction as an Option

Today, women may start wondering what to do with multiples as early as the sixth week, before they have any bodily awareness of twins, triplets, or quadruplets. As discussed in earlier chapters, fetal reduction became an option for higher-order pregnancy in the mid-1980s and was steadily practiced in the 1990s in Taiwan. Various studies have compared the outcomes with and without fetal reduction, and these show evidence that the procedure significantly reduces the incidences of spontaneous loss and preterm birth (see review of Evans, Andriole, and Britt 2014). The common tendency is to reduce from triplets or more fetuses to twins. Given that twin pregnancy still carries higher health risks compared with singleton pregnancy, reduction to a singleton has increased and is supported by the medical community, such as the ethical committee of the American College of Obstetricians and Gynecologists (ACOG 2017).

In Taiwan, no guideline has been issued from any medical society. There are no published local data on the outcomes before and after fetal reduction.² Taiwanese doctors who practice fetal reduction often suggest reduction to twins (A.-F. Li 2009; Y.-C. Hung 2018). Considering the health issues, such as in Stella's case, reduction to a singleton might be proposed by doctors, or by women and their family members, such as Stella's partner Jackie. In a survey of 112 cases of fetal reduction in a Taipei clinic, nearly half the women said



GRAPH 6.1. Triplet (and Higher-Order) Births and the Triplet (and Higher-Order) Birth Rate per Thousand Deliveries in Taiwan, 1998–2019. Source: "Demographic Data GIS" 2021. © Chia-Ling Wu

that they had reduced the multiple fetuses to a singleton, possibly due to the advanced age of the surveyed women, over two-thirds of whom were more than forty years old (Yu 2015).

Taiwan may well have one of the highest rates of fetal reduction in the world. Statistics on the prevalence of fetal reduction are just emerging. The annual report of Taiwan's ART registry disclosed, for the very first time, that out of 11,402 pregnancies in 2019, fetal reduction was practiced in 135 cases (ROC Ministry of Health and Welfare 2021a: 9).3 The reported number exceeds that in any European country (ESHRE 2020). The UK reported 155 fetal reductions, but its number of IVF cycles is three times greater than that of Taiwan (HFEA 2020). Taiwan's report does not include cases of multiple pregnancy due to spontaneous conception, IUI (interuterine insemination), or IVF done abroad, such as Stella's situation. Most doctors told me that in Taiwan, cases of multiple pregnancy caused by taking fertility drugs outnumber cases resulting from IVF. Probably more than in any other country, women in Taiwan have a higher chance of facing the decision-making process of fetal reduction. At the same time, the very existence of triplet and other higher-order deliveries shows that women do not always use this surgical solution. In 1998, 1999, and 2000, more than one hundred birthing women per year delivered triplets or quadruplets in Taiwan (graph 6.1). Both the number of cases and the triplet birth rate have

decreased since then, at least partly due to the increasing acceptance of fetal reduction.

Women Execute Technological Assessment

Some women I interviewed bluntly emphasized the risk that fetal reduction *creates* rather than the risk this intrusive surgery intends to *mitigate*. In their assessment, fetal reduction is an unreliable technology, or even a threat, in three ways: (1) it has the potential to cause miscarriage or total pregnancy loss, (2) it poses a risk to the safety of the remaining fetuses, and (3) doctors don't yet know exactly how to discern and keep the fittest fetuses during the procedure. Therefore, contrary to the medical benefits that proponents would list, some women regard fetal reduction not as a problem-solving technology but as a trouble-making one that needs to be avoided.

The Risk of Miscarriage

The risk of miscarriage after fetal reduction is well known to women facing the option. A study of 112 women undertaking fetal reduction in a clinic showed that 90 percent of them knew the risk (Yu 2015: 33). The possibility of total pregnancy loss makes fetal reduction threatening to women's hard-won achievement. Melody, pregnant with triplets, told me her concerns:

I did not consider fetal reduction. It has the risk of losing all fetuses, doesn't it? I finally got pregnant, so I'd better not to take the risk. ... I knew it might not be easy to bear triplets, but I had no experience of pregnancy, so I could not imagine how hard it could be.

Especially for women such as Melody, who became pregnant only after a long and difficult journey, the accomplishment needs to be cherished carefully, without introducing a new risky intervention like fetal reduction. Li-Hsueh, who attempted various methods to reach pregnancy, became pregnant with triplets by using fertility drugs. She treasured her first successful pregnancy, and stated that "if fetal reduction led to the loss of all three fetuses, I would go insane." These women are not necessarily unaware of the health risks of triplet pregnancy; carrying triplets itself entails the risk of total pregnancy loss, in addition to other complications. Still, some believe that what they can do to protect the pregnancy is to avoid the new danger created by an intrusive procedure. This uncertainty also looms for women who do choose fetal reduction. In a study of

six women undergoing fetal reduction in a medical center, three mentioned the worry of total pregnancy loss (H.-L. Wang and Chao 2006). Such fear of miscarriage also leads to the preference for keeping two fetuses rather than one. As one doctor said when proposing to reduce to twins, "If one is gone, at least another is left" (A.-F. Li 2009). Keeping two thus becomes a safety net to handle the potential disastrous loss that a preventive measure may bring.

The medical community may downplay the risk of fetal reduction. For example, in the American College of Obstetricians and Gynecologists (ACOG) statement on fetal reduction, the "Risks" section only includes the maternal and perinatal mortality and morbidity of multiple pregnancy, as if fetal reduction does not carry any risk.4 The statement does recognize that fetal reduction "in rare cases, may result in the loss of the entire pregnancy" (ACOG 2017: 3, emphasis added). This information appears in the section on "Ethical Considerations," which discusses how women consult their values when deciding between maximizing maternal and fetal health and risking the loss of all fetuses. By comparison, Taiwan's doctors regularly present the loss of all fetuses as the leading complication of fetal reduction. In the 1990s, it was often reported that the rate was 10–15 percent (S.-H. Hung 1995), which has now decreased to 2 percent for twins and 5 percent for triplets, according to a recent media report (Y.-C. Hung 2018). However, doctors tend to present a benefit-andrisk model for evaluation: whereas the miscarriage rate for reduction of triplets is 5 percent, the miscarriage rate is 11.5 percent before the twenty-fourth week if women do not conduct fetal reduction (ibid.). Doctors use statistics to foresee a better future, but pregnant women cannot ignore the near and present threat.

Harm to the fetuses during the procedure is another leading concern. In Yu's study, 87 percent of the surveyed women worried about whether the procedure would harm "the safety of the fetuses" (Yu 2015: 39). Although the main purpose is to "save the lives" of the remaining fetuses, women in my study mentioned concerns about whether the intrusion of the needle, the injection of poison, and the reduced fetuses remaining inside the womb might still hurt the remaining fetuses.

The Selection of Fetuses

Another major uncertainty is the selection of fetuses. Fetal reduction brings with it a new intervention—namely, which fetuses to reduce. Some women do not trust doctors' capacity to select the right ones. For example, Chiu-Yueh was implanted with five embryos, and

became pregnant with triplets. The doctor, her husband, and her mother-in-law all suggested that the three be reduced to two, but she cast doubt on the procedure. She wondered whether the fetus selected for reduction might be the best one, not the worst one. Therefore, she decided to keep all three to guarantee that the good ones would remain. Stella had a similar rationale. The main reason that Stella insisted on reduction to two fetuses, not one, was that she had not used PGT-A to select the best embryos. As a result, she worried, "What if the only one [that is not reduced] has something wrong?" For women who go through IVF to become pregnant, the chain of selection extends to the stage of selecting good reproductive cells and embryos. Through donor selection, some traits can be chosen through the commercial gamete banks. PGT-A can help clinicians identify the embryos with the normal number of chromosomes to transfer. After implantation, if pregnancy results, the routine use of prenatal genetic testing can provide further information about the fetuses.

Fetal reduction itself is another selective reproductive technology that brings in a new dimension of selection. Doctors may select the visually worst one, or simply reduce the one(s) whose location lends itself most easily to the procedure. This selectivity is much more inaccurate than that of preimplantation genetic testing such as PGT-A. Stella had not chosen to use PGT-A and felt unsure about the accuracy of selecting fetuses by fetal reduction. Therefore, keeping two became her strategy to help ensure that at least one good fetus would remain.

Incorporating Women's Values into Medicine

Women anticipate the adverse outcomes that fetal reduction may entail and act to handle the new uncertainty. They may reject the technology, do it but keep more fetuses in their wombs, or continue worrying about the adverse outcomes after the operation. These women offer a technology assessment model for evaluating fetal reduction. Such evaluation is seldom presented in the current studies, probably because most research to date has sought samples in the clinics that conduct fetal reduction and hence seldom studies the experiences of women who refuse the procedure.

In addition, current discussion tends to emphasize women's religious beliefs and lifestyle factors to explain why they hesitate, without presenting the so-called women's value system that also involves medicine and technology. Thus, I would like to echo the research on women's refusal of prenatal screening, in which women

are found to adopt "the logic of the biomedical paradigm to reject its very offering" (Markens, Browner, and Press 1999: 360). Similarly, in my study, fetal reduction's risk of miscarriage and its inaccuracy of selection are some women's major reasons for their fetal reduction decision. Some new advancements in fetal reduction attempt to reduce such risk by detecting fetal genetic abnormality through chorionic villus sampling (CVS) and other technologies before conducting fetal reduction (Evans, Andriole, and Britt 2014). The chain of selective reproductive technology is thus prolonged, but the issues of inaccuracy remain. Besides, in addition to the technological assessment, women have multiple other dimensions of evaluation to employ on their bumpy road to figuring out what to do with the option of fetal reduction.

The Intensity of Direction Guides

Whereas some women straightforwardly disregard fetal reduction, most women ponder the new option when it pops up unexpectedly during their reproductive journey. When the fetuses become publicly visible in the first trimester, many actors—doctors, family members, bloggers sharing experiences on the internet, and even gods and goddesses—can all get involved in giving women advice about what to do. Yu's survey of 112 women reveals the amazing intensity of their information-seeking behavior after receiving the suggestion of fetal reduction: finding famous doctors (94.6 percent), reading books (94.6 percent), surfing the internet (92 percent), consulting experts on genetics (89.5 percent), looking for cases having similar experiences (77.7 percent), consulting other ob-gyns (75.2 percent), and learning from the experiences of relatives and friends having similar situations (55.4 percent) (Yu 2015: 43).

In my study, most of the women not only searched numerous sources for their decision-making but also found that these sources often conflicted with each other. As earlier research on fetal reduction and other selective reproductive technologies has shown, the diversity of relevant actors may offer the logic of science, the faith of religious orientation, and various cultural conceptions. It takes anxious efforts to navigate divergent information and viewpoints to make the decision. In what follows, I first present Yi-Wen's journey of fetal reduction decision-making. Next, I present the two most conflicting guides that create extra burdens for women to navigate: doctors' contrasting opinions and the related maternal-fetal conflicts.

Yi-Wen's "Most Difficult Time"

Yi-Wen was very excited when she was first informed that she was pregnant with twins after an hCG test at the fourth week. Her fallopian tubes had been damaged when she had an ectopic pregnancy at eighteen years old. Her only option was to undergo IVF for conception. Around her late twenties, she began to consider having a baby. Living in a town that had no accredited IVF center, she had to take a two-hour train ride to Taipei for the fertility treatment. Since her husband, a busy local politician, could not go with her most of the time, she did not persist. Reaching the age of thirty, she resumed IVF treatment when the first accredited IVF center was established in her town. She was implanted with four embryos and became pregnant during the second cycle. The joy of having twins did not last long though, because the ultrasound image conducted at the sixth week showed that she was pregnant with triplets. "Hearing it was triplets, I felt hesitant," Yi-Wen told me during our interview in her husband's office.

The first thing that came to her mind was her eyewitness experience of seriously disabled triplets in the neighborhood of her natal family, two hundred kilometers from where she lived with her husband and in-laws. All the triplets had serious health problems, and one died early. This real case that she had known since child-hood gave Yi-Wen firsthand awareness of the hazards triplets faced. She went back to her parents' home and discussed the situation with her natal family members. She also consulted an obstetrician-gynecologist at the nearby medical center. She recounted that the doctor strongly suggested that she undergo fetal reduction, saying that "triplet pregnancy is not for human beings, especially not for Asian people." The doctor's main concern was the maternal health risk to Yi-Wen herself.

Yi-Wen also searched for information online. On the one hand, she read discussions on premature birth caused by triplets, including the high infant mortality rate. These statistics rang a bell for her, as they confirmed what she had witnessed a young girl in her encounters with the triples and their health problems. On the other hand, she learned about the procedure in detail. This disturbed her emotionally, especially the part about the injection of poison into the heart of a fetus, which made Yi-Wen feel "horrible," in her own words. Yi-Wen also wondered whether the reduced fetus, usually remaining in the womb, would influence the other two.

With all these pros and cons, Yi-Wen went back home to consult her IVF doctor, together with her husband. The doctor said that she did not oppose Yi-Wen doing fetal reduction, but she would not do it herself, as the procedure went against the beliefs of the hospital's religious affiliation. When she explained the procedure, highlighting the injection of a needle into the fetus's heart, Yi-Wen felt again how "brutal" the procedure was. The doctor also suggested that Yi-Wen was taller than the average Taiwanese woman, so that she should be able to bear the triplets. Yi-Wen was five feet four inches tall.

Sex preference became another decision criterion. Yi-Wen's husband wanted a baby girl. The ultrasound image showed that two of the fetuses were male and the gender of the third one was uncertain. The doctor asked the "what if" question: What if the reduced one is a baby girl? Yi-Wen's husband nodded positively. The preference of the doctor and the husband not to do fetal reduction became strong guidance. Other family members offered rhetoric such as "following nature," "taking things as they come," and "there must be a reason that these children are following you into the world" to comfort the indecisive Yi-Wen and encourage her to stick with the status quo. Not to act was advised as the best action. Yi-Wen's father-in-law was a Buddhist monk, so Yi-Wen came to believe that he would use religious power to protect her and the fetuses. As time passed, Yi-Wen continued carrying the triplets. "The struggle to decide whether to reduce or not was the most difficult time during the whole pregnancy," Yi-Wen told me as her three children, now healthy toddlers, played around us during the interview.

Doctors with Contrasting Opinions

In a world of evidence-based medicine and standardization, the diverse opinions of healthcare practitioners on the subject of fetal reduction are most striking. Women consult different experts. Yi-Wen consulted her IVF doctor and another ob-gyn for prenatal care. Other women may add a specialist in fetal reduction and genetics to the list, as Stella did. The specialization of doctors in reproductive care has grown over time, especially due to the rise of assisted reproductive technologies to make possible "parceling out the reproductive processes" (Gammeltoft and Wahlberg 2014: 209). As shown in chapter 3, many IVF doctors in Taiwan do not offer prenatal care, and hence women often need to visit other ob-gyns after successful conception. In Yu's study of 112 women undergoing fetal reduction in a specialized clinic, near 70 percent had come to the clinic on the referral of ob-gyns, and 20 percent on referrals from fertility specialists (Yu 2015: 33). Therefore, women carrying

multiples due to IVF often need to consult other doctors for guidance and services.

In addition, the easy access to prenatal care in Taiwan's healthcare system makes multiple visits within a short time highly feasible. One dramatic case is Yu-Ping, pregnant with triplets naturally, who visited a total of six doctors to find one who would support her determination not to do fetal reduction. The maternal healthcare program in Taiwan has been promoted since the 1970s and was strengthened after the implementation of National Health Insurance (NHI) in 1995. NHI provides a comprehensive benefit package to all citizens, including 10 prenatal care examinations. Five years before the NHI, women on average already had 10.3 prenatal care visits. After NHI, the average number of visits further increased to 11 (C.-S. Chen, Liu, and L.-M. Chen 2003). People have free choice among providers, easy access to specialists, and short wait times for the services they need (T.-M. Cheng 2015). IVF and fetal reduction have not been covered by NHI, but advice from doctors can be easily accessed. This explains why Yi-Wen could easily reach a doctor working in a medical center for a second opinion, Yu-Ping could visit six ob-gyns during her first trimester, and Stella could easily walk into a clinic specializing in fetal reduction after preregistering online.

Mobilizing Science and Emotion

Doctors are easy to consult in Taiwan, but they offer contrasting judgments. Yi-Wen's body type could be evaluated as *unfit* to carry triplets when the selected reference is Asian versus Western, but change to *possibly capable* when the comparison group is other Taiwanese women. Women's height has been selected by doctors as an indicator for evaluation. Stella's doctor preferred that she reduce to one fetus because she was less than five feet tall. By comparison, Mei-Hsueh, a petite self-employed beauty salon owner, was very much impressed when a doctor asked her, "If you did not try carrying [the triplets], how do you know that you cannot?" The criterion of height seems arbitrary. It demonstrates more about doctors' preference than about scientific evidence.

Doctors' rejection of fetal reduction operates in several ways. They may use some scientific criteria, such as height, to express the possibility of successfully carrying triplets. Alternatively, they may directly present how they dislike fetal reduction by refusing to do it, as Yi-Wen's doctor did. Another common strategy is to describe the procedure in detail to make women feel bad about

undergoing it. Some doctors also show couples ultrasound images to persuade them to keep all the fetuses. Allison, a lawyer, could not face her twin pregnancy, caused by taking fertility drugs, because she already had one child to care for and busy working hours. She wished the second fetus to vanish by itself within the next two weeks so that she could only have a singleton. When she asked about the option of fetal reduction, she found that her reticent doctor suddenly became talkative:

The doctor pointed out the ultrasound images to me: "You see, here is the one. The other is over there." ... He explained that medicine had made great progress. It was not a problem to handle twins. Carrying triplets and quadruplets might not be good for the mother, but carrying twins. ... Then he looked at the monitor, saying, "Look how lovely they are."

This mobilization of ultrasound images successfully elicited Allison's sense of responsibility to cherish the twins' lives and be a good mother. She redirected her worry about her career and financial burdens to the feelings of the fetuses. She stated that "if they felt that I did not welcome them, that might not be good for them." She chose to keep the twins and accepted the situation.

Recruiting Husbands as Allies

Doctors sometimes turn to husbands if women are indecisive. Yi-Wen's husband, who did not accompany her to the IVF procedures, suddenly became the doctor's ally. The husband's preference for a baby girl was identified as another reason not to do fetal reduction. Ting-Ting, who preferred voluntary childlessness and only used ART to fulfill her marital duty, described the scene in the clinic after she had been told she was pregnant with quadruplets:

I only wanted to have one kid, so I thought I would like to reduce three fetuses. But the doctor suggested twins, and my husband agreed. I considered that one is already a burden, and I did not want to have even one kid. Those who raised kids all told me how exhausting it is. One is tiring, so how would it be with two? I was over thirty, and my husband was over forty. Physically and financially, I did not think we could afford to raise twins. ... My husband and I couldn't agree at the clinic, so the doctor asked us to go back home to discuss it. The doctor also mentioned that due to the risk of miscarriage, it is better to have two. After that, I talked to my parents, and they said they respected my decision. My husband's family preferred to keep two. Thinking about how I would be blamed if I only kept one, especially if something went wrong in the future, ... I eventually had to keep two.

When facing quadruplets, all agreed to conduct fetal reduction. However, everyone had different considerations. Ting-Ting's doctor suggested keeping two as the normal clinical practice, mentioning the risk of miscarriage. When the medical framework did not match the expectant mother's wishes, the doctor brought in her husband. The in-laws' long-standing expectations added further weight to the reasons to have twins. Ting-Ting did not have strong support on her side, so she compromised. No professional counseling was involved, and the doctor failed to take Ting-Ting's strong preference seriously. These various kinds of disagreement, both among doctors and between doctors and their clients, often add further strain to women's navigation of the fetal reduction decision. Also, the possible maternal health risk of carrying multiples was the factor least mentioned during the discussions that led to Ting-Ting's decision.

Maternal-Fetal Conflicts

Although other people's various opinions give pregnant women instruction and inspiration as to what to anticipate, it is important to note that maternal-fetal conflicts also come into play. In theory, maternal and fetal health should both be taken into consideration in decision-making. In some cases studied here, maternal health risk was at the center of thought, such as when Jackie worried about her partner Stella's second pregnancy in light of her difficult first one, and when the main concern of the second doctor Yi-Wen consulted was the risk of multiple pregnancy to Yi-Wen herself. However, in most other cases it was fetal health that became the center of discussion. The statistics provided to women in the clinics or on the internet often emphasize the preterm births and prematurity of the infants more than the maternal mortality and morbidity of the women. This focus on fetal health can be deployed in two totally different directions: (1) toward rejecting the fatal harm caused by fetal reduction, or (2) toward employing fetal reduction to help ensure that the remaining fetuses will be healthy. Either way, it is fetal health, not women's health, that is the main theme.⁶

Another feature of maternal-fetal conflict lies in the assumption of fetal personhood. As described above, some doctors use ultrasonic images to highlight the loveliness of the "kids" on the monitor. Or they may describe the procedure in a way that stirs up emotions about "killing someone." Family members often refer to the fetuses as "children" or "kids" as well. They may draw upon some religious or supernatural logic to state that "there must be some reasons that the kids are following you," or they may evoke heaven-given

bonding to imply that the woman should keep all the "kids." This makes women feel guilty of bad mothering for not loving their "babies" at this stage. When Wen-Min described to me how she hesitated about what to do with the triple fetuses, she said that "in the beginning, I did not have motherly love, so I intended to reduce one." Family members reminded Yi-Wen of her "motherly love" and suggested that the goddess Mazu wanted her to "follow nature" and accept her assigned job of triplet pregnancy. Such rhetoric is an extra burden on women if they consider accepting fetal reduction.

Exercising Skill-Based Autonomy

Overall, women tend to form a hybrid assessment of the procedure, taking into consideration the health, social, emotional, moral, social, and financial aspects. Whether they accepted or declined fetal reduction in the end, I argue that many of them practiced what Meyers (2001) calls the skills-based autonomy. To enact their own desires and goals, these women sought out diverse information to compare and contrast (communication and analytical skills), to reflect upon (introspective skills), to consider in the light of relevant experiences (memory skills), and to evaluate in terms of the future (imaginative skills). They went through very complicated reasoning to make their final decisions.

Women's volitional skills are sometimes endangered. In Taiwan, the conflicting opinions of doctors and the subordination of women's interests to those of the fetuses—or even to those of the women's husbands—often create new barriers to women enacting what they really need. Ting-Ting's preference for reduction to a singleton best illustrates such suppression of women's volitional skills. If they are without other support, women may find it very difficult to confront the authoritative knowledge of doctors in the clinics and/or the dominant status of their husband in the patriarchal family, making it doubly hard to "resist the pressure to capitulate to convention" and "to challenge ... the cultural regimes that pathologize or marginalize their priorities" (Meyers 2001: 741–42).

Some women needed to rebuild the network of fetal reduction that some doctors complicated for them. When these women finally decided to undergo fetal reduction, their doctor would refer them to other doctors. They needed to reschedule and even arrange a long trip to carry out the surgery, as Stella and Jackie did (also see P.-Y. Chiu 2004). Even though fetal reduction is legal, financially feasible,

and accessible in Taiwan, reaching the clinic service still meant overcoming an additional hurdle, and often not the last hurdle.

Conclusion

The main anticipatory labor concerning fetal reduction consists of navigating complex information. The core work for women is to seek out and clarify the contrasting opinions, advice, insights, and support offered by doctors, family members, women who share their experiences on the internet, and even the gods and goddesses of religious tradition. Information and suggestions can range from statistics shown on clinicians' desks or the life story of a neighbor to popular wisdom, the moral principles of a certain religion, or the gender preferences of certain family members. This can cause the decision-making process to differ widely from the ACOG guideline's statement that "respect for a patient's autonomy acknowledges an individual's right to hold views, make choices, and take actions based on her personal values and beliefs" (ACOG 2017: 3, emphasis added). The so-called *personal* is shaped and built by *collective* consultation, which is often very political. An individualized ethics model such as informed consent is not adequate.

Although this chapter recognizes women's great efforts to find their own direction amid these divergent recommendations, a collective effort is nevertheless needed to relieve them of carrying these burdens alone. What is most problematic is that health professionals in Taiwan do not have an official guideline, and individual doctors in different specialties and with different values offer opposing directions. A detailed guideline based on global and local data and evidence should be available for women as one of their resources for enhancing their analytical and reasoning skills.

I also highlight women's capacity to conduct a technological assessment. Most research to date has focused on the decision-making processes, tending to separate medical factors (recognizing the health risk of multiple pregnancy) and nonmedical factors (religious belief and lifestyle) (e.g., H.-L. Wang and Chao 2006; Britt and Evans 2007a; Kelland and Ricciardelli 2015). Many women care most about how medical technology has brought new risks to their cherished pregnancies. Their capacity to assess the medical model should become an important part of consultancy. Ethical guidelines and medical communications should not only focus on women's values or on the social dimensions of decision-

making but also recognize women's critical evaluations of medical technology.

On some occasions, feto-centrism and the marginalization of women's health risks and social needs can also prevent women from fully assessing various merits of fetal reduction. When women's concerns about their own health, their care responsibilities, and their career development were put aside in the clinic or the living room, the resulting "decision" was often to keep the triplet or twin pregnancy. As we will see in chapter 7, when women carrying multiples move to the second trimester, they immediately become the risk group, start intensive body work, and bear the sole responsibility for fetal health. These should be anticipated and become an important part of deliberations for navigating the decision on fetal reduction.

Notes

- 1. One exception is Mei-Hui, who was pregnant with triplets. She was not offered the option of fetal reduction. And she said that this would not have been an option due to her religious beliefs.
- 2. Several local studies compare the results of twin pregnancies with and without fetal reduction (e.g., Hwang et al. 2002; Cheang et al. 2007).
- 3. This is partly due to my strong suggestion to the Ministry of Health and Welfare to reveal some reported data openly, such as the number of fetal reductions (Wu et al. 2020).
- 4. "Obstetrician-gynecologists should be knowledgeable about the *medical risks* of multifetal pregnancy, the potential *medical benefits* of multifetal pregnancy reduction, and the complex *ethical issues inherent in decisions* regarding multifetal pregnancy reduction. They should be prepared to respond in a professional and ethical manner to patients who request or decline to receive information, or intervention, or both" (ACOG 2017: 718, emphasis added).
- 5. Doctors also claimed that the miscarriage rate after reduction to twin pregnancy was about 4–5 percent, which was similar to, or only slightly higher than, that in twin pregnancy without fetal reduction. In addition, taking into account the baseline, the miscarriage rate directly caused by the fetal reduction might be even lower. The experts would like to start to claim that some of the miscarriages may happen naturally, not due to the intervention of fetal reduction. Dr. Ko, the leading expert in this field, provides information based on his long-term experience. He points out that the miscarriage rate, the leading risk of fetal reduction, is about 3.1 percent in Taiwan, which is lower than most of the published reports in the European and American countries (Ko

- 2021). He also reminds readers that even without the process of fetal reduction, singleton and twin pregnancy has its "natural miscarriage rate," fetal mortality, and very early prematurity. Overall, he suggests that one in every twenty to twenty-five cases seeking fetal reduction would meet with miscarriage, pretty close to the "natural miscarriage rate."
- 6. In Yu's study of 112 women undergoing fetal reduction, women's prime consideration was the risk of miscarriage caused by multiple pregnancy, immediately followed by the risk to maternal health (Yu 2015: 37).
- 7. Rich research has shown how fetal personhood works in the abortion debates, as well as how religious entrepreneurs in Japan (Hardacre 1997) and in Taiwan (Chen 2020) draw selectively upon, and creatively assemble, historical religious tradition to pressure women into practicing some rituals to memorialize the aborted fetuses. Whether or not these newly created rituals have influenced how people perceive fetal reduction needs further research.