Parents’ experiences telling children conceived by gamete and embryo donation about their genetic origins

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Objective: To gain an in-depth understanding of parents’ experiences telling children conceived by gamete and embryo donation about their genetic origins.

Design: Qualitative, descriptive.

Setting: Families’ homes.

Patient(s): Gamete or embryo donation recipient parents living in the United States and who told their children, from birth to 16 years, about their genetic origins.

Intervention(s): Individual semistructured (n = 12) or dyadic (n = 2) parent interviews.

Main Outcome Measure(s): Directed qualitative content analysis.

Result(s): Fourteen families that comprised 16 gamete or embryo donation recipient parents and represented 24 donor-conceived children between the ages of 4 months and 16 years participated in the study. Single parents (n = 3) and both parents in most two-parent families (n = 9) led the initial telling conversations. Parents recounted personal short stories using language that was both developmentally and medically appropriate. Multiple strategies, including children’s books, were used by parents to aid them in their telling. The oldest donor-conceived children in each family were first informed of their genetic origins at birth (n = 10 families) or at 6 months (n = 1 family; “practice runs”) or from 3.5 to 12 years (n = 3 families). The telling conversations took place during routine family activities that naturally brought parents and children in close proximity, usually in the home.

Conclusion(s): Awareness of the nuances of parents’ telling conversations with their children through the age of 16 years can help guide clinical counseling and the development of tools to aid parents in their telling conversations. (Fertil Steril Rep® 2021;2:479–86. ©2021 by American Society for Reproductive Medicine.)
Professional organizations (1, 2), clinicians (3–5), and health care policymakers (6) have voiced the importance of parents telling their children conceived through gamete and embryo donation about their genetic origins. However, our longitudinal research (7) and other studies (8–10) with children aged 7–19 years demonstrated that 39%–83% of parents, especially heterosexual couples, find it difficult and/or opt for secrecy.

Over the past three decades, research investigating parents’ disclosure has primarily focused on understanding the factors affecting parents’ decision-making processes about whether to inform their children about their genetic origins. Less research has contributed to understanding how parents actually tell and/or engage with their children in telling conversations. One of the first such reports documented the themes of these conversations and compiled six short stories (or scripts) ranging from one to four sentences per story that parents of young children in New Zealand used to tell their children about their donor sperm origins (11). In the United Kingdom, Hunter et al. (12) explored parents’ telling conversations about donor sperm origins; findings from that study and others (13, 14) brought to light parents’ use of children’s books and/or family photo albums to facilitate telling conversations. Another insight was that disclosing parents engaged in an earlier “practice run” of the telling conversation with age-appropriate words and language when their children were very young (12).

One of the few United States (US) studies examining parents’ telling strategies reported that 141 married parents generally used one of two belief strategies (i.e., seed planning, right time) to tell their children about their genetic origins (15). The seed-planting strategy centers on parents’ belief that early telling is paramount and that their child should “always know” the information about their genetic origins. The right-time strategy is exemplified by parents’ belief that there is an optimal time or “window of opportunity” in the child’s development during which the child is best able to receive and comprehend the information. Parents struggled with the words and language to use, especially describing the donor, and identified a lack of resources and support to help them with their telling (15).

As part of a larger, longitudinal study in the United Kingdom, Blake et al. (16) interviewed 23 gamete and/or embryo donation families (23 mothers and 15 fathers) when their children were 7 years old; all but one had disclosed the genetic origins before the child was 4 years old. Mothers typically took the lead in the initial telling and shared the initiation of subsequent telling conversations approximately 40% of the time, more frequently than any other role. The conversations consisted of either a simple description of how the parents needed help to have a baby or a more detailed scientific explanation that included the need for either an egg or sperm from another person. Mothers used the terms “another man/another lady,” “another father,” and “somebody else” when describing the donor to their children.

A study in the US examined the perspectives of heterosexual couples, single women, and lesbian parents who had used open-identity sperm donors and had children through the age of 17 years; 93.3% had told their children about their genetic origins, with the average age at initial telling of 4.8 years (17). Insight from this study included the words parents used to describe the donor (“the donor,” “biological or birth father,” or “father or dad”); however, none of the heterosexual parents opted for the term “father or dad.” Other investigators have contributed knowledge about parents’ telling conversations; however, as in this study (17), parents’ telling conversations were not the primary focus of the research or the research was completed outside of the US (18–22).

Our long-term goal is to create a targeted, parent-centered decision aid that provides a tailored approach to supporting gamete and embryo donation recipient parents with their telling conversations. The decision aid targets US parents with children (up to 16 years old) who were conceived by donated eggs, sperm, or embryos. The systematic process for developing patient decision aids, in conjunction with the International Patient Decision Aid Standards Collaboration for evaluating decision aids (23, 24), calls for ensuring that the target population’s experiences and perspectives be included and subsequently transformed into the core content for the decision aid (25, 26). Accordingly, this study aimed to gain understanding of the who, what, when, and where of parents’ telling conversations with their children aged 0–16 years conceived through gamete and embryo donation in the US.

MATERIALS AND METHODS
The study used a qualitative descriptive design (27) and received human subject protections approval from the University of Illinois Chicago Institutional Review Board (Protocol # 2019-0799). To maintain parent confidentiality, numeric codes and pseudonyms representing the parents are used throughout this manuscript.

A multifaceted recruitment plan employed an informative study website, advertisements posted on websites of interest to parents, and verbal and written information about the study relayed by the principal investigator (P.E.H.) when providing lectures or participating in other professional events and meetings. Eligible parents were purposively selected to reflect a range of families (e.g., single- and two-parent, gamete type, donor type) and to include parents who had told their children, aged 0–16 years, about their genetic origins.
After we obtained informed consent, parents participated in digitally recorded, semistructured interviews that were transcribed verbatim and checked for accuracy by trained research assistants. Parents could complete the interview by phone, WebEx technology, or face-to-face. In instances where only one parent of two-parent families participated, we considered this a family unit because one partner can provide data for dyadic phenomenon [28]. The interview guide was developed based on a literature review, our previous qualitative research with parents [7, 29, 30], and feedback from content experts and other qualitative researchers (Table 1). Further, the cognitive appraisals dimension of our decision-making process model [7] also informed the interview guide, allowing for directed content analysis, a qualitative analytic approach when a theoretical framework exists [31].

Data analysis occurred simultaneously to data collection, as is typical in qualitative research, until saturation was achieved. Initial coding was guided by a prespecified coding template that aligned with concepts representing the cognitive appraisals dimension (e.g., who, what, when, where) within the decision-making process model. Initial codes were then grouped into main categories using a matrix method [32] and analyzed within/ across individual parents, dyads, and families. To enhance rigor and promote analytic insights, a secondary review and summated interpretation of six family interviews was completed by an experienced qualitative researcher (A.M.G.). Peer debriefing meetings with all members of the research team occurred periodically as data were obtained and analyzed.

RESULTS
Parents were interviewed by either telephone (n = 12) or WebEx (n = 4) from February 26, 2020, through April 22, 2020 (none were held face-to-face because of the COVID-19 pandemic). The interviews lasted 31–75 minutes (M = 45 minutes).

Sample
The sample was composed of 14 families, comprising 16 parents (12 individuals, 2 couples) and representing 24 donor-conceived children living in eight US states. The donor-conceived children were aged 4 months to 16 years; 4 were the only children in their families. The families were of high socioeconomic status (M income = $143,863 per family), and the parents were well educated (M education = 16 years per parent; Table 2).

Who Told?
In the three single-parent families, the individual parent led the telling conversations with their children. In the 10 two-parent families, both parents shared the lead in the initial telling (n = 8), except for two where mothers led by themselves. Two-parent partners were keenly aware of the challenges associated with talking to their children together, especially for younger children. For instance, Mother 13 said:

“I think that both parents probably should be there, but the three-year-old is probably bouncing off the walls anyway and probably half listening to the story and it’s just another story to him or her. So, if the three-year-old has any questions, which probably not, but both parents are there and comfortable with it.”

Two major parental challenges about who should tell were the sensitivity about the telling conversations by the nongenetic parent and the perception among heterosexual partners that one parent, typically the mother, was more skilled at the telling conversations. As Mother 3 explained:

“Because I think the person who has the genetic link just doesn’t think about it at all. And it’s funny because I’ve said to my husband, ‘You really have to talk about this stuff.’ And he’s like, ‘Yeah, I know.’ He’s tried and him telling our daughter at the age of four, and the way that he sort of stammered it out, was kind of like me telling her when she was about 18 months. So, there’s definitely a lag.”

Mother 6 described the situation where her husband deferred to her to make decisions about telling and take the lead in telling:

| Table 1 |
| --- |
| **Semistructured interview guide: sample questions.** |
| **Question** | **Content** |
| **Broad introductory** | - Think aloud about your experience thus far with telling your child(ren) about their donor conception, and verbalize what you are thinking and experiencing. Be as detailed or take as much time as you need to express your thoughts and experiences. |
| **Probes** | - Who did the actual “telling” to your child(ren)? For example, for two-parent families, were you both present when you first told the child(ren) or did one of you first tell the child(ren) and the other follow-up? |
| | - Can you tell me how you actually told your child(ren) about their donor conception? |
| | - What language did you use? |
| | - What word(s) do you use for the donor? |
| | - When you told your child(ren), did you use any books, the internet, or other helpful prompts to aid you in your telling your child(ren)? If so, what did you use and how was it helpful to you or your child(ren)? |
| | - Did you select a specific time or place and if so, why? |
| | - Did you pick out a specific location? |
| | - Any regrets about telling? Things you might do differently? If so, please explain. |

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“[T]hat’s one of the finer details, we did agree from the beginning that we would always explain it to them in terms that they could understand and relate. Now we don’t make up stories. There’s not this, ‘Well, the stork brought a special egg,’ or anything like that. We tell them the whole truth exactly how it is but in terms that they can understand at that age.”

Parents also reported how they added details to their story as their children grew. For example, Mother 4 of a 6-year-old remarked:

“[A]s far as the telling, and it’s just been very organic. From the time I was holding Sarah, breastfeeding, saying, ‘I want to talk to you about where you came from and how your story started.’ And as she gets a little older, it gets a little more in depth.”

Supplemental strategies. Although specific language and stories provided the foundation for the telling conversations, parents used other strategies, too, including children’s books, creating songs, developing a fairy tale, and using videos and/or drawings. For parents who opted to tell their children early, almost all incorporated children’s books. The parents who first told their child later (age 12 years) also used an age-appropriate book about donor conception after the initial telling conversation. Some parents obtained the children’s books before the initial telling, such as Mother 8, who began collecting appropriate children’s books during her pregnancy:

“I continued to collect some [books] after my daughter was born. And to me, that was really nice because, one, I’m a huge book lover. And so for me, books are kind of a comfort zone. And it also was really helpful to have some ideas of how to tell her story, what that story could look like. And of course, there’s no book that perfectly captures typically one’s own experience. But at least, it gave me some of the language that was useful thinking about talking to her about it.”

Mom 12, whose children are now in 11 and 13 years old, added:

“Even back then, I researched what they [books] were. I ordered them. We just put them in … they were always in the rotation of multiple children’s books that we had. And we read to them when they came up in the rotation when the kids picked them. And we would take a few minutes to say, ‘This is just like how we got you.’”

Some parents who opted not to use children’s books thought that the books were not specific enough for their family. This sentiment was captured by Mother 4:

“There’s not any [book] out there that says what happens when your mom’s partner-in-crime-for-life decides to give her egg.”

What to Tell?

Parents reported their preferences about using language (e.g., specific words, phrases) in telling conversations related to donor and conception story. They also reported supplemental strategies.

Donor. Most parents voiced strong opinions not to use the words parent, mother/mom, and/or father/dad with their children (Table 3). However, parents also shared their sense of “still trying to figure it out” or “I still don’t know” regarding the best language to use about the donor, for up to 2 years after the initial telling.

Conception stories. Parents described their language for the components of the conception story (e.g., “magic seed”; Table 4). Stories that ranged from one to seven sentences were meaningful, to the point, and typically used language that was both developmentally and medically appropriate. Father 4 noted:

“I think he deferred to me a little bit, even though I don’t think he was 100% sure that was the right thing to do. … [H]e’s always taken just a backseat to this whole thing, not because I wanted him to, but because I don’t know that he really knows how to talk about it.”

### TABLE 2

Parent demographic characteristics (N = 16 parents).

| Demographic characteristic | Parents (percentage, mean, or range) |
|----------------------------|-------------------------------------|
| **Age**                   | M = 48.69 years                     |
| Mothers (range)           | 36–61 years                         |
| Fathers (range)           | 43–52 years                         |
| **Sex**                   |                                     |
| Female                    | 13 (81.25%)                         |
|                         | Male                                | 3 (18.75%)                         |
| **Gender orientation**    |                                     |
| Heterosexual/straight     | 12 (12.50%)                         |
| Queer/bisexual            | 2 (12.50%)                          |
| Lesbian                   | 1 (6.25%)                           |
| Gay                       | 1 (6.25%)                           |
| **Race and ethnicity**    |                                     |
| White                     | 15 (93.75%)                         |
| Indian and Asian          | 1 (6.25%)                           |
| Hispanic or Latino/a      | 0 (0.00%)                           |
| **Donation type**         |                                     |
| Donated eggs              | 8 (50.00%)                          |
| Donated sperm             | 4 (25.00%)                          |
| Donated embryos           | 2 (12.50%)                          |
| Double donation (egg and sperm) | 2 (12.50%)                             |
| **Surrogate**             |                                     |
| Gestational               | 3 (18.75%)                          |
| **Donor type**            |                                     |
| Anonymous                 | 8 (50.00%)                          |
| Known                     | 6 (37.50%)                          |
| Open-identity             | 2 (12.50%)                          |
| **Family type**           |                                     |
| Married                   | 12 (75.00%)                         |
| Single (never married)    | 3 (18.75%)                          |
| Divorced                  | 1 (6.25%)                           |
| **Religious affiliation** |                                     |
| Christian                 | 7 (43.75%)                          |
| Jewish                    | 6 (37.50%)                          |
| Roman Catholic            | 1 (6.25%)                           |
| Hindu and Jewish and Protestant | 1 (6.25%)                             |
| No religion or atheist    | 1 (6.25%)                           |

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TABLE 3

Examples of parent’s words and language preferences for the donors.

| Parent and donation type | Donor type and age of children | Words and language preference for donors |
|--------------------------|--------------------------------|----------------------------------------|
| Mother 1 Embryo          | Known donor Child = 2 years   | “So that’s what my struggle was, was like, ‘What’s common vocabulary that I can feel comfortable explaining this?’ The idea of saying, ‘You were conceived from a donor embryo. Let me explain what an embryo is’ as opposed to ‘You have biological parents that are not me.’ It just felt like more loving language than the words donor sperm and donor egg, right? But I didn’t know—I still don’t know, to be honest. That is still a problem for me because I want to express the love that was given from these people who donated, who don’t know us, and yet, I don’t want to use the word parent.” |
| Mother 2 Sperm           | Open-identity⁶ Child = 3 years | “Do I specifically use the word donor? Yes. And again, I don’t emphasize dad. I feel a little touch of sadness when I say, ‘We don’t have a dad in this family.’ But that is the truth. We don’t have a dad in this family… We just say in our family we don’t have a dad because I don’t believe a donor is a dad… He’s really close with my dad, and he hears me call my dad, ‘Dad,’ so sometimes, he calls him ‘grandpa dad.’” |
| Mother 3 Egg             | Known donor Child = 5 years   | “I’m careful not to use like, ‘Donor mother.’ And I will, pardon my French, shoot that shit down and I have.” |
| Mother 4 Egg             | Known donor Children = 4 and 6 years | “We weren’t going to define for our children how they saw these extended people in their lives… Are they going to look at Cousin Noah and consider him as a sibling? Or is he a cousin? Or is he somewhere in between? And we’re not making—we’re not defining that for them. We’ll say the word ‘gibling’ or we’ll say the word ‘cousin.’ But we don’t put any parameters on that…. It’s really going to be up to our kids, the relationships they decide to have.” |
| Mother 5 Egg             | Anonymous donor Child = 8 years | “We call her a very generous woman. He knows the word donor. We use the word donor, too, and he’ll ask me, ‘Mommy did [the donor] _______?…’ But we also use ‘very generous woman.’” |
| Mother 6 Egg             | Anonymous donor Children = 10 years (twins) | “I call her your egg donor.” |
| Mother 7 Egg             | Anonymous donor Child = 3 years | “So how I usually refer to her is a ‘donor mom’ because some people don’t like the term mom or mother. But I don’t know. I think of it as she’s a type of mom, so I just specify which type. Oh, sorry. Let me back up. I actually also say ‘genetic mom’ when that’s relevant. I usually say that more to adults though, yeah, who don’t know the donor situation, and then I can explain that to them. Like doctors.” [italics added for emphasis] [She said to her children] “I am your real mom. Your mom is what happens when you come home from the hospital, and all of the things that I’ve done and experiences we’ve shared.’ I call the donors biological contributors. I don’t call them mother or father or parent. It helps me and it probably helps them [children] also to use that term. I think words and terminology are very important in life. So, I do think other people might say, ‘Oh, the real mom.’ I’m like, ‘Oh, no, I’m their real mom. She’s the biological contributor.’” [italics added for emphasis] |
| Mother 9 Both egg and sperm | Anonymous donors Children = 16 years (twins) | “Their bio father. So we said to them, ‘You do have a biological father.’” |
| Mother 10 Sperm          | Open-identity Children = 4 years (twins) | “We say [the donor’s first name] or egg donor. I intentionally say it as egg donor because she’s not mom.” |
| Father 11 Egg            | Known Child = 5 years         | “I just say either the egg donor or the donor. I mean, I don’t introduce the word mom into it because I think that would be extremely confusing. But it comes naturally to me to say the egg donor or the donor.” |
| Mother 12 Egg            | Known Children = 11 and 13 years | *Notes:* “Denotes donor’s identity to be released to the child when the child reaches 18 years of age. Herstberger. Parents’ experiences telling children. Fertil Steril Rep 2021.”

Other strategies to help telling were creating a song and developing a personalized fairy tale. Mother 9 stated:

“I would sit in the rocker and I’d sing. I’d read books, I’d talk to them while I fed them, and I practiced my story because I thought, ‘I want to feel comfortable with this when they start understanding it,’ and I developed a fairy tale.”

Parents also incorporated simple drawings of reproductive organs to explain the treatment procedures, and others took videos of their telling conversations not only as a keepsake for their child but also to foster future telling conversations. A few parents shared pictures of the donor with their children to facilitate understanding. Mother 7 shared:

“And I do remember there was one time, actually, that I decided to show him some photos of the donor. Yeah. So that was really adorable actually. We were on the playground, and he came and sat next to me, and I had been, for some reason, reading her profile. And, well, I look at it once in a while. And he came and sat next to me, and I just told him, and I was like, ‘You want to see some pictures?’ And he was like, ‘Yeah.’
TABLE 4

| Parent and donation type | Age of child(ren) | Telling story |
|--------------------------|-------------------|---------------|
| Mother 2 Sperm           | 3 years           | “Well, this is our story. ‘I wanted you. I wanted to be a mom. I went to a doctor, and I got help from a sperm, and the doctor helped put the sperm in my body, and it became you. And we’re grateful to this person.’ It very, very quickly glosses over the word person, and that we don’t know this person. And then it’s like, ‘And then you and I became a family.’” |
| Mother 3 Egg             | 5 years           | “And I said that, ‘Mommy gave the uterus. A donor gave the eggs. Daddy gave the sperm. And mommy and daddy wanted you very much. And that’s what makes me your mummy.’ And there’s a little bit of back and forth because she’s grabbing my hair … And then, when she was two, it sort of evolved into, ‘Mommy and daddy wanted you very much. So mommy and daddy tried for a baby. And we tried and we tried and we tried, and we said, ‘We went to the doctor and the doctor said, ‘Oh, to make a baby you need three things.’ … And daddy has the sperm, mommy has the uterus but mommy doesn’t have the right kind of eggs.’” |
| Mother 5 Egg             | 8 years           | “So I would just tell him, ‘I gave birth to you, but you need to know you were formed with daddy’s sperm and a very generous woman’s eggs.’” [And] “Sweetie, you remember the story of how you were born? Well, now let me tell you how you were conceived. Daddy and I loved you so much. We so much wanted to have a baby. We wanted you even before you were born. But I needed help or we needed help.” |
| Mother 6 Egg             | 10 years          | “It’s like, ‘A nice lady gave us a present.’ For kids that are too little to understand.” [And] “So recently, a few more questions and Timmy [child conceived by donor] in particular coming to this conclusion like, ‘Oh, so it took three people to make me?’ Right, the egg donor donated some of her eggs. And then it was daddy sperm. And then it was mommy’s uterus and my body that built you the rest of the way.” |
| Mother 8 Embryo          | 3 years           | “This is like an evolving thing. But she knows that people sometimes need help to have a baby and go to a doctor, and the doctor can help them. And sometimes, people help by giving a little piece that’s called an embryo because she understands some of these things.” |
| Mother 10 Sperm          | 4 years           | “We used the language that we came up with on our own which is you have two moms and a donor and then when I read the thing it was like that’s not—it’s not the kid’s donor, it’s our donor. It’s their biological parent. And so when it came up at some point it was important to me to start saying, ‘Well, you don’t have a daddy, but you do have a biological father.’” |
| Mother 13 Both egg and sperm | 10 years     | “But we did say to him [when he was 3] that mommy had something in her that was broken and we asked a lady for a piece of her, if she would let us have what was working for her that she didn’t need and we said the same thing about daddy. Daddy was broken and so we had to borrow that from a boy and that we were going to fly on a plane and have a doctor put a baby in me, in three-year-old terms.” |
| Mother 14 Sperm          | 12 years          | “And we just went in her room and we were like, ‘Hey - this is really awkward. We just have to tell you something. And we just jumped right in. She had always known that she was conceived through IVF, but we just added in that extra layer of it.” |

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And I showed him a few pictures, and I said, ‘That’s the lady who helped us make you, gave me the piece to help make you.’ And I don’t know if he got it, but he just had this huge smile. It was really sweet.”

### When to Tell?

Ten families opted to tell their oldest or only child about their genetic origins early, often before their child was even able to comprehend the spoken words. For example, Mother 2, began the telling conversations “Before he was born,” and Mother 1 informed her child, “Basically, as soon as he was born.” Parents with donor-conceived children of multiple ages reported the initial telling, and telling conversations became easier as their families grew, and the children learned of their sibling’s donor origins. Several parents revealed the telling was completed sequentially and over time. Mother 5 explained:

“[W]hen I was pregnant … I started telling him how he was loved and how he was wanted and how he was conceived. And then once he was born, I just made sure to tell him once a week… But as he became a toddler, and as he became more aware of the world, and as he became a little kid, and now a big kid, it’s just a part of his life that we talk about.”

Four families opted for telling later. Mother 3 said, “It was never a question if we should tell. It was more when” [italics added for emphasis]. She went on to tell her oldest child at 6 months, after she gained confidence her ability and the rationale for the telling. Mother 6 told when her children were 3.5 years because she had a biologically conceived child and wanted to delay the telling. Mother 10 said she and her partner “were on different pages” initially, and later, she and her partner agreed to tell when their twins asked about their “daddy,” which happened at the age of 4 years. Parents 14 told their daughter together at the age of 12 years; the Mother recounted:

“[W]e were kind of in the camp of don’t tell because that’s the [recommendation] we were given from everybody at the beginning was, ‘You just take this to your grave.’ So that’s who we were until, gosh, December of 2019, and we were watching a TV show, that CBS Good Morning show that comes on Sunday mornings, and they were doing a study—they were doing a story.
on that 23andMe thing, and it was in that that we realized, ‘Oh God. We don’t want her to find this out from a test someday that she might take on a whim’… ‘We have to tell her—and right away.’ And so that kind of started us on the journey to at least figure out how to do it.”

Where to Tell?
Parents described a range of places where the telling conversations occurred, typically within the home but not always. Often, the conversations took place during family activities that naturally bring parents and children in close proximity such as breastfeeding, diaper changes, meals, and/or children’s “story time.” Mother 5 noted:

“[W]hen he was a baby, I would always talk to him while I was changing his diaper. Because he was on the table and we’re face-to-face.”

For the parents who told later, when the child was 12 years old, Mother 14 reported, “And we just went in her room” at a quiet time during the day when both parents were home. Conversely, several parents, like Mother 8, held the telling conversations (especially subsequent telling conversations) wherever:

“I do know some people will tell it as a bedtime story every night, and I don’t. I do it more as like when she shows interest in the books or periodically when the spirit moves. Or I’ll just sort of bring it gently into the conversation. And I’m also very open to other people. So typically, like if somebody asks, ‘Oh, who does she look like?’ I will say, ‘Oh, she looks like her donors.’”

DISCUSSION
Study findings illuminate the voices and experiences of US gamete or embryo donation recipient parents and the who, what, where, and when of telling conversations with their children. These findings, along with the scientific literature and the research team’s clinical practice experiences, provide rich contextual knowledge that can be transformed into content for a storyboard—a critical next step in decision aid development, where parent experiences, testimonies, and stories underlie the text, images, and interactive elements (24, 25).

Regarding who told, while we found that mothers typically led the telling conversations in mother–father dyads, which is supported in other studies (16, 33), we became aware of the unique tailored educational needs of both nongenetic parents and fathers, especially about how they can engage in telling conversations. Clinicians who counsel and educate parents need to be aware that mothers are likely leading the telling conversations and will need support; however, they must also be responsive to the unique needs of fathers and nongenetic parents.

Parents reported brief telling conversations (mainly for the initial telling conversations) that were meaningful to them, concise, and developmentally appropriate for children up through the age of 12 years. These findings support prior research about the length and content of initial telling conversations (11, 15, 16), as well as the preferred language parents used, especially when referring to the donor (21, 34, 35).

Findings that parents struggle with selecting words for the donor, even up to 2 years after the initial telling conversation, and the multiple ways parents approach references to the donor (e.g., allowing children to select the word, correcting children with the parents’ preferred word) have significant implications as we develop our decision aid. This finding also has implications for clinical counseling.

The strategies parents used to aid their telling conversations, primarily the use of children’s books, align with prior research (11, 12). What is less known is the extent and use of other strategies such as songs, fairy tales, and photos. The resourcefulness of parents, such as obtaining children’s books even before their children are born, is a significant finding. Clinicians can incorporate this into clinical counseling, working with parents to identify and review which books or other media best fit the parents’ communication style and preferences. Despite the insights gained regarding the “what” of telling conversations, future research should aim to uncover the essential components of the initial telling conversation and how these components differ when children are initially told at an early age vs. a later age (e.g., adolescence).

Most families (n = 10) first told their oldest child(ren) about their genetic origins at birth, which aligns with the parental seed–planting belief (15). The remaining families took a right-time approach and told their children when they believed it was most appropriate, which was between 6 months (n = 1) or 3.5 years and 12 years (n = 3). With a child at 6 months, the telling conversation was likely a practice run (12). Nevertheless, their multilayered approach to telling, using short stories and supplemental strategies, provides additional insight into creating a decision aid.

Most parents in this study completed the initial telling at home and when they were in close physical proximity to their children (e.g., breastfeeding, during diaper changes, at meals, during quiet time). We were unable to locate studies that asked parents specifically where the telling took place. In our experiences with these parents, we learned that they want this type of specificity in a decision aid.

Limitations
The study has several limitations. The sample size was small, and all but one parent identified as White. However, the sample represented diversity in gender minorities (e.g., bisexual, gay), family types (e.g., single, divorced), gamete or embryo type (e.g., egg), donor type (e.g., open-identity, anonymous), and religions. Other limitations were the use of online recruitment and that few fathers participated in the research, cautioning interpretation of the findings that reflect predominantly mothers’ telling conversations and parents who may have been influenced by other parents’ experiences in online groups.
CONCLUSION

The nuances, stories, and illustrative quotes about how the parents told are significant for understanding the needs of these families. Learning the several strategies parents are using to facilitate their telling conversations is also beneficial. In keeping with decision aid guidelines, these findings strengthen the foundation for a decision aid to support parents in their telling conversations.

Acknowledgments: The authors sincerely thank the families who participated in the study and Kevin Grandfield, Publication Manager for the UIC Department of Biobehavioral Nursing Science, for his editorial review.

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