

CLINICALLY ASSISTED REPRODUCTION AMONG SEXUAL MINORITY

WOMEN:

PLANS, PIVOTS, AND PARTNERED-DECISIONS

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Patrina Sexton Topper

DEDICATION

To my father, Richard Sexton.

To my wife, Maura, and our daughter, Bridget Maeve.

To the women who shared their stories with me, and all of those who came before us.

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ABSTRACT

CLINICALLY ASSISTED REPRODUCTION AMONG SEXUAL MINORITY WOMEN: PLANS, PIVOTS, AND PARTNERED-DECISIONS

Patrina Sexton Topper

José A. Bauermeister, PhD, MPH

Research focused on the efforts to conceive among sexual minority women (SMW) in same-sex couples has expanded in breadth and depth in recent decades. Yet, as consistent evidence of health disparities among SMW, along with sociopolitical and technological transformations that have changed notions of kinship and family formation, the context and forces that shape coupled SMW's paths to pregnancy require further investigation. Informed by health equity and reproductive justice frameworks, this dissertation qualitatively examines the experiences of 20 coupled SMW (10 same-sex cisfemale couples) actively engaged in trying to conceive with clinically assisted reproduction (CAR), in the United States. Using a three-paper approach, this dissertation addresses three facets of coupled SMW's experiences: 1) fertility related information needs, seeking, and use; 2) experiences of sexual minority stress in CAR; and 3) an innovative approach to co-created relationship timelines and their use in qualitative analysis. In Chapter II, which focused on information needs, seeking, and use, I found that SMW work hard to build information repositories drawing on multiple sources. Three main themes that reflect the nuances of the results are: contextual factors that shape information navigation; certainty and uncertainty about aspects of CAR; and the cyclical and unpredictable process of information seeking, appraisal, and use. Chapter III, focused on manifestations of sexual minority stress in CAR. I found that stress manifests within

hegemonic heteronormativity, with specific structural, clinical, and individual dimensions. Chapter IV, the relationship timeline method, co-construction of timelines yielded graphic and narrative data that offered new insights about SMW couples in a medicalized process. Overall this dissertation provided new insights and generated additional questions about how to achieve more equitable and just paths to pregnancy and family expansion for sexual and gender minorities.

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Chapter 1

Introduction

Parenthood remains a highly valued milestone among adults in the United States. Like individuals in heterosexual couples, same-sex couples aspire to parenthood and desire to have biologically connected families as a manifestation of their love for, intimacy with, and commitment to one another (Patterson & Riskind, 2010; Riskind & Patterson, 2010; Riskind, Patterson, & Nosek, 2013). Coupled sexual minority women (SMW; inclusive of lesbian, bisexual, queer, and other non-heterosexually identified cisgender females) interested in conceiving and childbearing, often rely on forms of *clinically assisted reproduction* (CAR; i.e., *assisted reproduction* facilitated by clinicians including licensed midwives, nurses, doctors). Yet, for coupled SMW, conception, pregnancy, and the transition to parenthood involve unique challenges and forms of stress exacerbated by non-LGBT inclusive policies and/or discriminatory practices. Despite unprecedented expansion of civil rights and increased visibility and social acceptance in recent decades, SMW must engage in critical considerations of identity- and gender-related issues (Ryan, 2013), as well as, physical, financial, social, political, and legal factors that affect pregnancy decisions and behaviors that align with efforts to conceive (Bushe & Romero, 2017; Hayman & Wilkes, 2017; Hayman, Wilkes, Jackson, & Halcomb, 2013; Hayman, Wilkes, Halcomb, & Jackson, 2015; Moore & Stambolis-Ruhstorfer, 2013).

Even with federal recognition of same-sex marriage ("Obergefell v. Hodges," 2015) including the rights and benefits ascribed to married couples, queer couples continue to face widespread discrimination in healthcare settings and challenges to family

expansion that relies on one or both partners in a couple becoming pregnancy and bearing a child or children (Baptiste-Roberts, Oranuba, Werts, & Edwards, 2017; Bushe & Romero, 2017; Corriher, 2016; Graham, Berkowitz, Blum, Bockting, Bradford, de Vries, Garofalo, et al., 2011; "Pavan v. Smith," 2017). In assisted reproductive contexts, evidence of barriers to care include refusal of fertility care and structural norms that reproduce hegemonic heteronormativity and erase SMW bodies, identities, and relational status (Hayman & Wilkes, 2017; Hayman, Wilkes, Jackson, et al., 2013; Somers et al., 2017; Werner & Westerstahl, 2008). Such experiences may create stress and relationship strain in the midst of trying to conceive, promote medical mistrust, and contribute to increased inequities in SMW's fertility experiences. These experiences underscore the need for systematic research focused at addressing SMW couples' barriers to family expansion through clinical care (e.g., donor insemination (DI) and other clinically assisted reproductive methods) and uncovering new opportunities to guide changes in policy and clinical services.

Due to gaps in research and practice (Bushe & Romero, 2017; Ruppel, Karpman, Delk, Merryman, 2017; Schwartz & Baral, 2015), I will examine three critical components of coupled SMW's fertility experience and decision-making in this dissertation. Findings may be used to help reduce fertility and reproductive disparities and promote equitable models of care for SMW and their families (Renaud, 2005; Baptiste-Roberts, et al., 2017; Blanchfield & Patterson, 2015; Ard & Makadon, 2013; Schwartz & Baral, 2015). Specifically, I will (1) examine how coupled SMW addressed knowledge gaps related to clinically assisted reproduction, (2) describe barriers that become stressors related to CAR and analyze their manifestations of sexual minority

stress, and (3) describe adaptations to a co-constructed relationship timeline method used for dyadic data elicitation and graphic representations of SMW's narrative chronologies that focused on fertility experiences. These three underdeveloped areas of research within the scope of SMW's efforts to conceive and transition to parenthood address important issues in pathways to clinical care, and reproductive and family health among sexual minority women. The dynamic, and uncertain pathways to pregnancy among coupled SMW who use CAR create spaces for many individual and couple-level decisions, decisions informed by available information, barriers in pursuit of pregnancy, manifestations of sexual minority stress, and couples' shared experiences during their fertility journeys.

Positionality of the Researcher

Patricia Hill Collins writes in *Black Feminist Thought* (1990) "[e]ach group speaks from its own standpoint and shares its own partial, situated knowledge....individuals and groups forwarding knowledge claims without owning their position are deemed less credible than those who do" (1990, p. 236). According to standpoint theory, it is intellectually and ethically incumbent upon the researcher to acknowledge and share their specific social location to the extent that articulating that situatedness is possible. From this point of view, I share my situatedness as "researcher", queer cisfemale, married to another cisfemale, who has always lived in the United States. A few years ago, my wife and I decided to try to try to have a child. We are aware of our privilege as White, highly educated people in the United States. At the same time, we are aware of stigma and marginalization that comes with our sexual identities and relationship. When we started to try to conceive with the help of a fertility doctor in

Philadelphia, we had the economic resources to pay for CAR, which was all an out of pocket cost. Neither of us are infertile in biological terms—only social ones. We also had the knowledge and resources needed to initiate care with providers who have a positive reputation for high quality care for sexual and gender minorities. I was able to conceive and gestate after several tries with anonymous donor sperm. We are now parents of a small child. It is from this situatedness as married, queer, racially white, highly educated, socioeconomically privileged, mother, and researcher that I write this dissertation.

Terms

Below, I briefly define a series of terms used throughout this dissertation (see Table 1:1). Given their centrality I subsequently elaborate on three terms: *family*, *clinically assisted reproductions* (CAR), and *sexual minority women* (SMW to reinforce conceptual clarity and elucidate some of my own assumptions in the use of these terms.

Table 1.1 Brief Definition of Terms

Term	Definition
Family	The unit of two people who intend and take action to expand beyond the unit of two to include children through conception and birth.
Medically or clinically assisted reproduction (CAR)	Clinical techniques that aid in conception, including include donor insemination, drug therapies, in vitro fertilization, embryo donation, and genetic interventions.
Assisted reproductive technology (ART)	The Centers for Disease Control (CDC) defines ART as “all fertility treatments in which both eggs and embryos are handled” (CDC, 2017).
Sexual Minority Women (SMW)	Women who are non-heterosexual in sexual orientation, behavior, and attractions. May

	include lesbian, bisexual, queer, and other non-heterosexual identities.
Intrauterine Insemination (IUI)	Type of artificial insemination, in which sperm s delivered into uterine cavity by way of catheter around the time of ovulation improve chances of conceiving.
In vitro fertilization (IVF)	A form of ART in which mature eggs are retrieved from a person’s ovaries, followed by fertilization by sperm outside of the body. Embryo(s) are later transferred to uterus.

Family

Definitions of family have expanded beyond notions of units composed of opposite sex couples and the children they raise together, related by birth or adoption. The U.S. Census Bureau defines family as “a group of two people or more (one of whom is the householder) related by birth, marriage, or adoption and residing together” (U.S. Census Bureau, 2019). Yet, broader, more inclusive and diverse definitions of family have gained increased attention and legitimacy in the United States and worldwide. Those in intimate partnerships who may seek to have and raise children, included through birth or adoption is a more specific case of the more general definition of the term *family*. I use the term family in this dissertation to denote the unit of two people who intend and take action to expand beyond the unit of two to include children through conception and birth. While the use of the term in this paper has been circumscribed, it is not meant to be exclusive. The terms family formation and family expansion reflect the addition of children to the unit of two persons through intentions and actions associated with adding children to the units of partnered individuals who themselves constitute *families* as defined by the U.S. Census Bureau.

Sexual Minority Women (SMW)

Researchers, clinicians, policy makers, advocates, and community members use a variety of terms to characterize the population of interest in this dissertation. Consistent language within and across disciplines describing sexual and gender minority populations continues to present challenges in research involving sexual minorities. For the purpose of this dissertation I use the term *sexual minority women* to refer to cisfemales (i.e. gender identity is female, corresponding to female sex at birth) who identify as other than heterosexual (e.g. lesbian, bisexual, queer, or any other non-heterosexual identity) and whose attractions and sexual behaviors are not compatible with exclusive heterosexuality. The term *sexual minority* implies a sexual *majority* that is normative and expressed in opposite sex, heterosexual identities, attractions, and behaviors. However, sexual minority not only refers to sexual attractions and behaviors outside of a heterosexual cultural norm, it connotes important social networks, communities, and relationships (Young & Meyer, 2005). Moreover, it implies direct and indirect experience of stigma and marginalization among non-heterosexual couples that impacts lived experiences and influences decision-making (Young & Meyer, 2005; LeBlanc et al., 2015). Thus, throughout this dissertation, the use of SMW as a term will be inclusive of women who are cisfemale and in same-sex couples, who may identify as lesbian, bisexual, gay, queer or some other local term that differentiates them from heterosexual identity, attractions, and behaviors and do not live out heterosexual norms. This study focused on SMW in committed same-sex intimate partnerships.

In the context of same-sex partnerships among SMW, both partners often capable of trying to conceive, SMW may enact a variety of possible pregnancy permutations in

their family formation efforts. That is, if both partners have no reason to believe that physiological impediments to conception and gestation exist, both are capable of trying to conceive. The terms *gestational* and *non-gestational partners* can help to differentiate women in same-sex relationships who contribute differently to a pregnancy. However, I recognize that use of the labels “gestational” and “non-gestational” may communicate prioritization in the act of childbearing and birthing. For some same sex cisfemale couples, the same woman may not contribute to her egg(s) and physical gestation, labor, and delivery. For example, in the case of reciprocal-IVF (or co-IVF) the non-gestational partner undergoes a process of egg-extraction and contributes to embryo creation, while the gestational partner carries an embryo or embryos in her uterus and body are the vessel in which the pregnancy. Below is a two-by-two table to help differentiate possible pregnancy permutations among coupled SMW.

Table 1.2. Permutations of Pregnancy Contributions

		Gestational Parent	Non-Gestational Parent
Egg contribution	Yes	<i>Medicated ICI, IUI, or IVF.</i> Partner conceives with her eggs, bears, and births.	<i>Reciprocal IVF.</i> Egg contributor (genetic connection through ova).
	No	<i>Reciprocal IVF.</i> Partner bears and births. Her partner’s egg fertilized with donor sperm.	Non-gestational parent does not conceive, carry, or birth offspring using donor sperm (no biological or genetic contribution).

Clinically Assisted Reproduction (CAR)

This dissertation focuses the experience of coupled SMW building families through clinically assisted methods of conception. These women rely on clinicians including licensed midwives, nurses, and other health care providers (HCP) who offer reproductive guidance, medical assistance, diagnostics, and forms of assisted reproductive methods in their practices. The Centers for Disease Control (CDC) defines assisted reproductive technologies (ART) as “all fertility treatments in which both eggs and embryos are handled” (CDC, 2017). For many SMW who seek assistance from clinicians in their pregnancy efforts, neither eggs nor embryos are handled. Many seek their assistance for preconception testing, intrauterine insemination, ultrasound monitoring, or medications without the need for egg retrieval or fertilization outside of the body. This dissertation focuses on the experiences of SMW couples who have worked with the clinicians in their pursuits of pregnancy with donor sperm.

Health Equity and Reproductive Rights and Justice in Assisted Reproduction

SMW’s experiences with CAR viewed through the theoretical lenses of health equity and reproductive rights and justice, offers a social justice framework in the development of new knowledge. Inquiry into how SMW make fertility decisions sits at the intersection of increased (but challenged) LGBTQ civil rights and protections, expanded social acceptance and visibility of LGBTQ families, transformations in reproductive technologies and associated industries, and NIH calls for knowledge expansion and improved clinical practice for women and LGBTQ populations. While visibility and acceptance have increased, SMW couples continue to face challenges to family formation rooted in enduring marginalization, stigma, and discrimination of non-

heterosexual, gender non-normative identities and relationships, opposition to non-heterosexual parenthood, and hostile political environments that impact civil rights including parental rights. A health equity framework prioritizes the opportunity for all people, regardless of sexuality or gender identity, to achieve optimal health (Braveman et al., 2011; Gurmankin, Caplan, & Braverman, 2005). This includes fulfillment of reproductive and fertility goals (Mamo & Alston-Stepnitz, 2015; Mamo & Fishman, 2013).

Despite advances in health research and improved access to care for sexual and gender minorities (SGM), SMW's health remains under-researched and continuously impacted by barriers to care (Baptiste-Roberts et al., 2017; Coulter, Kenst, & Bowen, 2014; Health, Human Services Office of Disease, & Health, 2017a). Healthcare access and SMW health disparities may be exacerbated by non-inclusive policies and/or discriminatory practices (Bell, 2016; Graham, Berkowitz, Blum, Bockting, Bradford, de Vries, Garofalo, et al., 2011; Hequembourg & Farrell, 1999). Such discrimination includes refusal of care (Hayman, Wilkes, Halcomb, & Jackson, 2013; Karpman, Ruppel, & Torres, 2018; Ruppel, Karpman, Delk, & Merryman, 2017a) and system-level marginalization arising from heteronormative assumptions and structures (Blanchfield & Patterson, 2015; Malmquist & Nelson, 2014; Røndahl, Bruhner, & Lindhe, 2009), which may influence fertility efforts and pregnancy outcomes.

The technological landscape within which those seeking to grow families using healthcare facilitated assisted reproduction continues to evolve. Not only do SMW couples utilize biomedical interventions to help them to build families of their own, increasing technological capacities make this endeavor increasingly innovative and

ethically nuanced—like a brave new world. Moreover, beyond access to reproductive technologies, expansion of access to genetic information in the marketplace makes anonymity of gamete donors (and their offspring) harder to promise. This introduces new questions about kinship and the meaning of genetic ties and the definition of family (Mamo, 2018; Mamo & Alston-Stepnitz, 2015; Mamo & Fishman, 2013). While this work may not necessarily address such questions, it is relevant to name that they exist in the space where SMW couples are making decisions about how to conceive and form their own *de novo* families. Fertility decision making as it relates to constantly evolving reproductive technologies from which queer couples have to choose in building their families (Mamo, 2018; Mamo & Alston-Stepnitz, 2015; Mamo & Fishman, 2013).

Disparities in access to and utilization of assisted reproduction remain obdurate characteristics of the U.S. healthcare landscape. Population level research suggests that CAR is largely accessed by and accessible to upper and upper middle class, highly educated White women (Bell, 2016; Carpenter et al., 2020; Rogalin & Brooks, 2018). As with many other aspects of contemporary life in the United States, family formation has become increasingly medicalized (Bell, 2009, 2016). Medicalization has been defined as “a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illnesses or disorders” (Conrad, 1992, p. 209). A growing literature has examined the stratification of fertility medicalization relative to race and socioeconomic status (Bell, 2009, 2010, 2015). Chandra and colleagues, for example, drawing on National Survey of Family Growth (NSFG) data found that college educated women were four times more likely to access ART than non-college educated counterparts (Chandra, Copen, & Stephen, 2014). Blanchfield and Patterson (2015), also

used NSFG data and found that White women received medical assistance for reproductive impediments at double the rates of those who identified as non-White, sexual minority, or both. Further, mediation analysis revealed that insurance coverage and income only partially mediated the difference in access between non-White and White respondents, while it fully mediated the difference between heterosexual and sexual minority respondents.

When we consider women with multiple marginalized identities, the disparities in access to CAR are even greater (Bell, 2016). The intersection and overlap of such characteristics within the United States leaves SMW, non-White, and non-affluent individuals at a greater disadvantage to obtain clinical assistance to overcome social and/or physiological subfertility or infertility issues. This is important because for some SMW couples, reliance on clinical assistance may afford significant protections and be more cost-effective do-it-yourself home inseminations. One alternative to reliance on the fertility industry and medicalization includes use of known donor sperm and intracervical insemination (ICI) at home. While this approach may initially appear financially less costly if proximity is not a factor, it can also lead to complex legal, relational, emotional, social, and, at times, financial burdens. Thus, lack of access due to racial, ethnic, and socioeconomic barriers to CAR, places women of color and lower SES at a distinct disadvantage.

Though racial, ethnic, and socioeconomic disparities evidenced in CAR are not the focus of this dissertation, you will see their impact reflected in recruitment and data collection for this study. Indeed, almost all participants identified as racially White, while only one participant self-reported race as Black, and three reported Hispanic or Latina ethnicity.

Not only were the women in the study predominantly white, mean household income for the samples was \$133,700 (median= \$105,000, Range \$67,000-200,000) than the median national income: \$61,937 (U.S. Census, 2019)

(<https://www.census.gov/library/stories/2019/09/us-median-household-income-up-in-2018-from-2017.html>)

Background

Situating the Pursuit of Pregnancy among Coupled Sexual Minority Women

In recent decades, there has been a rise in the, presence, visibility, and acceptance of SMW-led families (Goldberg, Gartrell, & Gates, 2014; Hayman, Wilkes, Halcomb, et al., 2013; Hequembourg & Farrell, 1999; Renaud, 2007; Riskind & Tornello, 2017).

Some researchers have used the term *de novo* families to denote SMW-led, families that are planned, conceived, and birthed within the context of their same-sex female relationships as this population has received increasing attention in the academic literature (Hayman & Wilkes, 2017; Hayman, Wilkes, Halcomb, & Jackson 2015; McNair, 2004). These SMW-led families are formed with the intention of one or both women being genetically and physiologically connected to the conception, pregnancy, labor and delivery processes (Bushe & Romero, 2017; Hayman, Wilkes, Halcomb, & Jackson, 2014; Patterson & Riskind, 2010).

The “lesbian baby boom” (Dunne, 2000; Goldberg & Conron, 2018; Patterson, 1994) and national-level calls for increased health-related research and clinical attention to bridge sexual and gender minority (SGM) health disparities emerged (Graham, Berkowitz, Blum, Bockting, Bradford, de Vries, Garofalo, et al., 2011) along similar timelines. A persistent lack of attention within the health research community has led to minimal

research focused on health of sexual minority women (Coulter et al 2014). Updated strategic plans within institutes of the National Academies (National Institutes of Health, 2010, 2015) have recognized the need to reduce this gap.

The majority of literature published about SMW health has focused on disparities in the presence of illness and health behaviors (Diamant, Wold, Spritzer, & Gelberg, 2000; Graham, Berkowitz, Blum, Bockting, Bradford, de Vries, Garofalo, et al., 2011; Wingo, Ingraham, & Roberts, 2018), and more recently an uptick in research on increased pregnancy risks among sexual and gender minority youth (Carpenter et al., 2020; Charlton et al., 2013; Charlton et al., 2018; Goldberg, Reese, & Halpern, 2016; Hodson, Meads, & Bewley, 2017; Saewyc, 2014; Saewyc, Bearinger, Blum, & Resnick, 1999). Though SMW, like other women, pursue pregnancy and childbearing, there is relatively little written about this aspect of reproductive health. Beginning in the late 1970's SMW seeking healthcare assistance in fertility and other clinical settings to increased, as access to donor sperm and clinical insemination began to grow (Batz, 2016; Olesker & Walsh, 1984; Wismont & Reame, 1989). Compared to heterosexual infertility research and demographic studies on LGBTQ parenthood desires, intentions, and child development outcomes, relatively little empirical literature has focused on sexual minority women trying to conceive (Bushe & Romero, 2017; Chabot & Ames, 2004).

The research on SMW's pursuit of pregnancy and transition into parental roles falls into three main buckets: first, early scientific literature focused on the experiences and psychosocial outcomes of children raised primarily by lesbian mothers (Bos, Van Balen, & Van Den Boom, 2005; Brewaeys, Ponjaert, Van Hall, & Golombok, 1997;

Gartrell et al., 1999; Golombok & Tasker, 1994); second, a subset of studies has examined antenatal, childbearing, and postpartum experiences of SMW in healthcare institutions and hospital contexts (Dahl, Fylkesnes, Sørli, & Malterud, 2013; Hayman, Wilkes, Halcomb, et al., 2013; Malmquist, 2015b; McManus, Hunter, & Renn, 2006; Dahl & Spidsberg, 2007)); and, a third, more limited subset of the literature, has focused on the experiences of SMW partners who have alternatively been called “co-mothers” and “nonbiological mothers” (Wojnar & Katzenmeyer, 2014; Erlandsson et al., 2010; McKelvey, 2014; Dahl & Malterud, 2015). Other dimensions of fertility related experiences among SMW, however, deserve attention. Below I will review the literature relevant to the three aims of this dissertation in the context of the larger SMW family formation literature.

Information Seeking, Acquisition, Use

Information behavior theories, rooted in library and information sciences (LIS) and communications theory, acknowledge that humans engage in information related practices as a way to reduce uncertainty and bridge gaps in understanding or knowledge (Wilson, 2000; Pettigrew, et al.; Case 2007). Several models have been adapted or developed to focus on health-specific information behaviors (Case, 2007; Finney Rutten et al., 2019; Johnson, Donohue, Atkin, & Johnson, 1995).

Information behaviors (e.g., information seeking and avoidance, information dissemination, appraisal, and use) has been the subject of research related to fertility and assisted reproduction (Greil, 1997; Greil, Slauson-Blevins, & McQuillan, 2010; McQuillan, Greil, Shreffler, & Bedrous, 2015; Slauson-Blevins, 2011; Slauson-Blevins, McQuillan, & Greil, 2013). For cisgender, same-sex SMW couples who desire and intend

to pursue parenthood through pregnancy and childbearing, complex decision-making informed by wide-ranging health-related, legal, and financial and insurance considerations (Wingo, Ingraham, Roberts, 2018; Schwartz & Baral, 2015; Somers, et al., 2017) requires access to reliable and accurate information. Existing literature focused on fertility information behavior has attended primarily to heterosexual married couples. Research about fertility information seeking and use among SMW couples who try to conceive using CAR is limited. What is available has relied on publicly available information sourced from the Internet (Holland, 2018; Kreines, Farr, Chervenak, & Grünebaum, 2018a; Ruppel, Karpman, Delk, & Merryman, 2017; Wu et al., 2017).

Evidence suggests that people who encounter infertility search the internet about infertility causes and diagnoses (Haagen et al. 2003; Slauson-Blevins et al., 2013), the presence of reproductive endocrinology clinics (Weissman et al., 2000), or to learn about alternative treatments (Porter & Bhattacharya, 2008). Researchers have also found that online and in-person health seeking is common among those who experience fertility impediments (Slauson-Bevins, McQuillan, Greil, 2013). For example, in a 2013 study of a national probability sample of heterosexual women in the U.S. aged 25-45 with known fertility problems in the National Survey of Fertility Barriers (NSFB) data, researchers found that ever-infertile women sought information from both online and in-person sources. Type of health seeking varied by individual characteristics, symptom salience, social network factors, and resources. Findings demonstrated factors associated with health-seeking behaviors included positive attitudes toward medical science, salience of infertility symptoms (including primary) infertility, desire for a baby, intent to become pregnant, and perceptions of a problem. Notably, those with higher perceptions of stigma

for infertility sought information online rather than in-person. For SMW who often do not have evidence of physiological infertility, the stigma associated with wanting pregnancy and the need for assistance has to do with sexual orientation and same-sex relationships. For heterosexual couples and SMW couples alike, however, “[i]t is important to understand the full range of health-seeking behaviors among (in)fertile women” (Slauson-Blevins et al., 2013, p. 113).

Ruppel and colleagues (2017) conducted an innovative study of SMW maternal information exchanges using peer networks or online forums and compared LBQ forums to heterosexually oriented fertility and parenthood forums. Ruppel and colleagues argued that for those who have difficulty accessing traditional forms of medical care (including historically marginalized individuals) information vacuums may result. In the presence of information vacuums, the anonymity and open access to information serves these populations. They argue that while some scholars endorse the democratization of information access and dissemination provided by the Internet, the quality of information found in online settings can be flawed, unreliable, and remains difficult to regulate. Others argue that the volume of information that people find and filter online may become a barrier to accessibility (Cline & Haynes, 2001). Ruppel and colleagues sought to better understand information seeking by assessing LBQ gaps in knowledge about pregnancy and associated care, quality of information, and the perpetuation of misinformation and misconceptions that result from peer information sharing about trying to conceive in the absence of one partner being a source of sperm. They then evaluated the ways in which these might contribute to existing health disparities within this population. Ruppel and colleagues found that LBQ both sought and provided medical

advice, and discussed of similar experiences, pregnancy test related, and donor related issues. Interestingly, compared to heterosexual forums, LBQ forums were dominated by content related to seeking or providing medical advice.

Sexual Minority Stress

Meyer's Minority Stress Model (Meyer, 1995; Meyer, 2003), adapted from social stress theory has been applied to study of SGM health. The model describes the interactions between social and interpersonal stressors related to sexuality and gender, which may result in increased vulnerability to sexual prejudice and discrimination, anticipated rejection, sexual orientation concealment, internalized homonegativity resulting from hypervigilance, intrinsic monitoring regarding the need to conform to 'traditional' social expectations (Frost, Lehavot, & Meyer, 2015; Hequembourg & Brallier, 2009; Meyer, 2003; Meyer & Frost, 2013). Meyer's model, initially developed and applied to study mental health issues among sexual minorities, has been used widely among researchers who have employed minority stress frameworks to understand the experiences of SMW and the impact of minority stressors on mental and physical health (Lick, Durso, & Johnson, 2013). For example, research has found that SMW are at increased risk for depression and anxiety (Baams, Grossman, & Russell, 2015; Lehavot & Simoni, 2011), suicidal ideation (Baams et al., 2015), substance misuse (Lehavot & Simoni, 2011), smoking (Lehavot & Simoni, 2011), and binge and other disordered eating (Mason & Lewis, 2015; Watson, Grotewiel, Farrell, Marshik, & Schneider, 2015). To date, however, few researchers have explored the varied manifestations of CAR-related barriers as minority stressors in the lives of SMW (H. M. W. Bos, van Balen, van den Boom, & Sandfort, 2004).

SMW exercise intentionality and long-term conscious decision-making when seeking to build families of their own in the context of same-sex relationships and HCP assisted reproduction. Many pursue this course of action as a way to protect the integrity of their families, determine kinship in legal and social senses, and reify their social location and identities as parents of conceived children. Previous work has shown that coupled SMW report s in fertility and childbirth settings (Chapman, Wardrop, Zappia, Watkins, & Shields, 2012; Hayman, Wilkes, Halcomb, et al., 2013), feelings of exclusion from care in otherwise heteronormative environments (Chapman et al., 2012; Engström, Hägström-Nordin., Borneskog, & Almqvist , 2018; Gregg, 2018; Hammond, 2014; Hayman & Wilkes, 2017; Holland, 2018; Karpman et al., 2018; Malmquist & Nelson, 2014; Røndahl et al., 2009; Ryan, 2013), and refusal of care (Hayman, Wilkes, Halcomb, et al., 2013; Karpman et al., 2018; Ruppel et al., 2017a). Additional themes that have been uncovered in the literature on SMW-led *de novo* families include issues related to legal safeguards for families, perceived social support from communities and families of origin, and cost associated with TTC in the absence of a biomedical infertility diagnosis (Chabot & Ames, 2004; Gregg, 2018; Wojnar & Katzenmeyer, 2014).

Somers and colleagues, for example, shared findings from a qualitative study in 2017. The study conducted in Belgium with in-depth interviews of nine couples (both gestational and non-gestational partners; none of the couples used reciprocal IVF or mitochondrial transplant) who conceived using donor insemination techniques, elucidates the decision-making experiences of a sample of lesbian couples whose children ranged in age from 7 to 10 years old. Their focus included fertility treatment engagement (as individuals and the couple as a unit) and organization of family and found that meanings

related to genetic connection to offspring drove many decisions in the process of trying to conceive. In addition, they found that most of the couples sought to adapt to dominant heteronormative social norms in their family lives. Other work has focused on how SMW couples' perceptions of donor sperm (known or unknown donors) and its impact on families, intimacy, and children's understanding of their families (Donovan, 2000; Nordqvist, 2011a, 2011b; Nordqvist, 2012). In the United States, access to donor sperm through cryobanks was historically governed by the banks themselves and clinicians (Batz, 2016). Countries that provide degrees of nationalized healthcare, such as the United Kingdom and Sweden, granted SMW access to donor sperm and medicalized insemination and other ART only after regulatory changes (Almack, 2006; Donovan, 2000; Donovan & Wilson, 2008; Malmquist, 2015a).

A study of Canadian SMW who were actively trying or already had conceived and were parents to young children examined the donor insemination and fertility service needs as reported by the sample (Ross, Steele, & Epstein, 2006a). Recommendations provided in the report included SMW positive communications, infertility support specific to lesbian and bisexual women, consistent fee structures and minimization of associated costs, and expanded selection of donor semen reflecting more diversity.

The couple as a unit: methods that focus on Coupled SMW

Recognizing that couple-level interactions are linked to health-related decision-making (Jordan & Revenson, 1999; Peterson, Pirritano, Christensen, & Schmidt, 2008), this dissertation draws on the Actor Partner Interdependence Model (Kenny & Cook, 1999; Kenny & Ledermann, 2010) to frame couple narratives of fertility processes, and to conceptualize decision-making as they navigate CAR. The Actor-partner

Interdependence Model (APIM) has been used to conduct family research with romantic couples and parent-child dyads (Kenny & Ledermann, 2010; Peterson et al., 2008). APIM models suggest measurement of bidirectional effects in interpersonal relationships and assumes non-independence of observations. Couple dynamics in same-sex, cisfemale couples engaged in CAR may differ in some ways from heterosexual couples in approaches to fertility and prenatal decision-making, coping with the sexual minority stress associated with CAR, and the overall experience of navigating assisted reproduction. Fertility research focused on heterosexual couples provides evidence of different ways that couples as a unit affect individual fertility intentions and decisions, and how individual factors impact the couple (Miller, Severy, & Pasta, 2004; Miller, 1994). Other researchers have looked at the contribution of interaction and interdependence to fertility intention, behaviors, and outcomes (Jordan & Revenson, 1999; Maroufizadeh, Hosseini, Foroushani, Omani-Samani, & Amini, 2018; Stein, Willen, & Pavetic, 2014).

In the context of CAR, one individual does not receive treatment in isolation. Nordqvist drew on empirical data from in-depth interviews to explore how lesbian couples in the UK managed and perceived sperm donations (Nordqvist, 2011). SMW from this study reported management and negotiation of donor sperm (both in and outside of medical contexts) with respect to intrapersonal intimacies and sexual bodies, and the additional overlay of regulatory guidelines governing donor sperm utilization. Another study of couples who were actively trying to conceive focused on the negotiation of medical authority related to reproduction using online pregnancy journals from self-identified lesbian, queer, non-heterosexual couples (Holland, 2018). This study explored

online content from journals that couples constructed by couples about their fertility, pregnancy, and childbirth experiences. Very little has been written about the experiences of fertility and family planning among SMW couples who are actively in the process of engaging with CAR.

Existing literature that describes and analyzes SMW fertility, childbirth, and transitions to parenthood are largely retrospective reports while women are pregnant or after they have given birth, rather than during the process of trying to conceive. Several studies have sought to describe legitimization and formalization of parental roles among non-carrying mothers. Pelka (2009) for example, in a study of lesbian co-mothers, described the theme of jealousy with respect to relationships to offspring and unequal connection. Others have also noted the challenges to dynamics between mothers where genetic or biological asymmetries exist (Donovan, 2000; Donovan & Wilson, 2008; Ehrensaft, 2008; Goldberg, Perry-Jenkins, & Relationships, 2007). For example, Ben Ari and Livni point out the shift that some Israeli SMW experienced from an egalitarian dynamic between partners before the birth of a child to the sense of different statuses of motherhood afterward (2006). In contrast, Dahl and Malterud, in a study of Norwegian lesbians found that being women helped non-biological mothers relate to what their partners as mothers (2015).

A subset of research has investigated the experience of co-mothers or nonbiological or non-carrying mothers during the preconception, pregnancy, and postnatal periods, and the transition to parenthood (Cherguit, Burns, Pettie, & Tasker, 2013; Dahl & Malterud, 2015; Erlandsson, Linder, & Häggström-Nordin, 2010; Mason Bergen, Suter, & Daas, 2006; Wojnar & Katzenmeyer, 2014). While several other studies

sampled same-sex female couples (Chabot & Ames, 2004; Donovan & Wilson, 2008; Engström, Häggström-Nordin, Borneskog, & Almqvist, 2018; Malmquist & Nelson, 2014; Nordqvist, 2011; Somers et al., 2017; Spidsberg, 2007; Touroni & Coyle, 2002), only one published article about lesbian couples who had already conceived and/or had children, (Touroni & Coyle, 2002) to my knowledge, has evaluated couple decision-making using the couple as a unit of analysis in the SMW context. In this study, researchers found that partners considered the following when making fertility decisions: 1) internal factors to the couple such as concordance in desire to become parents; 2) external factors such as the changes in social and political context; 3) use of known versus anonymous donor sperm in conception; and 4) the perceived impact of biological links on parenting. Approaching interviews from the perspective of the couple acknowledges the qualities of trying to conceive as a negotiated and interdependent process (Touroni & Coyle, 2002).

The perspectives of SMW couples in which both cisfemales become mothers, but only one carries the pregnancy or contributes physiologically may reveal unexpected aspects of fertility decision-making that has clinical and policy implications. For example, after Obergefell (2015), the U.S. Supreme Court heard the case of Pavan v. Smith ("Pavan v. Smith," 2017), which dealt with listing names of parents in same-sex marriages on children's birth certificates. The Arkansas State Supreme Court ruled that non-biological parents of same-sex couples did not have the right to be listed on children's birth certificates because, they argued, such listings would *not reflect the biological parental relationship* to the child. In contrast, among heterosexual couples who employed assisted reproduction and in which both spouses may not have contributed biological material to the conception of the child, male partners were routinely listed as

“father” on birth certificates. Such an inconsistency in the application of the law overtly disregards the Obergefell decision, which held that same-sex married couples had equal access to marriage and “the constellation of benefits that the States have linked to marriage” in the same ways that different-sex couples have access to such benefits and rights. Such rights include parental rights in the case of conceiving and birthing a child to two parents. In Arkansas, the constellation of benefits includes listing both spouses on birth certificates (even when the different-sex couples use anonymous sperm donation for the purposes of conception in the context of marriage). Yet, the State Supreme Court ruled to allow differential application of the law for same and different-sex couples.

In the federal judiciary, the U.S. Supreme Court ruled in favor of Pavan (*Pavan v. Smith*, 2017) reversing an Arkansas Supreme Court ruling, indicating that the state did not need to include the female spouse of a woman giving birth on the child’s birth certificate. The Arkansas Supreme Court made this ruling even as it held that for different sex spouses in heterosexual couples who used artificial insemination (including donor insemination) to conceive a child, both parents would be named on the birth certificate. Yet, it aimed to deny the same marital rights to same-sex couples. While the U.S.S.C. overruled the state’s decision with a holding that according to the Obergefell v. Hodges (2015) decision that same-sex couples are entitled the “constellation of benefits that the State has linked to marriage” (Obergefell v. Hodges, 2015), other obstacles and challenges to same-sex couples marital and parental rights are afoot. The dissenting opinion written by Chief Justice Roberts, and joined by Justices Alito and Thomas, leaves open the possibility that if/when future cases arrive to the U.S.S.C. same-sex couples’ parental rights can be challenged. It is important to note here that both the carrying and non-

carrying mothers in the case of the Pavans considered and reified the rights only of married couples. For those couples who conceive and commit to raise a child together outside of the institution of marriage, the same rights are not necessarily extended, leaving open questions of kinship, family definitions, and the right to parent for LGBTQ families. These rulings set precedent and inform how healthcare and insurance policies develop in relation to sexual minority couples who want to have children and families.

At the present time, unlike sexual minority male couples, both cisfemale members of couples may contribute physiologically to conception efforts. ART allows for the process of reciprocal IVF wherein one partner contributes egg(s) that become fertilized, which the other partner then carries or provides gestation to the transplanted embryo(s). In this scenario, as we currently understand it, the partner who contributes the egg(s) provides a genetic contribution to offspring, while the other partner provides gestation and all of the biological elements involved in pregnancy. In this sense each partner contributes physiologically and biologically to family formation, allowing both to be “biologically connected” to offspring. Yet, despite the increasing popularity and utilization of such approaches, along with scientific outcomes literature that demonstrates the physiological feasibility and success rates of this process (Marina, et al., 2010), little has been written about a) the shared experience of SMW couples who pursue this path to pregnancy and reproduction or b) why couples pursue this path. Furthermore, absent from the literature are legal cases that rule on issues related to kinship, parentage, and the definitions of family in families formed through this form of ART.

Existing literature about SMW fertility decisions by couples in the U.S. has not addressed challenges to family formation that have come during the period of regulatory

shifts that came with the U.S. Supreme Court decision in *Obergefell v. Hodges* ("*Obergefell v. Hodges*," 2015) and subsequent pushback against marriage equality for same-sex couples. In the *Obergefell* decision, the definition of family substantively changed by defining legal marriage to include unions of same-sex couples. Additionally, considering the overlap of the impacts of *Obergefell* with the 2016 election and intensification of political acrimony that has come with it, challenges to parental rights of LGBTQ families have created uncertainty for existing and prospective parents. Yet, the effects of these tensions on beliefs about family formation and fertility decision making among sexual and gender minority couples have not been examined in the scientific literature.

Finally, studies that have investigated fertility treatment behaviors among SMW do not adequately address fertility and healthcare decision-making of SMW couples *as a unit*. Therefore, data collected at the couple-level about fertility decision-making will differ from data obtained from each partner individually (carrying and non-carrying partners) who will differently inhabit their identities when interviewed as dyads. From this perspective, the identity of the couple differs from the identity of the carrying and non-carrying mothers as individuals (Holmberg, Orbuch, & Veroff, 2003). The timeline exercise will help to anchor couples in their couple identity. Little published literature has focused on the needs and experiences of both the couple as a unit and the individual carrying and non- carrying mothers as a means by which to characterize and understand fertility decision making among SMW. This is particularly problematic as family planning research in heterosexual couples has found that both individual (e.g., prior healthcare experiences, fertility-related attitudes/norms) and couple (e.g., shared goals,

relationship duration) characteristics inform fertility decision-making (Kenny & Ledermann, 2010; Maroufizadeh et al., 2018; Peterson et al., 2008).

SMW's Pursuit of Pregnancy: Theoretical Approaches

Several theories have helped to provide structure to this study of coupled sexual minority women's efforts to conceive. I briefly describe the ways in which the theoretical models drawn upon (i.e. Integrated Behavior Model, Actor Partner Interdependence Model, information behavior theory, and Minority Stress Theory) pertain to and have been used in this dissertation.

Integrated Behavior Model

Pursuing pregnancy with CAR can be viewed as a behavior under volitional control and therefore suitable for study using behavioral models (Ajzen & Klobas, 2013; Fishbein, 1972; Fishbein & Jaccard, 1973). In view of behavioral models used to understand heterosexual fertility trends and variations using the individual as the unit of analysis (Miller & Pasta, 1995), this dissertation will draw on the Integrated Behavior Model of Behavioral Prediction (IBM) to conceptualize SMW's preconception and fertility experiences (Montano & Kasprzyk, 2015). An adapted conceptual model based on the Integrated Behavior Model (IBM) was used to conceptualize individual-level fertility behaviors of the carrying and non-carrying parents. IBM can help the researcher understand perceptions, intentions, motivations, individually integrated societal norms, attitudes (including internalized homophobia), sense of personal agency related to fertility treatment among the carrying partners and non-carrying partners. The series of behaviors involved in trying to conceive with CAR (Montano & Kasprzyk, 2015), are influenced by personal agency, sense of perceived norms, and personal

attitudes (McManus et al., 2006; Røndahl et al., 2009). In addition, the act of trying to conceive depends upon certain environmental constraints, habits, the salience of the behaviors involved, and knowledge to perform behaviors. TTC involves a collection of behaviors. For example, fertility discussions with new providers portend disclosure of sexual orientation of the couple. Disclosure requires an appropriate environment, previously developed habits involved in disclosure of sexuality, and knowledge to navigate the interaction effectively. Disclosure related anticipatory fear and actual negative experiences with healthcare providers and other clinicians to sexuality disclosure among SMW have been well documented (Spidsberg, 2007; Røndahl, Bruhner, and Lindhe, 2009; Lee, Taylor, Raitt, 2011; Spidsberg, & Sørli, 2012). For SMW couples who work with clinicians to try to conceive, disclosure is often a necessary part of the process. The example of disclosure-related experiences illustrates the larger contextual features and associated influence on individual-level perceived norms, personal agency, and attitudes about trying to conceive with CAR.

Integration of theoretical models: Application to current study

The sexual minority stress model, IBM, APIM, informed the design of the Queer Pregnancy Decision-making (QPYD) Study and the reports that follow in the three papers that compose this dissertation. Knowledge and information acquisition that support couples' paths to use CAR are a critical part of the process. Knowledge is often included in health behavior models as health behavior theories suggest that knowledge and habits influence enactment of health behaviors. In the synthesized conceptual model of IBM and APIM in the figure below, individual intention to TTC using clinical assistance connects to use of CAR. In this model, in addition to knowledge, physiological capacity may

impact use of CAR to try to conceive. As stated elsewhere, sexual minority stress may impact SMW in their everyday lives, but also in healthcare related experiences.

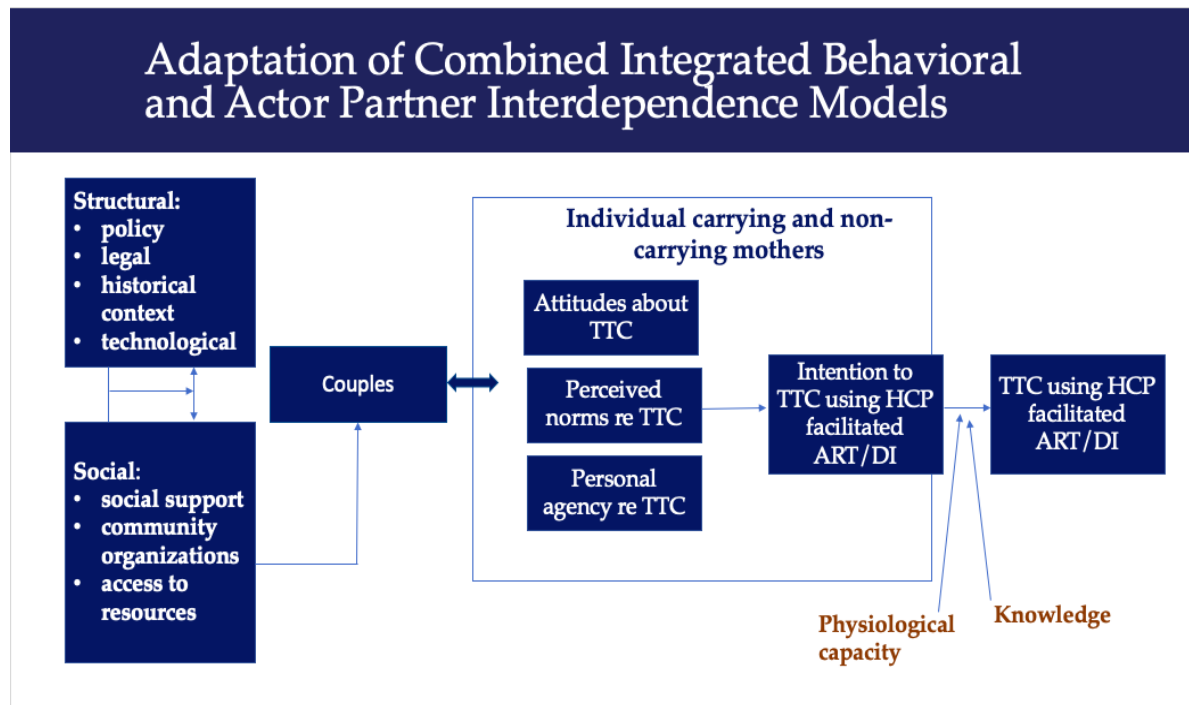


Figure 1.1 Conceptual Model

Description of Studies

The broad purpose of this dissertation is to explore individual and shared experiences and decision-making among coupled SWM who pursue pregnancy through HCP facilitated reproductive approaches in the current sociohistorical context of the United States. This moment has been characterized by changes in federal law that provide for equal access to the constellation of rights granted to married couples for same-sex couples, in addition to increasing political polarization and the implications of the current executive branch administrative agenda and policies. It is also characterized by increasingly rapid advancements in reproductive and genetic technologies used to assist in family formation. While aspects of the lived experience of SMW individuals and couples has grown in the literature in past decades, very little has examined the ways in

which couples who intend family formation through pregnancy navigate the stages in the process of trying to conceive. Using a three-paper approach, this dissertation will add to the growing body of literature on coupled SMW's experiences and healthcare decision making as they pursue pregnancy and family formation. This dissertation will add to existing literature through qualitative investigation and methodological innovations: (1) provides an overview of SMW's accounts of the iterative and dynamic information navigation process involved in CAR; (2) describe barriers to CAR and their manifestations as sexual minority stress; and (3) provides an analysis of the application of an innovative adaptation to dyadic timelines used for SMW couple-level data elicitation and visual representations of data. Below, I provide an overview of each paper:

Chapter II: Sexual Minority Women's Fertility Health Information Seeking: Trying to Conceive in an Information Infertile Environment

The purpose of *Chapter II* is to explore fertility related health information behaviors (identification of information needs, information seeking, information appraisal and use) among cisfemales in same-sex intimate partnerships. For coupled sexual minority women (SMW), recognition of information needs and information seeking are often a first crucial step in fulfilling desires for family formation and pregnancy. Drawing on data from semi-structured interviews with 20 self-identified SMW from 10 couples (10 gestational and 10 non-gestational partners) who live in all regions of the United States, I used a step-by-step approach to thematic analysis (Braun & Clarke, 2006) to examine themes associated with women's information needs, seeking, and use. Using a mixed inductive and deductive analysis to derive themes. The results of the study offer suggestions for clinicians who interact with SMW couples in ART contexts, a policy

suggestion for fertility industry stakeholders who develop and communicate information about CAR. Additionally, for community and advocacy organizations who seek to improve fertility care for this population, contribute to health literacy, as well as to improve access to care, results may provide insights to help develop information-based tools.

Chapter III: “Limits not for other people”: Barriers and minority stress in queer women’s pursuits of pregnancy

The purpose of *Chapter III* is to examine how coupled SMW experience barriers to CAR as a minority stress processes. This exploratory qualitative study aimed a) to enumerate the barriers to pregnancy identified by SMW participants through an online survey, and b) examine how barriers manifested as stress for coupled SMW participants based on in-depth interview data. Qualitative content analysis of responses to the open-ended survey question, “*What has made it difficult to try to conceive using clinical assistance?*” supported the first objective of this chapter--enumeration of barriers. Guided by minority stress theory, I applied thematic analysis to analysis relevant interview data to ascertain how barriers manifested as minority stress during the process of pregnancy planning and fertility efforts. The results of this study contribute to formation of guidance related to structural, clinical, and individual level changes. These include suggestions for strategies to reduce the prejudicial frameworks that marginalize SMW in CAR contexts, training clinicians to provide care with greater understanding and humility, and to leverage existing coping mechanisms that SMW find effective in navigating fertility related minority stress.

Chapter IV: Relationship Timeline Method Applied to Couple Sexual Minority Women Pursuing Pregnancy

The purpose of Chapter IV is to describe an adaptation to a relationship timeline method as it was applied to coupled SMW focused on fertility and family formation. Couple co-constructed relationship timelines were used to elicit milestones, shared decision making and shared lived experiences in the context of an intimate relationship, with a focus on their shared desire, intentions, and actions involved in family formation. This chapter examines the methodologic significance of integrated relationship timelines constructed by 10 SMW couples who participated in a study examining their experiences with clinically assisted reproduction. I adapted an established relationship timeline method to serve as the basis for dyadic interview data elicitation, construction of graphic representation of complex medical processes, and for analysis of qualitative narrative data. This dyadic approach provided couples opportunities to move from individual identities to their shared couple identity-- to move from “I” to “we” in their articulation of fertility experiences. Co-created relationship timelines offered a useful and practical approach for elicitation of rich, temporally situated, contextually based data, granting unique insights into the shared lived experience of couples engaged in a medical process and healthcare decision-making. Results from the study offer guidance for clinician understanding of coupled SMW and introduce methods that may be adapted for clinical use in working with coupled SMW who use CAR.

Nursing and Public Health Perspectives

From the scientific literature in this area we know that research of SMW efforts to conceive lends itself to multidisciplinary investigation. Nursing science and nursing

practice are well positioned to inform strategies to promote holistic approaches to CAR and movement toward equity. In the view of nurses, patients and their families experience their health and healthcare filtered through a holistic perspective of lived lives, shaped by context and meaning making. Nurses are well-positioned to foster inclusive healthcare environments that offer both culturally and structurally informed approaches to care delivery. In fertility settings, patients see RNs, NPs, and midwives along with other clinicians across the continuum of care. Furthermore, in their communication with clinics, patients most consistently speak or communicate via email with nurses. Those who work with these aspiring parents may improve delivery of care through understanding the unique considerations, decisions, and shared experiences among SMW partners as individuals and the couple as a unit. Such understanding of the experiences of this subpopulation may be transferable to other subpopulations who may face similar challenges or share experiences in trying to conceive and interactions with healthcare institutions. Moreover, the research of shared experiences among couples and other dyads, may be transferable to other healthcare contexts including that of chronic disease, terminal disease, and acute illness wherein the individual is not the only one having an experience of healthcare, treatment, or healthcare related decision making.

In line with NIH strategic goals (IOM, 2011; National Institutes of Health, 2015), the QPYD study contributes to the broader examination of critical aspects towards improved understanding how SMW reproductive health, and how same-sex couples (including carrying and non-carrying mothers) perceive family formation and fertility decision-making processes and the factors that help or hinder their ability to become parents. Increased visibility of couples in mainstream media, marketing to SMW couples

by fertility clinics and law firms (Nölke, 2018), and federally recognized marriage rights for same- sex couples ("Obergefell v. Hodges," 2015) suggest that family formation within this population will persist. Nevertheless, SMW do not fit the frameworks of existing clinical approaches to fertility care, nor the assumptions that clinicians have about who seeks CAR and why. As a result, the demands and inequities faced by SMW who pursue CAR in hopes of fulfilling pregnancy and parenthood aspirations create challenging environments in which to try to fulfill valued goals which are highly connected to physical health and well-being, along with biomedical interventions. Additionally, challenges to family formation and parental rights related in part to enduring prejudices, hegemonic heteronormativity, experiences of marginalization and stigmatization, opposition to SGM parenthood, and increasing hostility in the U.S. speak to the importance of this research. The following Chapters fill small but important gap in the literature, contribute to science of reproductive health among SGM, and provide important formative evidence for future analyses that compare individual level data to couple level data. This study led to new findings, generated additional research questions, and will allow for the development of survey items that can effectively reach SMW couples and healthcare providers.

References

- Ajzen, I., & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. *J Demographic Research*, 29, 203-232.
- Almack, K. (2006). Seeking sperm: Accounts of lesbian couples' reproductive decision-making and understandings of the needs of the child. *International Journal of Law, Policy and the Family*, 20(1), 1-22. doi:10.1093/lawfam/ebi030
- Ard, K. L., & Makadon, H. J. (2012). Improving the health care of lesbian, gay, bisexual and transgender (LGBT) people: Understanding and eliminating health disparities. *The Fenway Institute*.
- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental psychology*, 51(5), 688.
- Badgett, M. L. (2009). *When gay people get married: What happens when societies legalize same-sex marriage*: NYU Press.
- Baptiste-Roberts, K., Oranuba, E., Werts, N., & Edwards, L. V. (2017). Addressing Health Care Disparities Among Sexual Minorities. *Obstetrics and gynecology clinics of North America*, 44(1), 71-80. doi:S0889-8545(16)30092-4 [pii]
- Batza, K. (2016). From sperm runners to sperm banks: Lesbians, assisted conception, and challenging the fertility industry, 1971–1983. *Journal of Women's History*, 28(2), 82-102.
- Bell, A. V. (2009). “It’s Way out of my League” Low-income Women’s Experiences of Medicalized Infertility. *Gender & Society*, 23(5), 688-709.
- Bell, A. V. (2010). Beyond (financial) accessibility: inequalities within the medicalisation of infertility. *Sociology of health & illness*, 32(4), 631-646.
- Bell, A. V. (2014). “I think about Oprah” social class differences in sources of health information. *Qualitative health research*, 24(4), 506-516.
- Bell, A. V. (2015). Overcoming (and maintaining) reproductive difference: Similarities in the gendered experience of infertility. *Qualitative Sociology*, 38(4), 439-458.
- Bell, A. V. (2016). The margins of medicalization: Diversity and context through the case of infertility. *Social science & medicine* (1982), 156, 39-46. doi:10.1016/j.socscimed.2016.03.005 [doi]
- Bell, K. (2012). An exploration of women's psychosocial support needs in the context of assisted reproduction. *Social Work in Health Care*, 51(8), 695-709.
- Ben-Ari, A., & Livni, T. (2006). Motherhood Is Not a Given Thing: Experiences and Constructed Meanings of Biological and Nonbiological Lesbian Mothers. *Sex Roles*, 54(7), 521-531. doi:10.1007/s11199-006-9016-0
- Berends, L. (2011). Embracing the visual: Using timelines with in-depth interviews on substance use and treatment. *The Qualitative Report*, 16(1), 1-9.
- Berg, C. A., & Upchurch, R. (2007). A developmental-contextual model of couples coping with chronic illness across the adult life span. *Psychological bulletin*, 133(6), 920.
- Blanchfield, B., & Patterson, C. J. (2015). Racial and sexual minority women's receipt of medical assistance to become pregnant. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, 34(6), 571-579. doi:10.1037/hea0000124 [doi]

- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C., & Verhaak, C. (2012a). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C. J. M., & Verhaak, C. (2012b). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Bonvicini, K. A. (2017). LGBT healthcare disparities: What progress have we made? *Patient Education and Counseling*, 100(12), 2357-2361.
- Bonvicini, K. A., & Perlin, M. J. (2003). The same but different: clinician–patient communication with gay and lesbian patients. *Patient Education and Counseling*, 51(2), 115-122.
- Borneskog, C., Sydsjo, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: a descriptive study. *BJOG : an international journal of obstetrics and gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214 [doi]
- Borneskog, C., Sydsjö, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: A descriptive study. *BJOG: An International Journal of Obstetrics and Gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214
- Bos, H. M. W., Van Balen, F., & Van Den Boom, D. C. (2005). Lesbian families and family functioning: An overview. *Patient Education and Counseling*, 59(3), 263-275. doi:10.1016/j.pec.2004.10.006
- Bos, H. M. W., van Balen, F., van den Boom, D. C., & Sandfort, T. G. M. (2004). Minority stress, experience of parenthood and child adjustment in lesbian families. *Journal of Reproductive and Infant Psychology*, 22(4), 291-304. doi:10.1080/02646830412331298350
- Bostock v. Clayton County, GA, 590 1 (United States Supreme Court 2020).
- Boyd, C. J., Hill, E., Holmes, C., & Purnell, R. (1998). Putting drug use in context: Life-lines of African American women who smoke crack. *Journal of Substance Abuse Treatment*, 15(3), 235-249.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. *Handbook of Research Methods in Health Social Sciences*, 843-860.
- Braveman, P. A., Kumanyika, S., Fielding, J., LaVeist, T., Borrell, L. N., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: the issue is justice. *American Journal of Public Health*, 101(S1), S149-S155.
- Brewaey, A., Ponjaert, I., Van Hall, E. V., & Golombok, S. (1997). Donor insemination: child development and family functioning in lesbian mother families. *Human reproduction (Oxford, England)*, 12(6), 1349-1359.
- Bushe, S., & Romero, I. L. (2017). *Lesbian pregnancy: care and considerations*. Paper presented at the Seminars in Reproductive Medicine.
- Campagne, D. M. (2006). Should fertilization treatment start with reducing stress? *Human Reproduction*, 21(7), 1651-1658.
- Campbell, S. (2002). Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self. In: JSTOR.

- Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., Hendrick, C. E., & Higgins, J. A. (2020). Pregnancy (im) possibilities: identifying factors that influence sexual minority women's pregnancy desires. *Social Work in Health Care*, 59(3), 180-198.
- Carvalho, P. G. C. d., Cabral, C. d. S., Ferguson, L., Gruskin, S., & Diniz, C. S. G. (2019). 'We are not infertile': challenges and limitations faced by women in same-sex relationships when seeking conception services in São Paulo, Brazil. *Culture, health & sexuality*, 21(11), 1257-1272.
doi:10.1080/13691058.2018.1556343
- Case, D. O. (2007). *Looking for Information. A Survey of Research on Information Seeking, Needs and Behavior*. (2nd Ed. ed.). Amsterdam: Elsevier.
- Chabot, J. M., & Ames, B. D. (2004). "It wasn't 'let's get pregnant and go do it':" Decision Making in Lesbian Couples Planning Motherhood via Donor Insemination. *Family Relations*, 53(4), 348-356.
- Chandra, A., Copen, C. E., & Stephen, E. H. (2014). *Infertility service use in the United States: data from the National Survey of Family Growth, 1982-2010: US* Department of Health and Human Services, Centers for Disease Control and
- Chapman, R., Wardrop, J., Zappia, T., Watkins, R., & Shields, L. (2012). The experiences of Australian lesbian couples becoming parents: deciding, searching and birthing. *Journal of Clinical Nursing*, 21(13-14), 1878-1885.
- Charlton, B. M., Corliss, H. L., Missmer, S. A., Rosario, M., Spiegelman, D., & Austin, S. B. (2013). Sexual orientation differences in teen pregnancy and hormonal contraceptive use: an examination across 2 generations. *American Journal of Obstetrics & Gynecology*, 209(3), 204. e201-204. e208.
- Charlton, B. M., Roberts, A. L., Rosario, M., Katz-Wise, S. L., Calzo, J. P., Spiegelman, D., & Austin, S. B. (2018). Teen pregnancy risk factors among young women of diverse sexual orientations. *Pediatrics*, 141(4).
- Chaudoir, S. R., Wang, K., & Pachankis, J. E. (2017). What reduces sexual minority stress? A review of the intervention "toolkit". *Journal of Social Issues*, 73(3), 586-617.
- Cherguit, J., Burns, J., Pettie, S., & Tasker, F. (2013). Lesbian co-mothers' experiences of maternity healthcare services. *Journal of advanced nursing*, 69(6), 1269-1278.
- Chrisler, J. C. (2014). A reproductive justice approach to women's health. *Analyses of Social Issues and Public Policy*, 14(1), 205-209.
- Cline, R. J., & Haynes, K. M. (2001). Consumer health information seeking on the Internet: the state of the art. *Health education research*, 16(6), 671-692.
- Corriher, B. (2016). Putting Equality to a Vote: Individual Rights, Judicial Elections, and the Arkansas Supreme Court. *UALR L. Rev.*, 39, 591.
- Coulter, R. W., Kenst, K. S., & Bowen, D. J. (2014). Research funded by the National Institutes of Health on the health of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health*, 104(2), e105-e112.
- Courtright, C. (2007). Context in information behavior research. *Annual review of information science and technology*, 41(1), 273-306.
- Cousineau, T. M., & Domar, A. D. (2007). Psychological impact of infertility. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 21(2), 293-308.
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and

- violence against women of color. *Stan. L. Rev.*, 43, 1241.
- Creswell, J. W., & Miller, D. L. J. T. i. p. (2000). Determining validity in qualitative inquiry. 39(3), 124-130.
- Cwikel, J., Gidron, Y., & Sheiner, E. (2004). Psychological interactions with infertility among women. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 117(2), 126-131.
- Dahl, B., Fylkesnes, A. M., Sørli, V., & Malterud, K. (2013). Lesbian women's experiences with healthcare providers in the birthing context: a meta-ethnography. *Midwifery*, 29(6), 674-681.
- Dahl, B., & Malterud, K. (2015). Neither father nor biological mother. A qualitative study about lesbian co-mothers' maternity care experiences. *Sexual & Reproductive Healthcare*, 6(3), 169-173.
- Dancet, E., Van Empel, I., Rober, P., Nelen, W., Kremer, J., & d'Hooghe, T. (2011). Patient-centred infertility care: a qualitative study to listen to the patient's voice. *Human Reproduction*, 26(4), 827-833.
- de Vries, B. (2013). Lifelines: A review of content and context. *The International Journal of Reminiscence and Life Review*, 1(1), 31-35.
- de Vries, B., LeBlanc, A. J., Frost, D. M., Alston-Stepnitz, E., Stephenson, R., & Woodyatt, C. R. (2017). The relationship timeline: A method for the study of shared lived experiences in relational contexts. *Advances in life course research*, 32, 55-64.
- Dedoose Version 8.3.17. (2019). Retrieved from www.dedoose.com
- Dervin, B. (2015). Dervin's Sense-Making Theory. In *Information seeking behavior and technology adoption: Theories and trends* (pp. 59-80): IGI Global.
- Dervin, B., & Naumer, C. M. (2017). Sense-making. In *Encyclopedia of library and information sciences* (pp. 4113-4124): CRC Press.
- Dervin, B., & Nilan, M. (1986). Information needs and uses. *Annual review of information science and technology*, 21, 3-33.
- Devlin, N., & Parkin, D. (2003). Funding fertility: issues in the allocation and distribution of resources to assisted reproduction technologies. *Human Fertility*, 6(sup2), S2-S6.
- Diamant, A. L., Wold, C., Spritzer, K., & Gelberg, L. (2000). Health behaviors, health status, and access to and use of health care: a population-based study of lesbian, bisexual, and heterosexual women. *Archives of family medicine*, 9(10), 1043.
- Diamond-Smith, N., Warnock, R., & Sudhinaraset, M. (2018). Interventions to improve the person-centered quality of family planning services: a narrative review. *Reproductive health*, 15(1), 144.
- Domar, A. D. (2020). Patient Retention, Nursing Retention: The Importance of Empathic Communication and Nursing Support. *Patient-Centered Assisted Reproduction: How to Integrate Exceptional Care with Cutting-Edge Technology*, 146.
- Donovan, C. (2000). Who needs a father? Negotiating biological fatherhood in British lesbian families using self-insemination. *Sexualities*, 3(2), 149-164.
- Donovan, C., & Wilson, A. R. (2008). Imagination and integrity: decision-making among lesbian couples to use medically provided donor insemination. *Culture, health & sexuality*, 10(7), 649-665. doi:10.1080/13691050802175739 [doi]
- Donovan, C., & Wilson, A. R. (2008). Imagination and integrity: decision-making among

- lesbian couples to use medically provided donor insemination. *Culture, health & sexuality*, 10(7), 649-665.
- Doyal, L. (1995). *What makes women sick: Gender and the political economy of health*: Macmillan International Higher Education.
- Dudgeon, M. R., & Inhorn, M. C. (2004). Men's influences on women's reproductive health: medical anthropological perspectives. *Social Science & Medicine*, 59(7), 1379-1395.
- Dunne, G. A. (2000). Opting into motherhood: Lesbians blurring the boundaries and transforming the meaning of parenthood and kinship. *Gender & Society*, 14(1), 11-35.
- Ehrensaft, D. (2008). Just molly and me, and donor makes three: Lesbian motherhood in the age of assisted reproductive technology. *Journal of Lesbian Studies*, 12(2-3), 161-178. doi:10.1080/10894160802161331
- Eisikovits, Z., & Koren, C. (2010). Approaches to and outcomes of dyadic interview analysis. *Qualitative health research*, 20(12), 1642-1655.
- Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., . . . Kjellgren, K. (2011). Person-centered care—ready for prime time. *European journal of cardiovascular nursing*, 10(4), 248-251.
- Elder Jr, G. H. (1994). Time, human agency, and social change: Perspectives on the life course. *Social psychology quarterly*, 4-15.
- Elder Jr, G. H. (1998). The life course as developmental theory. *Child development*, 69(1), 1-12.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A.-L. (2018). Mothers in same-sex relationships describe the process of forming a family as a stressful journey in a heteronormative world: a Swedish grounded theory study. *Maternal and child health journal*, 22(10), 1444-1450.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A. L. . (2018). Mothers in Same-Sex Relationships Describe the Process of Forming a Family as a Stressful Journey in a Heteronormative World: A Swedish Grounded Theory Study. *Maternal and child health journal*, 1-7.
- Erlandsson, K., Linder, H., & Häggström-Nordin, E. (2010). Experiences of gay women during their partner's pregnancy and childbirth. *British journal of midwifery*, 18(2), 99-103.
- Everett, B. G., McCabe, K. F., & Hughes, T. L. (2017). Sexual Orientation Disparities in Mistimed and Unwanted Pregnancy Among Adult Women. *Perspect Sex Reprod Health*, 49(3), 157-165. doi:10.1363/psrh.12032
- Ezabadi, Z., Mollaahmadi, F., Sazvar, S., Vesali, S., & Omani-Samani, R. (2019). Satisfaction with information provided to infertile patients who undergo assisted reproductive treatment. *International journal of fertility & sterility*, 12(4), 324.
- Fals-Stewart, W., Birchler, G. R., & Kelley, M. L. (2003). The timeline followback spousal violence interview to assess physical aggression between intimate partners: Reliability and validity. *Journal of Family Violence*, 18(3), 131-142.
- Farquhar, C. M., Bhattacharya, S., Repping, S., Mastenbroek, S., Kamath, M. S., Marjoribanks, J., & Boivin, J. (2019). Female subfertility. *Nature Reviews Disease Primers*, 5(1), 1-21.
- Finney Rutten, L. J., Blake, K. D., Greenberg-Worisek, A. J., Allen, S. V., Moser, R. P.,

- & Hesse, B. W. (2019). Online Health Information Seeking Among US Adults: Measuring Progress Toward a Healthy People 2020 Objective. *Public Health Reports*, 134(6), 617-625.
- Fishbein, M. (1972). Toward an understanding of family planning behaviors. *Journal of Applied Social Psychology*, 2(3), 214-227.
- Fishbein, M., & Jaccard, J. J. (1973). Theoretical and methodological considerations in the prediction of family planning intentions and behavior. *Representative Research in Social Psychology*.
- Fox, S., & Jones, S. (2009). The social life of health information. Pew internet & American life project. *Washington, DC*.
- Frank, G. (1984). Life history model of adaptation to disability: the case of a 'congenital amputee'. *Social Science & Medicine*, 19(6), 639-645.
- Fredriksen-Goldsen, K. I., Kim, H.-J., Barkan, S. E., Balsam, K. F., & Mincer, S. L. (2010). Disparities in health-related quality of life: a comparison of lesbians and bisexual women. *American Journal of Public Health*, 100(11), 2255-2261.
- Fredriksen-Goldsen, K. I., Simoni, J. M., Kim, H.-J., Lehavot, K., Walters, K. L., Yang, J., . . . Muraco, A. (2014). The health equity promotion model: Reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. *American Journal of Orthopsychiatry*, 84(6), 653.
- Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of behavioral medicine*, 38(1), 1-8.
- Gameiro, S., Boivin, J., Dancet, E., de Klerk, C., Emery, M., Lewis-Jones, C., . . . Verhaak, C. M. (2015). ESHRE guideline: routine psychosocial care in infertility and medically assisted reproduction—a guide for fertility staff. *Human Reproduction*, 30(11), 2476-2485.
- Gameiro, S., Boivin, J., Peronace, L., & Verhaak, C. M. (2012). Why do patients discontinue fertility treatment? A systematic review of reasons and predictors of discontinuation in fertility treatment. *Human reproduction update*, 18(6), 652-669.
- Gameiro, S., Canavarro, M. C., & Boivin, J. (2013). Patient centred care in infertility health care: direct and indirect associations with wellbeing during treatment. *Patient Education and Counseling*, 93(3), 646-654.
- Gartrell, N., Banks, A., Hamilton, J., Reed, N., Bishop, H., & Rodas, C. (1999). The National Lesbian Family Study: 2. Interviews with mothers of toddlers. *The American Journal of Orthopsychiatry*, 69(3), 362-369.
- Gleicher, N., Vanderlaan, B., Karande, V., Morris, R., Nadherney, K., & Pratt, D. (1996). Infertility treatment dropout and insurance coverage. *Obstetrics & Gynecology*, 88(2), 289-293.
- Goldberg, A. E., Gartrell, N. K., & Gates, G. J. (2014). Research report on LGB-parent families.
- Goldberg, A. E., Perry-Jenkins, M. J. J. o. S., & Relationships, P. (2007). The division of labor and perceptions of parental roles: Lesbian couples across the transition to parenthood. 24(2), 297-318.
- Goldberg, A. E., & Sweeney, K. K. (2019). LGBTQ parent families. In M. C. B. H. Fiese, K. Deater-Deckard, E. N. Jouriles, & M. A. Whisman (Ed.), *APA handbooks in psychology®. APA handbook of contemporary family psychology:*

- Foundations, methods, and contemporary issues across the lifespan* (pp. 743-760): American Psychological Association.
- Goldberg, S. K., & Conron, K. J. (2018). *How many same-sex couples in the US are raising children?* : Williams Institute, UCLA School of Law.
- Goldberg, S. K., Reese, B. M., & Halpern, C. T. (2016). Teen Pregnancy Among Sexual Minority Women: Results From the National Longitudinal Study of Adolescent to Adult Health. *Journal of Adolescent Health, 59*(4), 429-437. doi:10.1016/j.jadohealth.2016.05.009
- Goldenberg, T., Finneran, C., Andes, K. L., & Stephenson, R. (2016). Using participant-empowered visual relationship timelines in a qualitative study of sexual behaviour. *Journal of Global Public Health, 11*(5-6), 699-718.
- Golombok, S., & Tasker, F. (1994). Donor insemination for single heterosexual and lesbian women: issues concerning the welfare of the child. *Human reproduction (Oxford, England), 9*(11), 1972-1976.
- Graham, R., Berkowitz, B., Blum, R., Bockting, W., Bradford, J., de Vries, B., . . . Kasprzyk, D. J. W., DC: Institute of Medicine. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding.
- Gramling, L. F., & Carr, R. L. (2004). Lifelines: A life history methodology. *Nursing Research, 53*(3), 207-210.
- Gray, J., & Dagg, J. (2018). Using reflexive lifelines in biographical interviews to aid the collection, visualisation and analysis of resilience. *Contemporary Social Science, 1*-16.
- Greenfeld, D. A., & Seli, E. (2016). Same-sex reproduction: Medical treatment options and psychosocial considerations. *Current Opinion in Obstetrics and Gynecology, 28*(3), 202-205. doi:10.1097/GCO.0000000000000266
- Gregg, I. (2018). The Health Care Experiences of Lesbian Women Becoming Mothers. *Nursing for Women's Health, 22*(1), 40-50. doi:10.1016/j.nwh.2017.12.003
- Greil, A. L. (1997). Infertility and psychological distress: a critical review of the literature. *Social Science & Medicine, 45*(11), 1679-1704.
- Greil, A. L., & McQuillan, J. (2004). Help-seeking patterns among subfecund women. *Journal of Reproductive and Infant Psychology, 22*(4), 305-319.
- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: a review of recent literature. *Sociology of health & illness, 32*(1), 140-162.
- Gurmankin, A. D., Caplan, A. L., & Braverman, A. M. (2005). Screening practices and beliefs of assisted reproductive technology programs. *Fertility and sterility, 83*(1), 61-67.
- Hall, K. S., Samari, G., Garbers, S., Casey, S. E., Diallo, D. D., Orcutt, M., . . . McGovern, T. (2020). Centring sexual and reproductive health and justice in the global COVID-19 response. *The lancet, 395*(10231), 1175-1177.
- Hammarberg, K., Zosel, R., Comoy, C., Robertson, S., Holden, C., Deeks, M., & Johnson, L. (2017). Fertility-related knowledge and information-seeking behaviour among people of reproductive age: a qualitative study. *Human Fertility, 20*(2), 88-95.
- Hammond, C. J. B. J. o. M. (2014). Exploring same sex couples' experiences of maternity care. *22*(7), 495-500.
- Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Stigma and minority stress as social

- determinants of health among lesbian, gay, bisexual, and transgender youth: research evidence and clinical implications. *Pediatric Clinics*, 63(6), 985-997.
- Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative Research in Psychology*, 12(2), 91-106.
- Hayman, B., & Wilkes, L. (2017). De novo Families: Lesbian Motherhood. *Journal of homosexuality*, 64(5), 577-591. doi:10.1080/00918369.2016.1194119
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2013). Marginalised mothers: Lesbian women negotiating heteronormative healthcare services. *Contemporary Nurse*, 44(1), 120-127.
- Hayman, B., Wilkes, L., Jackson, D., & Halcomb, E. (2013). De Novo Lesbian Families: Legitimizing the Other Mother. *Journal of GLBT Family Studies*, 9(3), 273-287. doi:10.1080/1550428X.2013.781909
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2015). Lesbian Women Choosing Motherhood: The Journey to Conception. *Journal of GLBT Family Studies*, 11(4), 395-409. doi:10.1080/1550428X.2014.921801
- Health, U. S. D. o., Human Services Office of Disease, P., & Health, P. (2017). Healthy People 2020. 2017(February).
- Hequembourg, A. L., & Brallier, S. A. (2009). An exploration of sexual minority stress across the lines of gender and sexual identity. *Journal of homosexuality*, 56(3), 273-298.
- Hequembourg, A. L., & Farrell, M. P. (1999). Lesbian motherhood: Negotiating marginal-mainstream identities. *Gender & Society*, 13(4), 540-557.
- Hodson, K., Meads, C., & Bewley, S. (2017). Lesbian and bisexual women's likelihood of becoming pregnant: a systematic review and meta-analysis. *BJOG: An International Journal of Obstetrics and Gynaecology*, 124(3), 393-402. doi:10.1111/1471-0528.14449
- Holland, S. (2018). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*.
- Holland, S. (2019). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*, 41(1), 52-66.
- Holmberg, D., Orbuch, T. L., & Veroff, J. (2003). *Thrice told tales: Married couples tell their stories*: Routledge.
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277-1288.
- James-Abra, S., Tarasoff, L. A., Green, D., Epstein, R., Anderson, S., Marvel, S., . . . Ross, L. E. (2015). Trans people's experiences with assisted reproduction services: a qualitative study. *Human reproduction (Oxford, England)*, 30(6), 1365-1374. doi:10.1093/humrep/dev087 [doi]
- Jin, H., & Dasgupta, S. (2016). Disparities between online assisted reproduction patient education for same-sex and heterosexual couples. *Human Reproduction*, 31(10), 2280-2284.
- Johnson, J. D., Andrews, J. E., & Allard, S. (2001). A model for understanding and affecting cancer genetics information seeking. *Library & Information Science Research*, 23(4), 335-349.

- Johnson, J. D., Donohue, W. A., Atkin, C. K., & Johnson, S. (1995). A comprehensive model of information seeking: Tests focusing on a technical organization. *Science Communication*, 16(3), 274-303.
- Johnson, K. M. (2012). Excluding lesbian and single women? An analysis of U.S. fertility clinic websites. *Women's Studies International Forum*, 35(5), 394-402. doi:10.1016/j.wsif.2012.05.002
- Johnson, M. J., & Nemeth, L. S. (2014). Addressing health disparities of lesbian and bisexual women: a grounded theory study. *Women's Health Issues*, 24(6), 635-640.
- Jordan, C., & Revenson, T. A. (1999). Gender differences in coping with infertility: a meta-analysis. *Journal of behavioral medicine*, 22(4), 341-358.
- Justice, A. C. f. R. (2005). *A NEW VISION FOR ADVANCING OUR MOVEMENT FOR REPRODUCTIVE HEALTH, REPRODUCTIVE RIGHTS, AND REPRODUCTIVE JUSTICE* Retrieved from <http://forwardtogether.org/assets/docs/ACRJ-A-New-Vision.pdf>.
- Karpman, H. E., Ruppel, E. H., & Torres, M. (2018). "It wasn't feasible for us": Queer Women of Color Navigating Family Formation. *Family Relations*, 67(1), 118-131. doi:10.1111/fare.12303
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. R. C. M. Judd (Ed.), *Handbook of research methods in social and personality psychology* (pp. 451-477): Cambridge University Press.
- Kenny, D. A., & Cook, W. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. *Personal relationships*, 6(4), 433-448.
- Kenny, D. A., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor-partner interdependence model. *Journal of Family Psychology*, 24(3), 359.
- Klein, D. A., Berry-Bibee, E. N., Baker, K. K., Malcolm, N. M., Rollison, J. M., & Frederiksen, B. N. (2018). Providing quality family planning services to LGBTQIA individuals: a systematic review. *Contraception*, 97(5), 378-391. Retrieved from <https://doi.org/10.1016/j.contraception.2017.12.016>
- Klitzman, R. (2019). *Designing Babies: How Technology is Changing the Ways We Create Children*: Oxford University Press, USA.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018a). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018b). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1-6.
- Kuhlthau, C. C., Heinström, J., & Todd, R. J. (2008). The 'information search process' revisited: Is the model still useful. *Information research*, 13(4), 13-14.
- Lambert, S. D., & Loiselle, C. G. (2007). Health information—seeking behavior. *Qualitative health research*, 17(8), 1006-1019.
- LaSala, M. C. (2003). When Interviewing "Family" Maximizing the Insider Advantage in the Qualitative Study of Lesbians and Gay Men. . *Journal of Gay & Lesbian Social Services*, 15(1-2), 15-30.

- Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of consulting and clinical psychology*, 79(2), 159.
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521-548.
- Lincoln, Y. S. (1997). Self, subject, audience, text: Living at the edge, writing in the margins. *Representation and the text: Re-framing the narrative voice*, 37-55.
- Luce, J. (2004). Imaging Bodies, Imagining Relations: Narratives of Queer Women and "Assisted Conception". *Journal of Medical Humanities*, 25(1), 47-56.
- Luce, J. (2010). *Beyond expectation: Lesbian/bi/queer women and assisted conception*: University of Toronto Press.
- Magee, J. C., Bigelow, L., DeHaan, S., & Mustanski, B. S. (2012). Sexual health information seeking online: a mixed-methods study among lesbian, gay, bisexual, and transgender young people. *Health Education & Behavior*, 39(3), 276-289.
- Makadon, H. J. (2011). Ending LGBT invisibility in health care: The first step in ensuring equitable care. *Cleve Clin J Med*, 78(4), 220-224.
- Malmquist, A. (2015a). A Crucial but Strenuous Process: Female Same-Sex Couples' Reflections on Second-Parent Adoption. *Journal of GLBT Family Studies*, 11(4), 351-374. doi:10.1080/1550428X.2015.1019169
- Malmquist, A. (2015b). Women in Lesbian Relations: Construing Equal or Unequal Parental Roles? *Psychology of Women Quarterly*, 39(2), 256-267. doi:10.1177/0361684314537225
- Malmquist, A., & Nelson, K. Z. (2014). Efforts to maintain a 'just great' story: Lesbian parents' talk about encounters with professionals in fertility clinics and maternal and child healthcare services. *Feminism and Psychology*, 24(1), 56-73. doi:10.1177/0959353513487532
- Mamo, L. (2005). Biomedicalizing kinship: Sperm banks and the creation of affinity-ties. *Science as Culture*, 14(3), 237-264. doi:10.1080/09505430500216833
- Mamo, L. (2007a). Negotiating conception: Lesbians' hybrid-technological practices. *Science Technology and Human Values*, 32(3), 369-393. doi:10.1177/0162243906298355
- Mamo, L. (2007b). *Queering reproduction: Achieving pregnancy in the age of technoscience*: Duke University Press.
- Mamo, L. (2018). Queering the fertility clinic. In *Beyond Bioethics: Toward a New Biopolitics* (pp. 328-338): University of California Press.
- Mamo, L., & Alston-Stepnitz, E. (2015). Queer intimacies and structural inequalities: New directions in stratified reproduction. *Journal of Family Issues*, 36(4), 519-540.
- Mamo, L., & Fishman, J. R. (2013). Why justice? Introduction to the special issue on entanglements of science, ethics, and justice. *Science, Technology, Human Values*, 38(2), 159-175.
- Maroufizadeh, S., Hosseini, M., Foroushani, A. R., Omani-Samani, R., & Amini, P. J. B. p. (2018). The relationship between marital satisfaction and depression in infertile couples: an actor-partner interdependence model approach. 18(1), 310.
- Mason Bergen, K., Suter, E. A., & Daas, K. L. (2006). "About as solid as a fish net": symbolic construction of a legitimate parental identity for nonbiological lesbian

- mothers. *The Journal of Family Communication*, 6(3), 201-220.
- Mason, T. B., & Lewis, R. J. (2015). Minority stress and binge eating among lesbian and bisexual women. *Journal of homosexuality*, 62(7), 971-992.
- McManus, A. J., Hunter, L. P., & Renn, H. (2006). Lesbian experiences and needs during childbirth: guidance for health care providers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 35(1), 13-23.
- McNair, R. (2004). *Outcomes for children born of ART in a diverse range of families*: Victorian Law Reform Commission Melbourne,, Australia.
- McQuillan, J., Greil, A. L., Shreffler, K. M., & Bedrous, A. V. (2015). The Importance of Motherhood and Fertility Intentions among U.S. Women. 58(1), 20-35. doi:10.1177/0731121414534393
- Medicine, I. o. (2003). Washington (DC): National Academies Press (US)
Copyright 2002 by the National Academy of Sciences. All rights reserved.
- Medicine, I. o. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Retrieved from
- Mehta, A., Nangia, A. K., Dupree, J. M., & Smith, J. F. (2016). Limitations and barriers in access to care for male factor infertility. *Fertility and sterility*, 105(5), 1128-1137.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of health and social behavior*, 38-56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, 129(5), 674.
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. *Handbook of psychology and sexual orientation*, 252-266.
- Meyrick, J. J. J. o. h. p. (2006). What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality. 11(5), 799-808.
- Miller, W., Severy, L., & Pasta, D. J. P. s. (2004). A framework for modelling fertility motivation in couples. 58(2), 193-205.
- Miller, W. B. (1994). Childbearing Motivations, Desires, and Intentions: A Theoretical Framework. *Genetic, Social & General Psychology Monographs*, 120(2), 223-253.
- Miller, W. B., & Pasta, D. (1995). Behavioral Intentions: Which Ones Predict Fertility Behavior in Married Couples? 1. *Journal of Applied Social Psychology*, 25(6), 530-555.
- Montano, D., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health behavior: Theory, research and practice*, 95-124.
- Moore, M. R., & Stambolis-Ruhstorfer, M. (2013). LGBT sexuality and families at the start of the twenty-first century. *Annual Review of Sociology*, 39, 491-507.
- Morgan, D. L. (2016). *Essentials of dyadic interviewing*: Routledge.
- Morse, J. M. (2008). Confusing categories and themes. *Qualitative health research*, 18, 727-728.
- Murray, M. (2017). Intimate Choices, Public Threats - Reproductive and LGBTQ Rights under a Trump Administration. *New England Journal of Medicine*, 376(4), 301-303. doi:10.1056/NEJMp1615718

- National Institutes of Health. (2010). Moving into the future with new dimensions and strategies: a vision for 2020 for women's health research. *Strategic plan—executive summary* (NIH Publication No. 10–7606), NIoH Office of Research on Women's Health, US Department of Health and Human Services, Editor. Bethesda.
- National Institutes of Health. (2015). NIH FY 2016–2020 strategic plan to advance research on the health and well-being of sexual and gender minorities. Bethesda, MD: National Institutes of Health.
- Nölke, A.-I. (2018). Making diversity conform? An intersectional, longitudinal analysis of LGBT-specific mainstream media advertisements. *Journal of homosexuality*, 65(2), 224-255.
- Nordqvist, P. (2011a). Choreographies of sperm donations: Dilemmas of intimacy in lesbian couple donor conception. *Social Science and Medicine*, 73(11), 1661-1668. doi:10.1016/j.socscimed.2011.09.033
- Nordqvist, P. (2011b). 'Dealing with sperm': Comparing lesbians' clinical and non-clinical donor conception processes. *Sociology of Health and Illness*, 33(1), 114-129. doi:10.1111/j.1467-9566.2010.01279.x
- Nordqvist, P. J. C., Health, & Sexuality. (2012). Origins and originators: lesbian couples negotiating parental identities and sperm donor conception. 14(3), 297-311.
- Obergefell v. Hodges. (2015). *S.Ct.*, 135(No. 14-556), 2071.
- Olesker, E., & Walsh, L. V. (1984). Childbearing among lesbians: are we meeting their needs? *Journal of Nurse-Midwifery*, 29(5), 322-329.
- Patterson, C. J. (1994). Children of the lesbian baby boom: Behavioral adjustment, self-concepts, and sex-role identity. *Psychological perspectives on lesbian and gay issues*, 1, 156-175.
- Patterson, C. J., & Riskind, R. G. (2010). To Be a Parent: Issues in Family Formation among Gay and Lesbian Adults. *Journal of GLBT Family Studies*, 6(3), 326-340. doi:10.1080/1550428X.2010.490902
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*: SAGE Publications, inc.
- Pavan v. Smith, No. No. 16-992, 137 2075 (Supreme Court 2017).
- Pelka, S. (2009). Sharing motherhood: Maternal Jealousy among Lesbian co-mothers. *Journal of homosexuality*, 56(2), 195-217. doi:10.1080/00918360802623164
- Peterson, B. D., Newton, C. R., Rosen, K. H., & Skaggs, G. (2006). Gender differences in how men and women who are referred for IVF cope with infertility stress. *Human Reproduction*, 21(9), 2443-2449.
- Peterson, B. D., Pirritano, M., Christensen, U., & Schmidt, L. (2008). The impact of partner coping in couples experiencing infertility. *Human Reproduction*, 23(5), 1128-1137.
- Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual frameworks in information behavior. *Annual review of information science and technology (ARIST)*, 35(43-78).
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.): Wolters Kluwer
- Porter, M., & Bhattacharya, S. (2007). Helping themselves to get pregnant: a qualitative longitudinal study on the information-seeking behaviour of infertile couples.

- Human reproduction*, 23(3), 567-572.
- Rappaport, H., Enrich, K., & Wilson, A. (1985). Relation between ego identity and temporal perspective. *Journal of Personality and Social Psychology*, 48(6), 1609.
- Rausch, M. A., & Wikoff, H. D. (2017). Addressing Concerns with Lesbian Couples Experiencing Fertility Treatment: Using Relational Cultural Theory. *Journal of LGBT Issues in Counseling*, 11(3), 142-155.
doi:10.1080/15538605.2017.1346494
- Reczek, C. (2014). Conducting a multi family member interview study. *Family process*, 53(2), 318-335.
- Reczek, C., Elliott, S., & Umberson, D. (2009). Commitment without marriage: Union formation among long-term same-sex couples. *Journal of Family Issues*, 30(6), 738-756.
- Renaud, M. T. (2007). We are mothers too: Childbearing experiences of lesbian families. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 36(2), 190-199.
- Riskind, R. G., & Patterson, C. J. (2010). Parenting intentions and desires among childless lesbian, gay, and heterosexual individuals. *Journal of Family Psychology*, 24(1), 78-81. Retrieved from <http://dx.doi.org/10.1037/a0017941>
- Riskind, R. G., Patterson, C. J., & Nosek, B. A. (2013). Childless lesbian and gay adults' self-efficacy about achieving parenthood. *Couple and Family Psychology: Research and Practice*, 2(3), 222.
- Riskind, R. G., & Tornello, S. L. (2017). Sexual orientation and future parenthood in a 2011-2013 nationally representative United States sample. *Journal of Family Psychology*, 31(6), 792-798. doi:10.1037/fam0000316
- Roberts, D. (1997). Killing the black body: Race, representation, and the meaning of liberty. *New York: Vintage*.
- Roberts, D. E. (1995). Race and the new reproduction. *Hastings LJ*, 47, 935.
- Robson, A., & Robinson, L. (2015). The information seeking and communication model. *Journal of Documentation*, 71(5), 1043-1069. doi:10.1108/JD-01-2015-0023
- Rogalin, C. L., & Brooks, J. E. (2018). Lesbians achieving pregnancy: The intersections of social location and the heteronormative medicalization of infertility. *Sociology Compass*, 12(11), e12637.
- Röndahl, G., Bruhner, E., & Lindhe, J. (2009). Heteronormative communication with lesbian families in antenatal care, childbirth and postnatal care. *Journal of advanced nursing*, 65(11), 2337-2344.
- Ross, L. (2006). Understanding reproductive justice: Transforming the pro-choice movement. *Off our backs*, 36(4), 14-19.
- Ross, L., Gutierrez, E., Gerber, M., & Silliman, J. (2016). *Undivided rights: Women of color organizing for reproductive justice*: Haymarket Books.
- Ross, L., & Solinger, R. (2017). *Reproductive justice: An introduction* (Vol. 1): Univ of California Press.
- Ross, L. E., Steele, L. S., & Epstein, R. (2006a). Lesbian and bisexual women's recommendations for improving the provision of assisted reproductive technology services. *Fertility and sterility*, 86(3), 735-738.
doi:10.1016/j.fertnstert.2006.01.049
- Ross, L. E., Steele, L. S., & Epstein, R. (2006b). Service Use and Gaps in Services for Lesbian and Bisexual Women During Donor Insemination, Pregnancy, and the

- Postpartum Period. *Journal of Obstetrics and Gynaecology Canada*, 28(6), 505-511. doi:10.1016/S1701-2163(16)32181-8
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017a). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18. doi:10.1016/j.midw.2017.02.011
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017b). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18-23. doi:10.1016/j.midw.2017.02.011
- Ryan, M. (2013). The gender of pregnancy: Masculine lesbians talk about reproduction. *Journal of Lesbian Studies*, 17(2), 119-133.
- Saewyc, E. M. (2014). Adolescent pregnancy among lesbian, gay, and bisexual teens. In *International handbook of adolescent pregnancy* (pp. 159-169): Springer.
- Saewyc, E. M., Bearinger, L. H., Blum, R. W., & Resnick, M. D. (1999). Sexual Intercourse, Abuse and Pregnancy among Adolescent Women: Does Sexual Orientation Make a Difference? *Perspectives on sexual and reproductive health*, 31(3), 127-131. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-0346657470&partnerID=40&md5=b2ebc93ddb894e7efe0797f7da62056>
- Schmidt, L. (2009). Social and psychological consequences of infertility and assisted reproduction—what are the research priorities? *Human Fertility*, 12(1), 14-20.
- Schwartz, S. R., & Baral, S. (2015). Fertility-related research needs among women at the margins. In (Vol. 23, pp. 30-46).
- Schwartz, S. R., & Baral, S. (2015). Fertility-related research needs among women at the margins. *Reproductive health matters*, 23(45), 30-46.
- Slauson-Blevins, K. S. (2011). Infertility Help Seeking and Social Support: Do Conventional Theories Explain Internet Behaviors and Outcomes.
- Slauson-Blevins, K. S., McQuillan, J., & Greil, A. L. (2013). Online and in-person health-seeking for infertility. *Social Science & Medicine*, 99, 110-115.
- Smietana, M., Thompson, C., & Twine, F. W. (2018). Making and breaking families—reading queer reproductions, stratified reproduction and reproductive justice together. *Reproductive Biomedicine & Society Online*, 7, 112-130.
- Smith, L. (2017). Tangling the web of legal parenthood: Legal responses to the use of known donors in lesbian parenting arrangements. In *Parental Rights and Responsibilities* (pp. 259-286): Taylor and Francis.
- Somers, S., Van Parys, H., Provoost, V., Buysse, A., Pennings, G., & De Sutter, P. (2017). How to create a family? Decision making in lesbian couples using donor sperm. *Sexual & Reproductive Healthcare*, 11, 13-18. doi:<https://doi.org/10.1016/j.srhc.2016.08.005>
- Spidsberg, B. D. (2007). Vulnerable and strong - Lesbian women encountering maternity care. *Journal of advanced nursing*, 60(5), 478-486. doi:10.1111/j.1365-2648.2007.04439.x
- Spidsberg, B. D. (2007). Vulnerable and strong—lesbian women encountering maternity care. *Journal of advanced nursing*, 60(5), 478-486.
- Stein, P., Willen, S., & Pavetic, M. (2014). Couples' fertility decision-making. *Demographic Research*, 30, 1697-1732.
- Touroni, E., & Coyle, A. (2002). Decision-making in planned lesbian parenting: an

- interpretative phenomenological analysis. *Journal of Community & Applied Social Psychology*, 12(3), 194-209.
- Traa, M. J., De Vries, J., Bodenmann, G., & Den Ouden, B. L. (2015). Dyadic coping and relationship functioning in couples coping with cancer: a systematic review. *British Journal of Health Psychology*, 20(1), 85-114.
- Umberson, D., Thomeer, M. B., Kroeger, R. A., Lodge, A. C., & Xu, M. (2015). Challenges and opportunities for research on same-sex relationships. *Journal of Marriage and Family*, 77(1), 96-111.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical education*, 51(1), 40-50.
- Watson, L. B., Grotewiel, M., Farrell, M., Marshik, J., & Schneider, M. (2015). Experiences of sexual objectification, minority stress, and disordered eating among sexual minority women. *Psychology of Women Quarterly*, 39(4), 458-470.
- Wendland, C. L., Burn, F., & Hill, C. (1996). Donor insemination: a comparison of lesbian couples, heterosexual couples and single women. *Fertility and sterility*, 65(4), 764-770. doi:S0015-0282(16)58211-9 [pii]
- Werner, C., & Westerstahl, A. (2008). Donor insemination and parenting: concerns and strategies of lesbian couples. A review of international studies. *Acta Obstetrica et Gynecologica Scandinavica*, 87(7), 697-701. doi:10.1080/00016340802011603 [doi]
- Wilson, T. D. (2000). Human information behavior. *Informing science*, 3(2), 49-56.
- Wingert, S., Harvey, C. D., Duncan, K. A., & Berry, R. E. (2005). Assessing the needs of assisted reproductive technology users of an online bulletin board. *International Journal of Consumer Studies*, 29(5), 468-478.
- Wingo, E., Ingraham, N., & Roberts, S. C. M. (2018). Reproductive Health Care Priorities and Barriers to Effective Care for LGBTQ People Assigned Female at Birth: A Qualitative Study. *Womens Health Issues*, 28(4), 350-357. doi:10.1016/j.whi.2018.03.002
- Wismont, J. M., & Reame, N. E. (1989). The lesbian childbearing experience: assessing developmental tasks. *Image--the journal of nursing scholarship*, 21(3), 137-141.
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of preconception, pregnancy, and new motherhood for lesbian nonbiological mothers. *Journal of Obstetric, Gynecologic, Neonatal Nursing*, 43(1), 50-60.
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of Preconception, Pregnancy, and New Motherhood for Lesbian Nonbiological Mothers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 43(1), 50-60. doi:10.1111/1552-6909.12270
- Wu, A. K., Elliott, P., Katz, P. P., & Smith, J. F. (2013). Time costs of fertility care: the hidden hardship of building a family. *Fertility and sterility*, 99(7), 2025-2030.
- Wu, A. K., Odisho, A. Y., Washington III, S. L., Katz, P. P., & Smith, J. F. (2014). Out-of-pocket fertility patient expense: data from a multicenter prospective infertility cohort. *The Journal of urology*, 191(2), 427-432.
- Wu, H. Y., Yin, O., Monseur, B., Selter, J., Collins, L. J., Lau, B. D., & Christianson, M.

- S. (2017). Lesbian, gay, bisexual, transgender content on reproductive endocrinology and infertility clinic websites. *Fertility and sterility*, 108(1), 183. doi:<https://doi.org/10.1016/j.fertnstert.2017.05.011>
- Yager, C., Brennan, D., Steele, L. S., Epstein, R., & Ross, L. E. (2010). Challenges and mental health experiences of lesbian and bisexual women who are trying to conceive. *Health and Social Work*, 35(3), 191-200. doi:10.1093/hsw/35.3.191
- Zhu, H., Colgan, J., Reddy, M., & Choe, E. K. (2016). *Sharing patient-generated data in clinical practices: an interview study*. Paper presented at the AMIA Annual Symposium Proceedings.

Chapter 2

Fertility Health Information Seeking among Sexual Minority Women: Trying to Conceive in an Information Infertile Environment

Abstract

This dissertation chapter investigates fertility related health information behaviors (e.g., identification of information needs, information seeking, information appraisal and use) among cisfemales in same-sex intimate partnerships. For coupled sexual minority women (SMW), recognition of information needs and information seeking are often a first crucial step in fulfilling desires for family formation through pregnancy. Drawing on a thematic analysis of semi-structured interviews with 20 self-identified SMW from 10 couples (10 gestational and 10 non-gestational partners) who live across the United States, in this paper I extend the existing literature on fertility related health information behaviors among SMW in same-sex relationships. SMW described how they came to learn about ways to achieve pregnancy through multiple iterations of information seeking, acquisition, appraisal, use, and satisfaction with the information use. Analysis revealed three primary themes: 1) *Contextual factors that shape information seeking*; 2) *Simultaneous Certainty-Uncertainty*: basic knowledge about how to conceive but uncertainty persists related to some aspects of process for same-sex couples; and 3) *Cyclical, iterative, fundamentally uncertain nature of the process*: one step forward, more uncertainty revealed. These findings support and extend existing evidence that has focused primarily on online fertility information seeking among SMW. Taken together, the evidence suggests a need for shifts in fundamental assumptions about who seeks

assisted reproductive support and why, as well as improvements in fertility-related health communication for this population.

Introduction

Health information seeking (i.e. identification of information needs, seeking, avoidance, and use) (Dervin, 2015; Wilson, 2000) is situated in the context of medical *decision-making*, *coping* with or adjusting to illness, and health *promotion* (Lambert & Loiselle, 2007). Access to useful health information about clinically or medically assisted reproduction (hereafter referred to as CAR) is integral to making informed fertility-related decisions (Hammarberg et al., 2017; Porter & Bhattacharya, 2007). However, accurate and reliable health information is not easily accessible for sexual minority women (SMW) who use CAR in their conception efforts (Ruppel et al., 2017). Inadequacies of fertility health information tailored to the contexts of SMW and their psychosocial needs make it difficult to know the right questions to ask, and where and how to identify, consolidate, appraise, and use information in the most effective ways when trying to conceive. While fertility related health information is ubiquitous, most information targets the information needs of heterosexual couples (Holland, 2019; Klitzman, 2019; Mamo, 2007b, 2018). This negatively impacts the health literacy, informed medical decision-making, and health outcomes of SMW seeking family formation through reproduction (Ruppel et al., 2017a).

Trying to conceive with CAR involves a series of planned behaviors motivated by desires and intentions to pursue pregnancy (Miller, 1994; Miller & Pasta, 1995). Informed by the Integrated Behavioral Model (IBM), for example, reproduction and fertility behaviors are influenced by personal agency, sense of perceived norms, and personal attitudes (McManus et al., 2006; Miller & Pasta, 1995; Röndahl et al., 2009). The intention to conceive, however, is contingent upon an individual's access to fertility

related information that is relevant, accurate, reliable and useful and ability to apply this knowledge to their specific social circumstance (Hammarberg et al., 2017; Porter & Bhattacharya, 2007). Thus, it is imperative to examine CAR from a socioecological standpoint as structural factors can impact individuals' decision-making if they have unequal availability and accessibility of accurate and reliable sources of information.

Health information seeking is an integral part of trying to conceive among those with subfertility or infertility (Greil & McQuillan, 2004; Porter & Bhattacharya, 2007; Slauson-Blevins et al., 2013; Wingert, Harvey, Duncan, & Berry, 2005). Information seeking behavior focused on reproductive health and infertility have been examined in the context of two primary sources: internet-based information seeking and in-person information seeking (Greil & McQuillan, 2004; Slauson-Blevins et al., 2013). In-person and online fertility information seeking often occurs in both formal and informal ways (Slauson-Blevins, McQuillan, Greil, 2013; Greil, Johnson, Lowry, McQuillan, Slauson-Blevins, 2019). At present, however, there is a dearth of literature focused on the information seeking experiences of SMW, as much of the available research implicitly targets heterosexual individuals and/or couples who have experienced challenges with pregnancy (Holland, 2018; Ruppel et al., 2017). Therefore, in this dissertation chapter, I explore how SMW experienced fertility information seeking.

Health information seeking for reasons of subfertility or infertility often reflect mechanisms for coping with the duress of unexplained fertility challenges (Peterson, Newton, Rosen, & Skaggs, 2006; Peterson et al., 2008; Porter & Bhattacharya, 2007). Yet, SMW and other SGM often seek information not to overcome or cope with subfertility or infertility in the physiological sense. Rather, they hope to overcome the

absence of a gamete source from their intimate partnerships. In addition, evidence suggests that online social media platforms where sexual and gender minorities (SGM) congregate to share information about pregnancy efforts, serve not only as hubs for information exchange, but for coping with challenges specific to SMW --one of which is the collective history of marginalization of and discrimination against LGBTQ people in healthcare spaces (Holland, 2018; Mamo, 2007b; Ruppel et al., 2017). SMW's information behaviors begin with a different set of assumptions about their needs and the potential paths they may take to achieve pregnancy.

Currently, however, there is an absence of a reliable, verified, and accessible information or data sources (Ruppel et al., 2017a) that SMW can consult. SMW engage in a wide variety of self-directed and community-sourced information behaviors (i.e. information needs identification, seeking, avoidance, and use in iterative and dynamic ways) in service to their family formation and pregnancy aspirations (Holland, 2019; Mamo, 2007b). SMW might generate knowledge tailored to the needs of community members, rather than fitting into heteronormative boxes that do not meet them where they are (Batza, 2016; Mamo, 2007a). Holland, for example, has argued that queer women who want pregnancy attempt to balance various types of knowledges that intersect to create what she calls "queer mother knowledge" (Holland, 2019). These knowledges include institutional clinical knowledge, queer communal knowledge ("built by and for nonheterosexual women"), and personal, embodied reproductive knowledge. While access to and integration of this knowledge allows women to overcome many barriers, it also may introduce increased risk as some information may be unverifiable, inaccurate, and unreliable. Researchers reported substantial variation in the accuracy of information

exchanged in these forums. This variation ranged from incorrect information to information misapplied to particular situations (Ruppel et al., 2017). Extent of misinformation varies but may have negative consequences (Ruppel et al., 2017). This information landscape may lead to challenges in articulating an accurate and robust body of relevant knowledge.

Study Purpose

Development of relevant, useful guidelines and information content for SGM who aspire to pregnancy, helped by CAR interventions, requires a more comprehensive understanding of how SMW identify information needs, and where and how they seek and use information. Inquiry into how SMW address information and knowledge needs in the context of fertility decision-making lies at the intersection of increased (but challenged) LGBTQ civil rights, expanded social acceptance and visibility of LGBTQ families, advances in reproductive technologies, and NIH calls for knowledge expansion and improved clinical practice for women SGM populations. *The goal of this dissertation chapter is to provide a descriptive overview of health information behaviors related to CAR among sexual minority female couples trying to conceive.* Three questions guide the investigation:

- 1) What is the context of information navigation as SMW consider pregnancy and family formation?
- 2) How do women resolve knowledge gaps?
- 3) How do women understand the applicability of information that arises largely from heteronormative contexts?

Methods

This exploratory qualitative study is situated in a larger study examining SMW's pregnancy planning and decision making. The focus of this analysis is information needs, information seeking, and information use related to fertility decision-making and clinically assisted reproduction. Data used for analysis is from interviews with SMW couples who were seeking pregnancy and occurred prior to the start of care that involved fertility-related medications, intrauterine insemination and/or steps in the *in vitro* fertilization (IVF) or reciprocal IVF processes. The University of Pennsylvania Institutional Review Board approved the study's protocol and procedures.

Participants and Recruitment

Prior research illustrates that despite gains in civil rights, social acceptance, and visibility, SMW often remain invisible to health-related research (Fredriksen-Goldsen, Kim, Barkan, Balsam, & Mincer, 2010; Hatzenbuehler & Pachankis, 2016; Johnson & Nemeth, 2014; Makadon, 2011). Thus, recruitment strategies were designed to optimize participation. Advertisements were posted in local establishments frequented by SMW, shared within social networks by way of email, and through online advertisements targeting SMW on Facebook and Instagram. Fourteen participants were recruited through Facebook and Instagram ads, two through snowball sampling, and four through outreach via my personal social network.

To be eligible, participants identified as female at birth and currently identified as women. They also had to be: 18 years of age or older, fluent English speaker, identify as lesbian, queer, bisexual or other non-heterosexual sexual identity, in a committed same-sex relationship, reside in the United States, tried either insemination or other medically

facilitated reproduction intervention in the six months prior to contacting study staff to communicate interest in participation. Exclusion criteria included inability to speak English sufficiently to engage in interviews, other than cisfemale, and efforts to conceive with health care provider assistance occurred more than six months from contact with research team.

Data Collection

I conducted 20 individual semi-structured qualitative interviews with study participants. Interviews were conducted using a secure video conference platform. These interviews were guided by a semi-structured interview schedule that included a specific questions to elicit resources participants consulted as they made decisions about trying to conceive. Individual, one-on-one interviews lasted between 35-90 minutes.

Data Management

Audio recordings were transcribed, checked for accuracy and fidelity to participant communication, and de-identified. De-identified transcripts were printed for the purpose of hand coding and stored in a locked file cabinet in a locked office at the University of Pennsylvania School of Nursing. Digital copies of transcripts were stored in Penn+Box and password protected. The computer assisted qualitative data analysis software, Dedoose Version 8.3.17 (2020) was used in the data analysis phase.

Data Analysis

Transcripts, fieldnotes, and memos formed the data corpus for analysis. Using the six phases of thematic analysis first outlined by Braun and Clarke (Braun & Clarke, 2006; Braun, Clarke, Hayfield, & Terry, 2019). I first engaged in familiarization with the data. Familiarization with the data began with conducting interviews and generating

fieldnotes during and immediately after each interview. Familiarization also involved transcription and transcription checks which occurred while listening to and relistening to recordings (audio-visual), and re-reading finalized transcripts, fieldnotes, memos.

Following the familiarization step, I independently generated initial inductive codes (Saldaña, 2016; Braun and Clarke, 2013; Braun, Clarke, Hayfield, Terry, 2019), based on systematic examination of all transcripts and consultation of field notes and memos. Both semantic (superficial and descriptive) and latent (implicit, conceptual) codes were generated (Braun, Clarke, Hayfield, Terr, 2019, p. 853) in this process.

Upon reflection on this initial coding, an emergent question came to the fore which was central to the goal of understanding how coupled SMW make decisions when trying to conceive. This question was: *how do SMW experience fertility information navigation related to trying to conceive via CAR?* Focused on this question, I trained two research assistants and conducted a second round of coding to better understand dimensions of information navigation described by SMW in the sample. Some of the codes included *contextual factors and timing of information seeking, knowledge deficits, sources and credibility, and emotional responses during information seeking*. A third round of coding aimed to reach agreement among the three coders. I then organized codes into descriptive categories and themes.

Rigor and Trustworthiness

Analytic rigor was enhanced through maintenance of an audit trail, reflexivity, examination of cases that deviated from patterns in the data, presentation of exemplar quotes, respondent validation, and multiple coders and coding cycles (Creswell & Miller, 2000; Meyrick, 2006). Through these multiple coding cycles and collaboration among

multiple coders, along analytic techniques, I aimed to achieve theoretical sufficiency, meaning the categories and themes sufficiently accommodated relevant data in the corpus (Varpio, Ajjawi, Monrouxe, O'Brien, & Rees, 2017, pp. 45-46).

Audit Trail. Throughout the research process I employed an audit trail (Creswell & Clark, 2017; Meyrick, 2006) to document research decisions and rationales. In line with Creswell and Miller's recommendations, a data collection chronology was maintained using Qualtrics reports, Excel spreadsheets, and records of data analysis procedures were recorded in memos.

Reflexivity. Reflexivity grants the researcher and researched permission to consider the social, experiential, cultural, historical, and political conditions that shape our views and interpretations in research. Throughout the research process, I aimed to acknowledge personal beliefs, values, and positionality in personal reflective practice. In addition, standpoint theory (Collins, 2002), feminist methodologies, and other critical paradigms informed how and why I conducted this research. .

As part of the work of maintaining credibility through reflexivity I prioritized awareness of my positionality as both an insider and outsider in this work (Hayfield & Huxley, 2015; LaSala, 2003). I am cognizant that I am part of the group of sexual minority women who has engaged in fertility decisions and have some understanding of at least parts of what women may report (LaSala, 2003). At the same time, I would not presume to understand the experiences or perceptions of any participant and will thus maintain awareness that I am outsider as well—not necessarily in a position to understand fully participants' perspectives than a non-cisfemale sexual minority (Hayfield & Huxley, 2015)

Findings

Sample

Demographic information gathered from participants through an online questionnaire prior to interview can be found in Table 2.1. The average age of participants was 33 years old, with a range of 28 to 40. Of the 20 participants, 16 identified as White, one as Black, two as Hispanic or Latina, and one as Xicana. Most participants identified as lesbian, queer, or both lesbian and queer. Two participants identified as bisexual and one as both bisexual and queer. Mean household income was \$133,700 per year, with a range between \$67,000 and \$200,000. Most participants had a graduate or professional degree. SMW resided across the United States, representing rural (two couples), suburban (two couples), and urban (six couples) settings.

Contextual Factors

Within the larger context of sociocultural conditions, knowledge systems, local and national political systems, and communities and social networks, SMW couples who desire to form families through pregnancy determine how best to do so for themselves, their relationships, and their potential children. The path to pregnancy with CAR remains somewhat muddled for SMW. Even among those participants who have clinical expertise (e.g. nurse midwife, nurse manager) or those embedded in local and national queer communities with numerous role models who have done this before, uncertainties, questions, and concerns persist. For example, this participant who was highly educated and deeply engaged in the local queer community shared, “I resent that there’s nothing. So I feel like I’ve sought out everything that I could but it’s just not that much” (20G).

Another participant, a nurse manager, shared, “because it’s this weird world of, you just ask your friends how it works” (3G). Anticipatory fears about and actual experiences of discrimination and alienation in healthcare settings due to sexual identity and relationship status loomed among the women with whom I spoke. For example, one SMW shared that she and her wife sought care, “based on a bunch of recommendations, not based on us finding a random person. I assume it would be bad. I assume as a lesbian couple I should be going off of recommendations – like I shouldn’t just be going to (university medical center)” (20G).

Within these contexts, participants reiterated the absence of SMW-specific considerations. Several participants felt like they had to “start from square one” (23NG) to make sense of their options and the steps they needed to take to fulfill their pregnancy and parenthood aspirations. One participant exclaimed, “Nobody talks about it!” (18G), pointing out a sense that sparse communication about relevant, well-established, and useful (SMW families exist, after all) information about how to conceive and what the experience of trying to conceive was like within the LGBTQ community. This left her feeling as though she and her partner had to forge an entirely new path because information remained hidden in plain sight. This emphatic observation related specifically to a view that she wished more about the process of trying to conceive with HCP assistance, the possible barriers and burdens, and general conditions of the process were more widely discussed by SMW with experience.

Readiness to Address the Gaps

SMW described signals of readiness to begin to address information needs, how to bridge the gaps, or to figure out and answer (some questions can only be answered by

SMW themselves—internal referent) questions about how to conceive. These preconditions included preparations and life circumstances that suggested couples’ readiness to bridge gaps. For example, some participants discussed debt reduction, employment changes and insurance coverage, or having completed bucket list items as signifiers of things accomplished prior to serious investigation of the use of CAR to conceive. Others spoke about having “settled down” and talked about how others in their social milieus began to form families of their own. With graduate degrees completed, careers started, marriage equality established with legal protections conferred, and others in their social networks pursuing parenthood, SMW demonstrated that time was ripe to figure out how they too could fulfill pregnancy and parenthood aspirations. Importantly, most women in the study entered the initial period of inquiry assuming the absence of subfertility or infertility.

Certainty-Uncertainty

SMW’s motivation for information seeking I define *certainty-uncertainty* as a simultaneous experience of surety about some aspects (e.g. need for donor sperm) and uncertainty about other aspects (e.g. type of CAR a couple might use) of SMW trying to conceive with CAR. The theme of certainty-uncertainty captures tensions in SMW participants’ experiences of entering the journey toward possible pregnancy and parenthood. SMW began their journey toward pregnancy with desires and intentions to try to conceive. At a basic level, they were certain or assumed that procurement of donor sperm and some form of insemination or embryo transfer option would be involved. Yet, the practical aspects of how to use CAR as sexual minorities was neither self-evident nor intuitive, and thus filled with ambiguity and desires to reduce uncertainty. In the absence

of accessible, coherent, and clear guidelines and in the presence of continuously evolving approaches to assisted reproduction, most women expressed uncertainty about how to achieve their goals. This motivated them to seek more information to bridge gaps in understanding and to make sense of their new realities. In response to these uncertainties most of the women (both intended gestational and non-gestational partners) engaged in active information seeking. As one participant, a nurse manager in an internal medicine setting who was the intended gestational partner, noted,

“The only thing we knew is – we had poked around the sperm banks’ website and we had just seen a lot... But we, basically – I had very basic knowledge, basically, that you could use a donor that you knew, or you could use donor sperm. And I didn’t even really, I think, know how it worked in both of the scenarios. How it physically worked.” (3G)

This participant’s statement illustrates the certainty-uncertainty theme. She and her wife knew they had to acquire donor sperm and simultaneously acknowledge uncertainty, gaps in knowledge, about the technical parts of how CAR might work for them as a same-sex female couple.

Consistent with descriptions provided by Ruppel and colleagues (2017) as well as Holland (2018), women in this study found the luteinizing hormone (LH) surge tracking to be unreliable and the variation in information about this exercise challenging to filter and appropriately discern. The uncertainty introduced self-doubt if a cycle was not successful. Even when women used medically induced ovulation with their HCPs the variation in information caused consternation and wavering belief in the process and themselves. Given the stakes, this SMW reported that uncertainty can weigh heavily. For example, most of the women who intended to be the gestational partner and use methods of insemination (as opposed to IVF or co-IVF) had to learn the practice of tracking one’s menstrual cycles to determine LH surge timing, which serves as a proxy for time of

ovulation (or egg release). Identification of the LH surge optimizes chances of fertilization--and reduces the chance of wasting time, energy, and expensive sperm. Estimates suggest that the best time to attempt insemination is between 12-24 hours after ovulation. Learning how to track this accurately and reliably do can be time consuming. However, this window is only an estimate of a range. Different sources of information suggested different time frames (e.g. 12-36 hours or 24-36 hours). These small differences in what participants presumed were “facts” introduced great uncertainty for SMW.

Another dimension of certainty-uncertainty expressed by multiple participants had to do with the many “hoops” they perceived they had to “jump through” and the general challenges for SMW trying to conceive. This certainty is demonstrated by in the following quote from a non-gestational participant: *“there’s a lot more work for families like ours...And as you know, we don’t really get educated about how to do this. You’re just kind of finding your way and just finding stuff you know”* (3NG).

Certainty-uncertainty also involved a common phenomenon of not knowing what one does not know. Prior to awareness of an absence of knowledge or a knowledge deficit, it is hard to identify what one does not know about trying to conceive with clinical assistance or the right questions to ask. Once engaged in information seeking, acquisition, and use, additional gaps became apparent, but bridging those gaps remained a process of trial and error, and consultations with numerous formal and informal sources. For example, an intended gestational partner, expressed her surprise at “all these scientific things that had to go together in order to [conceive]” (9G) after attending an SGM-specific pregnancy planning course provided by a local midwife. This realization

gave the couple pause. Prior to the course, the gestational partner assumed they would have more “control” over the process because of their intentionality and the technological support they would employ to try to conceive. Given her new awareness, a type of uncertainty involved in the process (related to physiological factors and likelihood of success in a given cycle of insemination or embryo transfer), she and her wife decided that there were “too many factors...too much money. We just want to try it in a fertility clinic to try to get as many possibilities as many things—tests and stuff like that—done.” This couple expressed confidence in medical expertise and knowledge--taking clinicians as a source of reliable information by which to overcome some of the gaps in their understanding about how to conceive.

Strategies for knowledge development in information infertile spaces

Participants believed that accurate and reliable information from credible sources about how to achieve pregnancy existed for SMW—SMW just needed to find the sources and content. Yet, participants shared how this assumption was quickly contested. Information related uncertainty due to their sexuality was a challenging aspect of trying to conceive with MAR. The additional element of navigating information developed for and communicated with an audience of heterosexual individuals in mind, added a layer of difficulty, work, and angst. SMW tried to bridge gaps in understanding by engaging a mixture of formal and informal, online, textual (books), and in-person sources (Holland, 2018; Ruppel et al., 2017; Slauson-Blevins et al., 2013). As in most any information seeking endeavor, information acquired may or may not result in a need satisfied (Case, 2007; Wilson, 2000). This reality in the context of the desire to have children makes information navigation processes unpredictable and uncertain, and often anxiety

provoking. Most of the women interviewed, encountered uncertainty and had questions about numerous aspects of the process of trying to conceive-- from where and how to procure sperm, to how much it might cost in aggregate to the role of clinicians. Most SMW were aware of discrete, specific gaps in their knowledge, to which there were answers that they planned to find. For example, this non-gestational partner, described a litany of logistical questions she and her wife had, which they planned asked about at an LGBTQ pregnancy information session provided by a local clinician:

“Most of our questions were actually around the logistics: How does the sperm get to us? What is the size of the tank? How much does it weigh? What are we gonna do if my spouse has work when she’s ovulating? How do we tell if she’s ovulating?” (2NG)

While some of these questions might have ambiguous answers, such as “how do we tell if she’s ovulating?”, many of them have concrete, discoverable answers if sought from the right source.

At other times information seeking ended in frustration due to a relative absence of clear answers. For example, one couple who initially planned to work with a known donor and home insemination before switching to CAR, explained their inability to find clear, scientifically based answers about managing donor sperm. “Nobody definitively could say how long sperm would live outside the body. *I was like, why is this not really, really known in medical information?*” (23G). This gestational partner in the couple discussed the impact these types of ambiguities had on their ability to make sense of things as they planned to try to conceive. She said, “things like that were just so annoyingly complicated, and there are no clear answers.”

When asked about sources of information that were most helpful or unhelpful, SMW had a variety of experiences. Several participants voiced similar concerns about

self-directed Internet-based searches which could yield “whatever answer you want to find,” in the words of one participant (15G). This trend in responses underscored the surfeit of fertility related content online, as well as the wide range of available perspectives. SMW also reported the value found in connecting with other SGM in similar circumstances, or with more experience in trying to conceive, on social network platforms with LGBTQ pregnancy groups:

So there’s the people in real life but then there’s all the Facebook groups that the people in real life hook you up with that are very helpful to search for specific questions, like when the doctor’s like, your donor’s CMV-positive and you’re CMV-negative, and you’re like, what in the hell is this virus I’ve never heard of that no one cares about? And then all those people know because they’re doing the same thing. So that’s been good. And then we have friends who’ve done it all stages and are doing it all different ways. We have friends who’ve done IVF. We’ve had friends who’ve done a brown paper bag and taken it home from the donor down the street and done it themselves – the spectrum is just totally huge, so there’s a lot of information sharing that goes on. (20NG)

Several participants described direct contact with people as the most useful and helpful resource. Direct contacts included close friends or acquaintances with similar experience, and trusted clinicians. These direct contacts helped SMW make sense of information in environments that posed challenges of sheer volume, questionable credibility, and contradictions.

What the Experts Don’t Know

SMW described encounters with healthcare providers who they hoped would be able to address their needs for general guidance or answers to specific questions. As one participant described, “we knew we had to do some DIY stuff. And I’d done some reading and ordered a couple books and started poking online a little bit. But let’s talk to the fertility doctors because they’re experts, they’ll know” (23G). She continued:

we had this meeting with a doctor there and she basically was not so helpful. Didn't really have any – we were out of her framework of how a same sex couple could use a known donor. I was hoping for advice. And we had read and heard about companies that would mail donor sperm, and her response *was, well, they do that for horses*. ... And also, she was flat out, we can't do anything with known donors because of the risk, and we don't do that here.... So, that was a – not a great conversation...we also left like, okay, I guess we're just gonna have to do this on our own and figure out how to try for a while and see if it would work in different ways, based on books and some weird people on the internet that probably I shouldn't have trusted.

Another participant explained a similar encounter with a provider who did not have a framework by which to meet this SMW's needs:

I'd like to meet with an OB-GYN to talk about how to get pregnant, kind of what our steps would be. Because I think part of the – when we were talking, too – we were going to go do this thing for your career and so it was like, okay, we'll prioritize – We'll prioritize your career, but we'll prioritize getting me pregnant. I think it was like, 'I want to get pregnant.' So she was like, 'oh, you want to get fat and lazy?' It was this bizarre – even if I were straight it would be offensive. She was worthless. She gave us no information that was useful. (22NG)

When making the appointment they stated that they were a same-sex couple. Yet, their experience was very unpleasant after disclosure of their sexual orientation and intentions to conceive. The OB/GYN with whom they were scheduled seemed to want to deter them from pregnancy suggesting that the intended gestational partner would become “fat and lazy”. This became even more egregious when the participants learned that the doctor had birthed several children of her own and held staunch religious views on same-sex partnership. In the end, the physician offered no useful guidance to the couple. They moved for job purposes to what they describe as a more queer-friendly region of the country and initiated discussions with a new provider who was able to answer questions and assist them.

Several individuals described efforts to locate LGBTQ inclusive HCPs through internet searches and recommendations obtained through social networks. Those who

relied solely on internet searches to find clinicians used presence of any LGBTQ content on a website as a proxy for provider competence and inclusive practices. This was particularly true for SMW who lived in either the South or Midwest regions. For these participants, many found that advertising reflected clinical or provider capacity for inclusivity and competent care. However, others' experiences during initial consultations led to somewhat different evaluations. While SMW could receive assistance and were not turned away, clinics, providers, and staff varied in their approaches to queer women. Several participants noted their frustration with fertility practices that assumed subfertility or infertility; where standard practices involved treatment of SMW as though they had physiological problems rather than an issue with sperm delivery that they hoped to overcome with the help of expert providers.

Persistent Heteronormative Communication

Much of the assisted reproduction information available through healthcare providers and other formal and informal sources focused on infertility challenges among persons presumed to engage in opposite-sex intercourse. This excerpt illustrates a broader theme about the nature of fertility information and the system-level orientation of clinical approaches to supporting families that desire pregnancy:

“I feel like I’ve been reading a lot of infertility stuff...what’s annoying about the infertility stuff is that I’m not necessarily dealing with that. So it’s not a specific resource for lesbians. It’s a resource for women who have infertility issues. So I’ve also found that to be annoying – nobody’s paying attention to just lesbians” (20C).

The ubiquity of heteronormative discourse in fertility-related communications reinforces the invisibility of SMW and their desires for and pursuit of family formation through pregnancy. To not speak to the needs of SMW, and to offer services they will pay for but

in a way that expects them to conform to the practices established to meet the needs of heterosexual couples perpetuates inequities. While this participants' assertion was hyperbolic, and study participants know that some people are indeed "paying attention to the lesbians", accessibility to relevant and useful information and communication specific to lesbian and other SMW needs remains a challenge.

For example, guidance for heterosexual couples in the assisted reproduction space often includes timed intercourse. This is regularly recommended to couples served by ART clinics, as well as in a vast array of locations on the Internet from both formal and informal sources. Several study participants mentioned experiences in which nurses at fertility clinics included timed intercourse with a partner as part of patient education. Needless to say, SMW felt unsettled about the care they might receive from these healthcare teams. These types of early interactions with nurses and other clinicians in discussions about how SMW might conceive, left some with an exacerbated sense of uncertainty and angst before they even began to try.

Iterative and dynamic: One step forward, more uncertainty revealed

As mentioned above, information acquired may or may not result in a need satisfied. In either case, a need satisfied may reveal more questions, and a need unsatisfied leads to more seeking. In the context of fertility efforts among SMW participants, information seeking reflected an iterative, dynamic quality. For example, many participants ventured onto cryobank websites as an early step in searching for information about potential sperm donors they might consider. One participant's (15G) experience reflects the type of crucial data revealed during this early step. She spoke about her alarm when she discovered the need for a healthcare provider to obtain sperm.

This felt not only like an additional hoop to jump through, but as though healthcare providers served as gatekeepers from whom SMW needed approval in order to conceive. Moreover, as she and her partner explored their options, they found a dearth of Black or African American sperm donors. For this participant a racially Black donor was a non-negotiable factor. Not only did this revelation lead to information seeking about access to Black donor sperm through the U.S., it led to dynamic conversations with friends who shared the same criteria for donor sperm. The limited supply had implications about possible number of donor siblings, and potential linkages to other SMW friends' offspring. Other SMW involved in the study talked about many similar cycles of finding information only to seek more information about something entirely different.

“It feels like we’re playing a board game and you can’t see any of the pieces in front of you. You can see one square ahead and you’re told that in front of that one square behind the forest or whatever it is – are 15 more squares and you don’t know which one you’re going to get to next and so you’re just trying each time to just take one step forward and then there’s 15 more choices and you’re hoping that you’re doing them right but you have no idea when you’re gonna fall off into a pit or when a bear’s gonna jump out at you.” (20NG)

This participant illustrates this dimension of information seeking and the ways in which more becomes revealed in dynamic, iterative, and unanticipated ways. Furthermore, she points out the need to make additional decisions, unanticipated decisions, which may lead to decision fatigue and exacerbations of uncertainty.

Discussion

The availability and accuracy of health information affects SMW’s fertility decision-making (Bell, 2014; Hammarberg et al., 2017; Slauson-Blevins et al., 2013). Mirroring findings from previous research (Holland, 2018; Karpman et al., 2018; Ruppel et al., 2017), this study’s findings elucidate how the absence of reliable information

results in angst and a disrupted sense of confidence or self-efficacy in SMW's ability to determine a path to pregnancy given existing constraints. Despite social advancements regarding same-sex marriage equality and other civil rights protections (Goldberg et al., 2014; Goldberg & Sweeney, 2019), along with biomedical evolution of CAR technologies (Holland, 2018; Klitzman, 2019; Mamo, 2007a, 2018), SMW in this study expressed surprise at the extent to which information about how to conceive in the context of same-sex relationships remains elusive.

In the absence of coherent, inclusive guidelines and policies (Bushe & Romero, 2017; Klein et al., 2018; Ross, Steele, & Epstein, 2006b), SMW often rely on self-directed navigation and crowd-sourcing of relevant information to integrate formal and informal information content (Holland, 2018; Ruppel et al., 2017). Scholars from a variety of disciplines have traced the histories of innovative community-based workarounds devised by lesbians and other SMW in the United States who wanted to achieve pregnancy without having sex with men (Batza, 2016; Luce, 2004, 2010; Mamo, 2007b). Given that these workarounds bely the efficacy and efficiency that are expected for health interventions, SMW seeking CAR technologies as assisted strategies to achieve pregnancy expressed challenges in adapting professional recommendations geared toward heterosexual women to their own realities. Consistent with prior research, SMW in this study scavenged for SMW-relevant information online (Finney Rutten et al., 2019; Fox & Jones, 2009; Ruppel et al., 2017) and then sought to pair it with peers' prior experiences and advice (Kreines, Farr, Chervenak, & Grünebaum, 2018b; Magee, Bigelow, DeHaan, & Mustanski, 2012; Ruppel et al., 2017). As my findings suggest, however, the various collections of information obtained by SMW study participants often left them with

unsatisfied information needs as they planned to enter a life-altering endeavor. These information and experiential dissonances can lead to reification of misinformation, negative health outcomes, depletion of resources, and the perpetuation of health disparities. Moreover, as both my findings and extant literature suggest, even as SMW piece together necessary information, the CAR contexts entered for fertility care remain largely structurally and culturally heteronormative (Carvalho, Cabral, Ferguson, Gruskin, & Diniz, 2019; Holland, 2018; Klein et al., 2018; Ruppel et al., 2017a).

Disparities in health communication contribute to health inequities (Bell, 2014; Magee et al., 2012; Ruppel et al., 2017a). Information seeking and information dissemination are modifiable factors that may promote equity within the fulfillment of desires for family formation and pregnancy (Hammarberg et al., 2017; Ezabadi, Mollaahmadi, Sazvar, Vesali, & Omani-Samani, 2019). While most women in the study anticipated that trying to conceive would take more work compared to most heterosexual peers who also intended to try to conceive with no known fertility issues, the absence of accurate and reliable information from credible sources exacerbated an already challenging endeavor. The dearth of vetted information specific to SMW who desire biological connections to offspring, exists alongside a simultaneous overabundance of heteronormative infertility information in from healthcare sources received in person and online. While a variety of resources exist, the substance and quality may vary, leading SMW on sometimes inefficient paths. Professional organizations such as the American Society for Reproductive Medicine (ASRM) and Society for Assisted Reproductive Technology (SART), along with a growing number of fertility clinics (Greenfeld & Seli, 2016), have begun to promote inclusive practices that suggest attempts to meet the needs

of SMW and other SGM, yet coherent, accessible, and effective communication tailored to the information needs of SMW from these professional organizations and clinicians alike, have yet to coalesce (Holland, 2018).

Most women in this study echoed a strong desire for clear, cogent, easily accessible information that describes the possible paths to parenthood, and what they might expect as they try for pregnancy. As one participant in the study stated emphatically, “There should be a pamphlet for this!” While a centralized repository of relevant and inclusive information or a single document for SMW may be an unrealistic expectation, providers and industry experts can provide more clear, cohesive, and consistent information for SGM who hope to fulfill pregnancy desires. Future research focused on health communication design and effective implementation along with the ability to assess improved information seeking experiences and movement toward equity goals may be beneficial.

Fundamental assumptions about SMW’s paths to pregnancy, require updates. The pervasive assumption that all individuals seeking *fertility* interventions or support have physiologically based *infertility* issues shapes information construction, communication, and the cultures that inform care provision. As our findings suggest, these assumptions lead to flawed communication and education, and missed opportunities to provide competent and inclusive services. These findings, in combination with existing evidence, reemphasize the need for a paradigm shift or greater flexibility in thinking about who seeks CAR and why. Clinicians who provide assisted reproduction care know that one size does not fit all, yet more expansive views inclusive of SGM that take root across the

United States have yet to manifest. Therefore, more widespread shifts in basic assumptions that shape care provision and policy development are needed.

Limitations and Future Directions

Findings from this qualitative study do not presume to comprehensively encompass, or generalize, the experiences of SMW trying to conceive. The study aims to explore the meanings ascribed to experiences with information seeking within a sample of participants currently exploring pathways to conceive using MAR. As a result, this study does not include SMW who tried to conceive with known donor sperm and “do-it-yourself” at home insemination methods, leaving out the range and depth of information navigation issues related to other paths to pregnancy. This study also relies on a convenience sample, with most participants recruited through online advertisements. Participation may have had greater appeal to those women who encountered challenges in their efforts to conceive, those who find navigation of the process especially frustrating or burdensome, or who feel comfortable responding to online advertisements. Furthermore, the study eligibility criteria led to a relatively homogenous sample representing predominantly affluent, white SMW, leaving out the perspectives of other SMW. As research has demonstrated, access to CAR for women of color and across diverse socioeconomic strata has been historically problematic (Bell, 2016; Karpman et al., 2018). It is crucial to acknowledge the perspectives of racially and ethnically diverse SMW and their families.

Furthermore, this study did not address differences in information needs based on whether a partner contributes biologically (either gestational or egg contributions). Limited evidence suggested asymmetries in partner needs and motivations for

information seeking that depended on involvement. These asymmetries may have implications for future relational dynamics and family development. In addition, some non-gestational partners in couples that did not use co-IVF expressed a desire for preparatory guidance on how best to support their partners.

In light of these limitations and the need clearly expressed among coupled SMW, future research tackling the barriers to adequate fertility information for this population is warranted.

Conclusion

Despite unprecedented expansion of LGBTQ civil rights and increased social acceptance in recent decades, SMW couples trying to conceive engage in numerous critical considerations in this process. As one study of lesbian co-mothers states, “It’s [not] let’s get pregnant and go do it,” when planning pregnancy via donor insemination (Chabot & Ames, 2004). Not only do many SMW think about identity- and gender-related issues as they plan families, but also weigh financial, social, political, and legal factors as they make fertility decisions (Bushe & Romero, 2017; Hayman & Wilkes, 2017; Hayman, Wilkes, Jackson, et al., 2013; McNair, 2004; Meyer & Frost, 2013; Moore & Stambolis-Ruhstorfer, 2013; Renaud, 2007; Wojnar & Katzenmeyer, 2014). Even with federal recognition of same-sex marriage (“Obergefell v. Hodges,” 2015), which includes all rights and benefits ascribed to different-sex married couples, queer couples continue to face challenges to family formation (Corriher, 2016; Moore & Stambolis-Ruhstorfer, 2013; “Pavan v. Smith,” 2017). Furthermore, reports continue to suggest that SMW encounter discrimination and biased assumptions in healthcare settings (Baptiste-Roberts et al., 2017; Bell, 2016; Bushe & Romero, 2017; IOM, 2011).

This study reveals opportunities for more extensive research related to fertility and family formation information needs, mechanisms for seeking, relevance and utility, and use of fertility information by SMW and SGM more broadly. My findings suggest that SMW continue to face a paucity of accessible guidance that makes the process of having a child with CAR more feasible, less financially intensive (and risky), while retaining safety and legal safeguards. Improved mechanisms for information accessibility may help to reduce existing disparities.

Table 2.1 Sample Characteristics

N=10 Couples: 10 = Carrying/Gestational, 10 = Non-Carrying/Non-Gestational

Race	White/European American	19
	Black	1
Ethnicity	Hispanic/Latina/Xicana	3
Age (Range, Mean)	28-40	33
Household Income Range	\$67,000-200,000	
Highest level of education completed	Graduated HS	1
	College	1
	Graduate School	11
	Doctorate	3
	Professional degree (MD, JD, DDM)	4
Sexual Identity (some multiple identities)	Lesbian	12
	Bisexual	3
	Queer	11

References

- Ajzen, I., & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. *J Demographic Research*, 29, 203-232.
- Baptiste-Roberts, K., Oranuba, E., Werts, N., & Edwards, L. V. (2017). Addressing Health Care Disparities Among Sexual Minorities. *Obstetrics and gynecology clinics of North America*, 44(1), 71-80. doi:S0889-8545(16)30092-4 [pii]
- Batza, K. (2016). From sperm runners to sperm banks: Lesbians, assisted conception, and challenging the fertility industry, 1971–1983. *Journal of Women's History*, 28(2), 82-102.
- Bell, A. V. (2014). “I think about Oprah” social class differences in sources of health information. *Qualitative health research*, 24(4), 506-516.
- Bell, A. V. (2016). The margins of medicalization: Diversity and context through the case of infertility. *Social science & medicine* (1982), 156, 39-46. doi:10.1016/j.socscimed.2016.03.005 [doi]
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. *Handbook of Research Methods in Health Social Sciences*, 843-860.
- Bushe, S., & Romero, I. L. (2017). *Lesbian pregnancy: care and considerations*. Paper presented at the Seminars in Reproductive Medicine.
- Carvalho, P. G. C. d., Cabral, C. d. S., Ferguson, L., Gruskin, S., & Diniz, C. S. G. (2019). ‘We are not infertile’: challenges and limitations faced by women in same-sex relationships when seeking conception services in São Paulo, Brazil. *Culture, health & sexuality*, 21(11), 1257-1272. doi:10.1080/13691058.2018.1556343
- Case, D. O. (2007). *Looking for Information. A Survey of Research on Information Seeking, Needs and Behavior*. (2nd Ed. ed.). Amsterdam: Elsevier.
- Chabot, J. M., & Ames, B. D. (2004). “It wasn’t ‘let’s get pregnant and go do it’:” Decision Making in Lesbian Couples Planning Motherhood via Donor Insemination. *Family Relations*, 53(4), 348-356.
- Corriher, B. (2016). Putting Equality to a Vote: Individual Rights, Judicial Elections, and the Arkansas Supreme Court. *UALR L. Rev.*, 39, 591.
- Courtright, C. (2007). Context in information behavior research. *Annual review of information science and technology*, 41(1), 273-306.
- Creswell, J. W., & Miller, D. L. J. T. i. p. (2000). Determining validity in qualitative inquiry. 39(3), 124-130.
- Dedoose Version 8.3.17. (2019). Retrieved from www.dedoose.com
- Dervin, B. (2015). Dervin's Sense-Making Theory. In *Information seeking behavior and technology adoption: Theories and trends* (pp. 59-80): IGI Global.
- Dervin, B., & Naumer, C. M. (2017). Sense-making. In *Encyclopedia of library and information sciences* (pp. 4113-4124): CRC Press.
- Dervin, B., & Nilan, M. (1986). Information needs and uses. *Annual review of information science and technology*, 21, 3-33.
- Ezabadi, Z., Mollaahmadi, F., Sazvar, S., Vesali, S., & Omani-Samani, R. (2019). Satisfaction with information provided to infertile patients who undergo assisted

- reproductive treatment. *International journal of fertility & sterility*, 12(4), 324.
- Finney Rutten, L. J., Blake, K. D., Greenberg-Worisek, A. J., Allen, S. V., Moser, R. P., & Hesse, B. W. (2019). Online Health Information Seeking Among US Adults: Measuring Progress Toward a Healthy People 2020 Objective. *Public Health Reports*, 134(6), 617-625.
- Fishbein, M. (1972). Toward an understanding of family planning behaviors. *Journal of Applied Social Psychology*, 2(3), 214-227.
- Fishbein, M., & Jaccard, J. J. (1973). Theoretical and methodological considerations in the prediction of family planning intentions and behavior. *Representative Research in Social Psychology*.
- Fox, S., & Jones, S. (2009). The social life of health information. Pew internet & American life project. Washington, DC.
- Fredriksen-Goldsen, K. I., Kim, H.-J., Barkan, S. E., Balsam, K. F., & Mincer, S. L. (2010). Disparities in health-related quality of life: a comparison of lesbians and bisexual women. *American Journal of Public Health*, 100(11), 2255-2261.
- Goldberg, A. E., Gartrell, N. K., & Gates, G. J. (2014). Research report on LGB-parent families.
- Goldberg, A. E., & Sweeney, K. K. (2019). LGBTQ parent families. In M. C. B. H. Fiese, K. Deater-Deckard, E. N. Jouriles, & M. A. Whisman (Ed.), *APA handbooks in psychology®. APA handbook of contemporary family psychology: Foundations, methods, and contemporary issues across the lifespan* (pp. 743-760): American Psychological Association.
- Greenfeld, D. A., & Seli, E. (2016). Same-sex reproduction: Medical treatment options and psychosocial considerations. *Current Opinion in Obstetrics and Gynecology*, 28(3), 202-205. doi:10.1097/GCO.0000000000000266
- Greil, A. L., & McQuillan, J. (2004). Help-seeking patterns among subfecund women. *Journal of Reproductive and Infant Psychology*, 22(4), 305-319.
- Hammarberg, K., Zosel, R., Comoy, C., Robertson, S., Holden, C., Deeks, M., & Johnson, L. (2017). Fertility-related knowledge and information-seeking behaviour among people of reproductive age: a qualitative study. *Human Fertility*, 20(2), 88-95.
- Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth: research evidence and clinical implications. *Pediatric Clinics*, 63(6), 985-997.
- Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative Research in Psychology*, 12(2), 91-106.
- Hayman, B., & Wilkes, L. (2017). De novo Families: Lesbian Motherhood. *Journal of homosexuality*, 64(5), 577-591. doi:10.1080/00918369.2016.1194119
- Hayman, B., Wilkes, L., Jackson, D., & Halcomb, E. (2013). De Novo Lesbian Families: Legitimizing the Other Mother. *Journal of GLBT Family Studies*, 9(3), 273-287. doi:10.1080/1550428X.2013.781909
- Holland, S. (2018). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*.
- Holland, S. (2019). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*,

41(1), 52-66.

- Johnson, J. D., Andrews, J. E., & Allard, S. (2001). A model for understanding and affecting cancer genetics information seeking. *Library & Information Science Research*, 23(4), 335-349.
- Johnson, M. J., & Nemeth, L. S. (2014). Addressing health disparities of lesbian and bisexual women: a grounded theory study. *Women's Health Issues*, 24(6), 635-640.
- Karpman, H. E., Ruppel, E. H., & Torres, M. (2018). "It wasn't feasible for us": Queer Women of Color Navigating Family Formation. *Family Relations*, 67(1), 118-131. doi:10.1111/fare.12303
- Klein, D. A., Berry-Bibee, E. N., Baker, K. K., Malcolm, N. M., Rollison, J. M., & Frederiksen, B. N. (2018). Providing quality family planning services to LGBTQIA individuals: a systematic review. *Contraception*, 97(5), 378-391. Retrieved from <https://doi.org/10.1016/j.contraception.2017.12.016>
- Klitzman, R. (2019). *Designing Babies: How Technology is Changing the Ways We Create Children*: Oxford University Press, USA.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1-6.
- Kuhlthau, C. C., Heinström, J., & Todd, R. J. (2008). The 'information search process' revisited: Is the model still useful. *Information research*, 13(4), 13-14.
- Lambert, S. D., & Loiselle, C. G. (2007). Health information—seeking behavior. *Qualitative health research*, 17(8), 1006-1019.
- LaSala, M. C. (2003). When Interviewing "Family" Maximizing the Insider Advantage in the Qualitative Study of Lesbians and Gay Men. . *Journal of Gay & Lesbian Social Services*, 15(1-2), 15-30.
- Luce, J. (2004). Imaging Bodies, Imagining Relations: Narratives of Queer Women and "Assisted Conception". *Journal of Medical Humanities*, 25(1), 47-56.
- Luce, J. (2010). *Beyond expectation: Lesbian/bi/queer women and assisted conception*: University of Toronto Press.
- Magee, J. C., Bigelow, L., DeHaan, S., & Mustanski, B. S. (2012). Sexual health information seeking online: a mixed-methods study among lesbian, gay, bisexual, and transgender young people. *Health Education & Behavior*, 39(3), 276-289.
- Makadon, H. J. (2011). Ending LGBT invisibility in health care: The first step in ensuring equitable care. *Cleve Clin J Med*, 78(4), 220-224.
- Mamo, L. (2007a). Negotiating conception: Lesbians' hybrid-technological practices. *Science Technology and Human Values*, 32(3), 369-393. doi:10.1177/0162243906298355
- Mamo, L. (2007b). *Queering reproduction: Achieving pregnancy in the age of technoscience*: Duke University Press.
- Mamo, L. (2018). Queering the fertility clinic. In *Beyond Bioethics: Toward a New Biopolitics* (pp. 328-338): University of California Press.
- McManus, A. J., Hunter, L. P., & Renn, H. (2006). Lesbian experiences and needs during childbirth: guidance for health care providers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 35(1), 13-23.
- McNair, R. (2004). *Outcomes for children born of ART in a diverse range of families*:

- Victorian Law Reform Commission Melbourne,, Australia.
- Medicine, I. o. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Retrieved from
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. *Handbook of psychology and sexual orientation*, 252-266.
- Meyrick, J. J. J. o. h. p. (2006). What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality. *11*(5), 799-808.
- Miller, W. B. (1994). Childbearing Motivations, Desires, and Intentions: A Theoretical Framework. *Genetic, Social & General Psychology Monographs*, *120*(2), 223-253.
- Miller, W. B., & Pasta, D. (1995). Behavioral Intentions: Which Ones Predict Fertility Behavior in Married Couples? 1. *Journal of Applied Social Psychology*, *25*(6), 530-555.
- Montano, D., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health behavior: Theory, research and practice*, 95-124.
- Moore, M. R., & Stambolis-Ruhstorfer, M. (2013). LGBT sexuality and families at the start of the twenty-first century. *Annual Review of Sociology*, *39*, 491-507.
- Obergefell v. Hodges. (2015). *S.Ct.*, *135*(No. 14-556), 2071.
- Pavan v. Smith, No. No. 16-992, 137 2075 (Supreme Court 2017).
- Peterson, B. D., Newton, C. R., Rosen, K. H., & Skaggs, G. (2006). Gender differences in how men and women who are referred for IVF cope with infertility stress. *Human Reproduction*, *21*(9), 2443-2449.
- Peterson, B. D., Pirritano, M., Christensen, U., & Schmidt, L. (2008). The impact of partner coping in couples experiencing infertility. *Human Reproduction*, *23*(5), 1128-1137.
- Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual frameworks in information behavior. *Annual review of information science and technology (ARIST)*, *35*(43-78).
- Porter, M., & Bhattacharya, S. (2007). Helping themselves to get pregnant: a qualitative longitudinal study on the information-seeking behaviour of infertile couples. *Human reproduction*, *23*(3), 567-572.
- Renaud, M. T. (2007). We are mothers too: Childbearing experiences of lesbian families. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, *36*(2), 190-199.
- Robson, A., & Robinson, L. (2015). The information seeking and communication model. *Journal of Documentation*, *71*(5), 1043-1069. doi:10.1108/JD-01-2015-0023
- Röndahl, G., Bruhner, E., & Lindhe, J. (2009). Heteronormative communication with lesbian families in antenatal care, childbirth and postnatal care. *Journal of advanced nursing*, *65*(11), 2337-2344.
- Ross, L. E., Steele, L. S., & Epstein, R. (2006). Service Use and Gaps in Services for Lesbian and Bisexual Women During Donor Insemination, Pregnancy, and the Postpartum Period. *Journal of Obstetrics and Gynaecology Canada*, *28*(6), 505-511. doi:10.1016/S1701-2163(16)32181-8
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, *48*, 18-23. doi:10.1016/j.midw.2017.02.011

- Slauson-Blevins, K. S., McQuillan, J., & Greil, A. L. (2013). Online and in-person health-seeking for infertility. *Social Science & Medicine*, 99, 110-115.
- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical education*, 51(1), 40-50.
- Wilson, T. D. (2000). Human information behavior. *Informing science*, 3(2), 49-56.
- Wingert, S., Harvey, C. D., Duncan, K. A., & Berry, R. E. (2005). Assessing the needs of assisted reproductive technology users of an online bulletin board. *International Journal of Consumer Studies*, 29(5), 468-478.
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of preconception, pregnancy, and new motherhood for lesbian nonbiological mothers. *Journal of Obstetric, Gynecologic, Neonatal Nursing*, 43(1), 50-60.

Chapter 3

“Limits on us that aren’t for other people”: Barriers and minority stress in queer women’s pursuits of pregnancy

Abstract

Sexual minority women (SMW) face a multitude of reproductive considerations in the context of divergent social pressures and expectations. Even as marriage equality has conferred upon same-sex couples the rights and responsibilities of all married couples in the U.S., including parenthood, SMW continue to experience challenges to family formation and have concerns about the security of their families. Using data elicited through online surveys and in-depth interviews with 20 SMW, I sought to 1) enumerate barriers to clinically assisted reproduction (CAR) and 2) to understand how barriers to CAR become stressors and consequently manifest as sexual minority stress. Consistent with prior research, SMW in this sample reported common barriers CAR, including financial burdens, communication and information issues, time demands, and constraints, social isolation, and heteronormativity woven into policies, care delivery, and interpersonal interactions. Associated with the survey-based identification of barriers, sexual minority stress manifested in the context of structural, clinical, and individual levels of experience. To alleviate the barriers, associated stressors, and manifestations of stress experienced by SMW across regions of the U.S., continued action toward reduction of prejudice and discrimination in healthcare settings, regulatory updates relating to donor sperm, replication of successful models of CAR practice that address both

physiological and social forms of infertility, and investment in research and interventions that assist SMW in coping with CAR-oriented sexual minority stress are needed.

Introduction

Women face a series of reproductive decisions throughout their lives. Often times these decisions are clouded by social pressures and expectations (e.g. the motherhood imperative for female bodies), underscoring the need to understand these reproductive choices and promote women's health equity and bodily autonomy (Chrisler, 2014; Doyal, 1995; Dudgeon & Inhorn, 2004; Hall et al., 2020; Karpman et al., 2018; Roberts, 1995, 1997; Ross, Gutierrez, Gerber, & Silliman, 2016). Within a reproductive rights and justice framework, researchers and advocates have delineated three pillars foundational to movement toward health equity for all women: 1) the right to have children; 2) the right not to have children; and 3) the right to parent children in safe and healthy environments free from threats of harm or violence (Crenshaw, 1990; Roberts, 1997; Ross & Solinger, 2017). Reproductive justice has also been conceived of as "the complete physical, mental, spiritual, political, economic, and social well-being of women and girls, and will be achieved when women and girls have the economic, social and political power and resources to make healthy decisions about our bodies, sexuality and reproduction for ourselves, our families and our communities in all areas of our lives" (ACRJ, (2005, p. 1). Building on this framework, researchers and advocates have acknowledged that sexual minority women (SMW) encounter additional barriers across *structural, clinical, and individual* dimensions when pursuing sexual and reproductive justice (Carpenter et al., 2020; Everett, McCabe, & Hughes, 2017; Hall et al., 2020). Recognizing the diversity of potential barriers present in the lives of SMW and the need to share the articulations of these experiences through a person-centered care perspective (Diamond-Smith, Warnock, & Sudhinaraset, 2018; Ekman et al., 2011), my goal in this dissertation chapter is to

describe the barriers to trying to conceive using clinically assisted reproduction (CAR) experienced by SMW, and how these barriers manifested as stressors in women's lives, and the manifestations of sexual minority stress (Meyer, 2003) as they made choices in trying to conceive.

In the context of fertility decision making, researchers have pointed out common barriers encountered by both SGM and heterosexuals who use clinically assisted reproduction (CAR) (Bell, 2016; Schwartz & Baral, 2015; Wendland, Burn, & Hill, 1996). Common barriers include financial or cost related impediments (Devlin & Parkin, 2003; Gleicher et al., 1996; Mehta, Nangia, Dupree, & Smith, 2016; Wu, Odisho, Washington III, Katz, & Smith, 2014), medical mistrust (Blanchfield & Patterson, 2015; IOM 2003), communication challenges with providers, unmet information needs (Jin & Dasgupta, 2016; Mehta et al., 2016; Ruppel et al., 2017; Wu et al., 2017), impact on emotional health and well-being (Borneskog, Sydsjo, Lampic, Bladh, & Svanberg, 2013; Cousineau & Domar, 2007; Cwikel, Gidron, & Sheiner, 2004; Yager, Brennan, Steele, Epstein, & Ross, 2010), access to local providers (Mamo, 2007b; Mehta et al., 2016), and time and logistical pressures associated with clinical assistance (Mamo, 2007b; Wu, Elliott, Katz, & Smith, 2013).

While an ever-expanding body of literature has described the barriers, burdens, stressors, and stressful experiences associated with infertility treatments (Campagne, 2006), sexual and gender minorities (SGM) may experience the added layers of sexual minority stress that inscribes distinct challenges into their experiences of trying to conceive with CAR. SMW often access the reproductive care provided by fertility experts as a way to overcome social infertility (i.e. the absence of sperm by one partner in

a dyadic relationship), with no reason to believe that physiological impediments to fertility (i.e., clinical infertility) might exist. As a result, SMW may experience structural, interpersonal, and individual barriers in access to CAR that are different from peers who have clinical infertility diagnoses. For instance, SMW may encounter challenges in finding public policies, legal parameters, and pertinent information that affirms the use of CAR as a method of family expansion (Malmquist, 2015a; Chabot & Ames, 2004; Chapman et al., 2012; Engström, Häggström-Nordin, Borneskog, & Almqvist, 2018; Brenda Hayman & Wilkes, 2017; Mamo, 2007b; Ruppel et al., 2017a; Wu et al., 2017), face challenges when seeking clinical services originally designed with a heterosexual married couples (Hayman, Wilkes, Halcomb, et al., 2013; Mamo, 2005; Mamo & Alston-Stepnitz, 2015; Rogalin & Brooks, 2018), and experience a range of homophobic and discriminatory attitudes and behaviors as they pursue CAR (Chapman et al., 2012; Somers et al., 2017). In the present historical moment, clinical reproductive assistance is often a path that coupled SMW take to meet pregnancy and family formation goals. Yet, taking this path assumes the risk of enormous financial burdens that are disproportionate to available resources. The financial investment in donor sperm and clinical services together with uncertainty around the number of cycles it might take to meet pregnancy goals can create strained conditions in which couples try to conceive. Taken together, these experiences may heighten SMW's exposure to, and amount of, CAR-related barriers and create added stressors unique to the experience of SMW (Engström et al., 2018; Rausch & Wikoff, 2017).

Meyer adapted social stress theory to create a minority stress model for SGM populations (Meyer, 1995, 2003; Meyer & Frost, 2013). This model acknowledges that

social and interpersonal stressors related to sexuality and gender may result in increased vulnerability to sexual prejudice from diverse sectors of society and to internalized homonegativity resulting from hypervigilant, intrinsic monitoring regarding the need to conform to ‘traditional’ social expectations (Frost et al., 2015; Hequembourg & Brallier, 2009; Meyer, 2003; Meyer & Frost, 2013). Researchers who have used a minority stress framework to understand the experiences of SMW have found that minority stressors impact both mental and physical health (Lick et al., 2013). For example, SMW are at increased risk for depression and anxiety (Baams et al., 2015; Lehavot & Simoni, 2011), suicidal ideation (Baams et al., 2015), substance misuse (Lehavot & Simoni, 2011), smoking (Lehavot & Simoni, 2011), and binge and other disordered eating (Mason & Lewis, 2015; Watson et al., 2015). To date, however, few researchers have explored the varied manifestations of CAR-related barriers as minority stressors in the lives of SMW.

The goal of this Dissertation chapter is to explore how coupled SMW experience barriers to CAR as minority stress processes. This exploratory qualitative study aimed a) to enumerate the barriers to pregnancy identified by SMW participants and b) examine how these barriers manifested as stressors or in stress processes among coupled SMW participants. In order to facilitate this exploration, I examined to what extent stressors are linked to structural causes; second, I examined stressors in women’s clinical experiences; and finally, I examined stressors tied to women’s individual experiences and relationships.

Methods

Data for this study stem from a study examining coupled SMW’s pregnancy planning and decision-making. The focus of this analysis was on barriers identified by

coupled SMW trying to conceive with clinical assistance and how those barriers manifested as sexual minority related stress. The Institutional Review Board of the University of Pennsylvania approved this research protocol prior to implementation. I collected data over two months, between June and August 2019.

Participants and recruitment

The literature suggests that despite gains in civil rights, social acceptance, and visibility, SMW often remain invisible to health-related research. Additionally, evidence documenting the range of inclusive clinical spaces across the country suggests that barriers may differ slightly by region and/or state (Johnson, 2012; Wu et al., 2017). To ensure a wider catchment of eligible participants and to expand regional representation, participants were recruited from across the United States.

A range of recruitment strategies were enacted to optimize participation given the accelerated timeline of a dissertation project. Advertisements were posted in local establishments frequented by SMW, shared within social networks by way of email, and through online advertisements targeting SMW on Facebook and Instagram. Advertisements included a link to a study interest form that allowed people to provide contact information to the study team to schedule a follow-up screener and conversation about the study. I emailed interested parties who represented cisfemale couples trying to conceive and shared a link to the study screener (screening materials available in Appendix A).

Fourteen participants were recruited through Facebook and Instagram ads, two through snowball sampling, and four through my personal social network. Study participation relied on a convenience sample of SMW couples who met inclusion and

exclusion criteria and who were willing and able to participate in the study during the time of study recruitment. Reliance upon convenience sampling and established inclusion criteria increased the risk of a homogenous sample. To be eligible, participants identified as female at birth and maintain identity as women, were 18 years of age or older, spoke English, identified as lesbian, queer, bisexual or other non-heterosexual sexual identity, were in a committed same-sex relationship, resided in the United States, and had tried a clinically facilitated reproduction intervention in the six months. Exclusion criteria included younger than 18 years old, inability to speak English sufficiently to engage in interviews, other than cisfemale, and efforts to conceive with clinical assistance that occurred more than six months prior to contact with the research team.

Procedures and Data Collection

Participants were encouraged to complete an online questionnaire prior to the start of in-depth interviews. Both members of the couple were asked questions related to the process of trying to conceive. While the questionnaire addressed a variety of dimensions related to CAR experiences, I elicited responses regarding SMW's perceived control (i.e., perceived impact of barriers or facilitators, making it easy or difficult to achieve a goal or enact a behavior) as a means to ascertain barriers related to CAR. Participants were asked about what three things *made it easy* to try to conceive with assistance from clinicians, and what three things *made it difficult* to try to conceive with fertility assistance. Participants responded to these open-ended questions in open-field format, meaning there were no limitations on space used to identify and describe each item.

I conducted 20 individual semi-structured qualitative interviews with study participants. Interviews were conducted using the secure video conference platform,

Bluejeans, which was made available by the University of Pennsylvania. The interview guide focused on individual level experiences of both gestational and non-gestational partners in SMW couples as they pertain to the experience of trying to conceive a pregnancy with MAR. Participants were asked to discuss how they considered the many possible paths to parenthood and how they came to try for pregnancy with clinical assistance, what things had made CAR difficult; whether, as SMW, they experienced any asymmetries in treatment between gestational and non-gestational partner; or whether they felt any sense of being treated differently as SMW couples seeking fertility assistance.

Data Management

Qualtrics survey software (Qualtrics, 2020) was used to administer study questionnaires. Each participant answered questions independently. Data were stored securely using Qualtrics and downloaded for content analysis. Audio visual recordings of semi-structured interviews were checked for completeness. Audio recordings were transcribed, checked for accuracy and fidelity to participant communication, and de-identified. De-identified transcripts were printed for the purpose of hand coding and stored in a locked file cabinet in a locked office at the University of Pennsylvania School of Nursing. Digital copies of transcripts were stored in Penn+Box and password protected. The computer assisted qualitative data analysis software, Dedoose Version 8.3.17 (2020) was used in the data analysis phase.

Data Analysis

Qualitative Content Analysis

The first step in addressing the study aims was to enumerate barriers identified by SMW participants using the elicitation questions in the online questionnaire. Answers were extracted from survey data and reviewed to gain familiarity with the breadth of responses. Most responses included one word, a clause, or a short sentence (e.g. “cost”, “time”, “lack of information”, “hoops to jump through as same-sex couple”). Informed by minority stress theory and grouped similar data together into categories (irrespective of whether participants identified a barrier first, second, or third in their possible three answers to the question) and made comparisons across the aggregated subset of data (Hsieh & Shannon, 2005; Polit & Beck, 2017; Vaismoradi, Turunen, & Bondas, 2013). Subcategories were labeled to reflect nuances within each major category.

Thematic Analysis of Interview Data

Using the six phases of thematic analysis outlined by Braun and Clarke (Braun & Clarke, 2006; Braun et al., 2019), I first engaged in familiarization with the data, followed by development of initial inductive codes. Transcripts, fieldnotes, and memos formed the data corpus for inductive analysis. Familiarization with the data began with conducting interviews and generating fieldnotes during and immediately after each interview. It also involved transcription and transcription checks which occurred while listening to and relistening to recordings (audio-visual), and re-reading finalized transcripts, fieldnotes, memos. Next, I independently generated initial inductive codes (Saldaña, 2016; Braun and Clarke, 2013; Braun, Clarke, Hayfield, Terry, 2019), based on systematic examination of all transcripts and consultation of field notes and memos. Both

semantic (superficial and descriptive) and latent (implicit, conceptual) codes were generated (Braun, Clarke, Hayfield, Terry, 2019, p. 853) in first round coding. Upon reflection of this initial inductive coding, an emergent question became important to the larger study goal of understanding how coupled SMW make decisions when trying to conceive: how do coupled SMW's CAR barriers manifest as sexual minority stress?

Focused on this emergent question, and in an effort to capture the breadth of ways in which barriers may have manifested as stressful events, the following sets of codes were abstracted for further coding and analysis: 1) relating to clinicians and care received broadly, 2) LGBTQ competency, 3) insurance/finance/cost, 4) time and/or logistics, 5) stigma and discrimination (including gatekeeping), 6) heteronormativity and perceived norms, 7) comparisons to heterosexual couples' experiences, 8) known donor issues, sperm donor related issues, and 9) complexities of SMW families. Braun and Clarke's description of thematic analysis guided organization the inductive findings into defined themes for this report. The report consists of references to participants' lived experiences as well as exemplar quotes. For each participant unique identification codes have been used and information modified to promote confidentiality and privacy.

Rigor and Trustworthiness

Analytic rigor was enhanced through maintenance of an audit trail, reflexivity, triangulation, presentation of exemplar quotes, respondent validation, and multiple coders and coding cycles (Creswell & Miller, 2000; Meyrick, 2006). Through multiple coding cycles and collaboration among multiple coders, along with analytic techniques, I aimed to achieve theoretical sufficiency, meaning the categories and themes sufficiently accommodated relevant data in the corpus (Varpio et al., 2017, pp. 45-46).

Audit Trail. Throughout the research process I employed an audit trail (Creswell & Clark, 2017; Meyrick, 2006) to document research decisions and rationales. In line with Creswell and Miller's recommendations, a data collection chronology was maintained using Qualtrics reports, Excel spreadsheets, and records of data analysis procedures were recorded in memos.

Triangulation. Using survey and interview data, elicited at one moment in women's lives, provides for complementary ways to explore of SMW's reports of barriers to trying to conceive using CAR. to explore barriers to CAR through the lens of sexual minority stress data to the ways in which women identified what made CAR difficult, or barriers to CAR,

Reflexivity. Reflexivity, in parallel with the standpoint theory, feminist methodologies, and other critical paradigms, encourages the disclosure of assumptions, beliefs, and biases that inform the research process, data collection, and analysis. Reflexivity grants the researcher and researched permission to consider the social, experiential, cultural, historical, and political conditions that shape our views and interpretations in the research. Throughout the research process, I aimed to acknowledge personal beliefs, values, and biases in personal reflective practice that manifested in critical conversations with advisors and colleagues, journaling, and memoing. The discussion section of this chapter will further elucidate my positionality.

As part of the work of maintaining credibility through reflexivity I prioritized awareness of my positionality as both an insider and outsider (Hayfield & Huxley, 2015; LaSala, 2003). As insider and researcher, I disclosed and have been aware of my identity as a sexual minority woman in a same-sex couple who has engaged in fertility decision

making. As such I share some understanding of at least parts of what participants discussed (LaSala, 2003). At the same time, I would not presume to understand the experiences or perceptions of any individual participant and have maintained awareness as an outsider as well—not necessarily in a position to understand fully participants’ perspectives than a non-cisfemale sexual minority (Hayfield & Huxley, 2015).

Transferability. Transferability of study findings to various health related, clinical, and advocacy contexts has been a goal of the overall project. The findings from this study aim to support efforts to create more equitable conditions for health and well-being among SMW and their families. Clinical and policy level recommendations will be made drawing directly on study findings.

Findings

Sample

Demographic information gathered from participants through an online questionnaire (age, race, sexual identity, household income, highest level of education) are described in Table 3.1. The average age of participants was 33 years old, with an age range of 28 to 40 years old. Of the 20 participants, 16 identified as White, one as Black, two Hispanic or Latina, and one Xicana. Most participants identified as lesbian, queer, or both lesbian and queer. Two participants from different couples identified as bisexual and one as both bisexual and queer. Mean household income for couples was \$133,700 per year, with a range between \$67,000 and \$200,000 per year. Most participants had a graduate or professional degree. Couples resided across the United States from all four U.S. Census regions including Northeast, South, Midwest, and West. Participants came from rural (two couples), suburban (two couples), and urban (six couples) settings.

Table 3.1. Sample Characteristics

10 COUPLES :

10 = gestational partners and 10 = non-gestational partners

Race	White/European American	19
	Black	1
Ethnicity	Hispanic/Latina/Xicana	3
Age (Range, Mean)	28-40	33
Household Income Range	\$67,000-200,000	
Highest level of education completed	Graduated HS	1
	College	1
	Graduate School	11
	Doctorate	3
	Professional degree (MD, JD, DDM)	4
Identity (some multiple identities)	Lesbian	12
	Bisexual	3
	Queer	11

The structures and knowledges that form CAR policies and practice are primarily based upon treatment of opposite-sex couples who contend with physiological infertility (male or female factor). SMW use services and products provided by clinicians who assist with reproductive goals to bypass the lack of sperm in their intimate partnerships. As they rely on a system constructed around assumptions of heterosexuality and pathology, they are confronted by challenges because they do not fit into the framework or paradigm of most approaches to CAR.

The barriers faced by SMW that make CAR difficult include structural (i.e. policy, regulatory, legal factors), clinical (i.e. prejudicial clinical approaches and encounters), and individual level factors (i.e. internal to the individual and interpersonal). Although these barriers often overlap and impact one another across levels, I use this

organizational structure to help delineate the ways in which barriers are present in queer women's lives below.

Enumeration of Barriers

Participants identified several barriers through survey elicitation (see Table 3.2). Barriers identified by women in their responses included time, cost or financial issues, information and communication barriers, and overarching perceptions of heteronormative assumptions, influences, or interactions. I grouped these barriers into structural, clinical, and individual levels.

In alignment with prior findings in the literature, participants identified barriers to CAR common across populations. These include: financial or cost related impediments (Devlin & Parkin, 2003; Gleicher et al., 1996; Mehta et al., 2016; Wu et al., 2014); time demands and managing logistics logistical pressures associated with clinical assistance (Mamo, 2007b; Wu et al., 2013); inadequate information and poor communication with healthcare providers and clinical staff about procedures and protocols unmet information needs (Jin & Dasgupta, 2016; Mehta et al., 2016; Ruppel et al., 2017a; Wu et al., 2017); intensity of biomedicalized approaches (Boivin et al., 2012b; Gameiro, Boivin, Peronace, & Verhaak, 2012); and a sense of isolation (Bell, 2012; Borneskog, Sydsjö, Lampic, Bladh, & Svanberg, 2013; Luce, 2010; Schmidt, 2009). Subcategories of barriers in each grouping shared across those who use CAR contain no symbol to make distinctions. I have denoted barriers that have sexual minority specific manifestations with this symbol **. Barriers identified by SMW in the study are briefly summarized in the tables below.

Table 3.2 Enumeration of Barriers to CAR

Type of Barrier	Category of Barrier	Subcategories
Structural	Cost: money, cost, finances, financial burden	<p>**Cost of sperm: expensive and not covered by insurance</p> <p>**Lack of insurance coverage for fertility services (due to social infertility)</p>
	Time	<p>Age.</p> <p>Unpredictability of time to conceive</p>
	Information and Communication	<p>Overall lack of accessible information</p> <p>Absence of SMW specific information</p>
	Heteronormative assumptions of infertility and pathology	Antiquated policies
		Assumption of infertility / cishet definitions of fertility
		Intensive medicalized protocols
		**Gatekeepers
Clinical	Cost	**Overall lack of transparency about fees and cost structure
	Time	<p>Time consuming and unpredictability of length of appointments</p> <p>Inconvenient or limited appointment times</p>
	Information and Communication	<p>Poor communication</p> <p>Overall lack of accessible information</p> <p>**Lack of SMW specific information, lack of resources, lack of personalized information</p>

	Heteronormative assumptions of infertility and pathology	**Known donor issues and barriers to use of known donor sperm
		**Clinical assistance based on heteronormative framework
		**Antiquated and logically inconsistent policies
Individual	Cost	Resource constraints.
	Time	Interference with professional obligations, taking time off from work Logistics, clinician location, travel
	Information	Information exchanged at an interpersonal level among peers about lived experience.
	Heteronormative assumptions of infertility and pathology	[this category was not reflected by at the individual level]

Manifestations of Minority Stress

Consistent with the transactional model of stress, participants' narratives regarding CAR-related barriers often were portrayed as stressors linked to their experience as SMW. SMW who used CAR often experience barriers as stressors in numerous forms at the structural level: from procurement of donor sperm to the absence of work anti-discrimination laws. While some of these structures were created to support women exhibiting physiologic infertility fulfill pregnancy desires (in ways that may provide legal and emotional protections), these very structures also alienated SMW who were seeking CAR due to social infertility. As a result of experiences of alienation coupled with ongoing hypervigilance and expectations of rejection associated with sexuality, SMW perceive their fertility desires as being outside of normative clinical and regulatory frameworks, creating additional stressors during their fertility pursuits. Participants, for example, noted how assisted reproduction and its ancillary products and

services (e.g., cryobanks) continue to be based on heteronormative assumptions and have not yet caught up to meet the growing demands and needs of queer individuals or families. As one participant from the South succinctly stated, “we already know as a lesbian couple we gotta jump through so many hoops to get the family” (18NG).

SMW are aware of the many challenges that trying to conceive can present. But, as SMW universally reported, the degree to which it could feel challenging and the accompanying stress could not have been anticipated before entering into the process itself and facing structural, clinical, and individual challenges. One participant’s description captures how the reality of the challenges changed once she and her partner started to learn about and enact the steps of trying to conceive with clinical support:

I was angry. I was like angry at like how like this wasn’t, this was even harder than I thought it was gonna be. And I already knew it was gonna be hard. And I already knew it was gonna be expensive. And then I was like oh this is probably like twice as much as I thought it was gonna be, and like its twice as difficult as I thought it would be. 15G

SMW participants knew that trying to conceive as queer couples would be difficult, but as the above quote illustrates, enactment revealed just how difficult. In addition, even to this very meticulous, budget conscious participant, it also revealed how expensive it could be. These difficulties are reflected in the tapestry of structural, clinical, and individual manifestations of stress discussed below.

Structural

Structural level factors include laws, regulations, and policies (national, state, and institutional) that shape the ways in which SMW consider their choices regarding pregnancy and family formation, and how CAR is administered and practiced. A majority of participants acknowledged that the structures that shape the industry of clinically

assisted reproduction (including cryobanks, the handling of known donor sperm, and fertility clinic administrative and clinical protocol infrastructure) rest on assumptions of heterosexuality and opposite-sex sexual interactions. Participants shared that some clinics and clinicians have been driven to gain market share in LGBTQ+ reproductive efforts yet have not adapted to LGBTQ+ needs. As a result, participants felt like they needed to fit into heteronormative fertility protocols formulated for the needs of opposite-sex couples or single women. One participant described a perspective common to most participants, namely that clinically assisted reproduction is in general a system set up for “straight people”:

The kind of default still feels like straight couples there. Straight couples having trouble having a baby. And so, there’s just been – it’s always when I make an appointment to have the IUI, what’s your partner’s name? Well, it doesn’t matter, I have donor sperm, you don’t need to know who – he’s not coming in to give a specimen. (3G)

Throughout the interviews, it also became evident that SMW participants had at least cursory level of awareness and consideration of possible legal challenges to their future families, which impacted their decision-making with respect to choice of sperm donor, type of CAR they might try, the timing of their efforts, and the additional cost associated with legally protecting their parental rights.

Regulatory Guidance

Regulatory guidance and institutional interpretation of these policies were a source of structural stress for SMW. Across women’s interviews, participants shared how the implementation (or interpretation) of certain policies among SMW clients served as fertility barriers and resulted in minority stress. For example, institutional policies regarding known donors heightened the disparate treatment between opposite- and same-

sex couples. Some couples addressed these disparities directly. One couple, who lived in the South and received care in a large academic medical system, expressed exasperation at the inequitable applications of clinical policies. They addressed their reproductive endocrinologist and asked for an explanation of the policy's logical coherence --the policy seemed to treat sperm differently for same-sex cisfemale couples and heterosexual couples.

“At one point I asked the doctor, Mr. Fuddy-Duddy – I was like, do you check the ID of – if any woman comes in here and is trying to get pregnant with a man, are you checking to see if it's the same partner every time she comes in? I was like, what's going on here? You're telling me –? I was like – well, [my spouse] is going to come in with her new boyfriend and – like that's what's going to happen and then add my name – but that's why it was so maddening because it was like *you're putting these limits on us that aren't for other people for* – and it's like there's no rhyme or reason to it, really, it's just – it was really vague what their methods were.” (23NG)

Barriers in the form of the guidelines governing donor sperm use seemed prejudicial and discriminatory. Another couple, who partnered with a close friend to do a known donor arrangement shared the many hurdles they overcame in their efforts to conceive their first child and expressed how arduous it was to use the same donor for the second child.

Regarding testing requirements, one participant explained:

“He had to run around to get all this testing done because the place...where he had done his sperm deposits had waived the six-month FDA rule. They'll say it's a law. They told me it's not a law, it's a guideline, as you know. And so, they had waived – we had signed a waiver for that, but [the new *LGBTQIA clinic* they worked with to try for a second child in a different city] was not into that. And so, they actually made him go get tested. But of course, now that his sperm had been frozen for two years, it was like a two-year quarantine, so even safer. So, he had literally had to run all around Stockholm getting all of these tests done. And then they said oh, the letter that the doctor had sent wasn't worded right. I mean, it was so ridiculous, which I was actually very offended by, because I thought given the FDA's position towards gay men and sort of the general institutionalized homophobia, the fact that this – I'm sure it's just what their lawyers have told them they have to do. It's a liability thing. But I tried to say to her – like the woman who coordinates the program – like straight people don't have to do this. They don't have to quarantine sperm!” (23NG)

In some cases, use of known donor sperm was more logistically complicated, time consuming, and costly than purchasing anonymous donor sperm from a cryobank. While there are ways to waive the quarantine period, SMW felt that the entire process was unnecessary - with “hoops to jump through” applying disproportionately to SGM.

For the SMW who procure sperm from cryobanks, the experience of barriers differed in some respects from those who worked with known donors. For example, while cryobanks have benefits such as donor relinquishment of all parental rights and health-related screenings, aspects of the procurement process felt surprising to some participants because they did not come to the process of trying to conceive with a medicalized view of how it worked. To several participants, access to sperm and negotiating its use was described in terms of surveillance, namely “hoop jumping” and “gatekeeping”. A participant described her initial alarm when she learned about how she could obtain anonymous donor sperm:

I still didn’t know, I feel like I didn’t even know that I couldn’t just like buy sperm and like have it sent to me, like I was like, why can’t I just buy it, like, and yet, like already had all of these *gatekeepers* like, *people who had to sign off on it and I remember being really angry about it*. And um, so I was like, ok I have to have all of these people involved even though I don’t want to but because we have like this, like we don’t have like a known donor, like. It has all of the other barriers...(15G).

As this participant suggests, queer women trying to conceive often experience the regulatory systems they must function within as a form of surveillance. She describes her anger at the need for clinician sign off to purchase sperm and invokes the term “gatekeepers”. Whether or not these steps are specific to SMW, given the lived experience of stigma and marginalization, in addition to a surveillance culture that many SGM experience in daily life, the various steps involved in procurement of sperm may be thought of as “hoops” and experienced as minority stress.

Adopting our Own Children

When considering the use of CAR, many SMW were encouraged to consider second parent adoptions for the *non-gestational partners* once children were born. Couples often investigated potential legal pitfalls and protections and spoke with attorneys who specialized in LGBTQ families or with friends who had conducted research with attorneys already. In the case of couples who used donor sperm and IUI facilitated by clinicians or IVF, the egg and uterus of the partner who intended to carry and bear future children is legally considered a parent and recognized as such in birth certificates in all states. Many legal experts suggest, therefore, that non-gestational partners pursue second parent adoptions of children born into their marriages or partnerships to ensure protections of their parental and family rights. In the case of reciprocal IVF, the legal demarcations of parenthood and parental rights remains less clear.

A spectrum of views about second parent adoptions and their necessity were represented in the interviews. Some participants viewed second parent adoptions as unnecessary. As this participant argued after much investigation of existing case law:

the presumption of parentage phenomenon that comes with marriage is essentially ironclad across all 50 states, like case law after case law after case law supports it...my mom is a professor of family law and has over and over again – the presumption of parentage is ironclad. If you are married, it doesn't – it's not about the birth certificate. Children born in wedlock are the presumed children of that couple, even if that child is not biologically related to them. The other man cannot challenge that parentage relationship. And the third thing is that I make [more than my wife]... No one is going to be trying to terminate my parental rights. Quite the contrary, they're going to be coming after me for child support. So it's not logical to think that anyone's gonna be trying to take my children away from me. (2NG)

Others, more confident in the layer of protection added by second parent adoption and name changes (for consistency) decided they would pursue the adoption process. For example, this participant explained:

[w]e have friends who haven't done that and friends that have. I am somebody who just errs on the side of catastrophizing and knowing – thinking of the worst-case scenario. So, yes. I think we absolutely will. I don't know, financially, what that means fully. So, when we will be able to do that, I don't know, just because I don't know when we would be able to afford it. But, yeah. That would definitely be the plan. (3G)

Manifestations of stress related to second parent adoptions and its added financial burdens were reflected in statements such as, “You know it seems like another tax; like another gay tax when you need to pay thousands of dollars to adopt your own child” (3NG). Another non-gestational explained that from her perspective, “it just feels so invasive and um, yeah it would just feel like very invalidating of like, I am already this parent like we are going into this together, intentionally, so it's not an adoption” (15NG). One couple, who initiated CAR with IUI and later pivoted to reciprocal IVF, together articulated their incredulosity in this way:

“NG: Because of everything – how hard it's been to, one, make this family, and then to have to adopt children that I have worked two years [tearfully] building for feels absolutely – just kind of undermining my role as a parent and having to step in there and then legally adopt them just feels really terrible. I have a friend who had eggs donated to her, and she birthed them, and she didn't do a second-parent adoption. Those are just her kids.

G: Right. Yeah. And I mean, we have people in our lives who've gotten accidentally pregnant with these crappy men, and they just put those men on the birth certificate and there's no question of whether that's the father, and it's like we've worked so hard as a couple for these children and to –

NG: They're so wanted.

G: Right. And then to have to do this extra financially burdening and time-burdening step to ensure that our children are legally ours and protected – it just feels awful.

NG: Yeah. And we're going to do it because we want our kids to be most protected and we want our rights protected, but it just feels [sighs] crappy to have to go through this – *another hoop*.... I'm feeling like I want to get on this and get all the paperwork ready before they're born so that the second they're born we can sign on the dotted line and make sure that they are legally protected – not because we feel like we have any family members that would vie for rights, but you never know and the climate's just so unstable right now with our – the administration that is in the office right now. We just – we don't want there to be any holes in our plan.” (Couple 22)

For this couple, the second parent adoption represented a legal and financial barrier (in addition to a time suck) to their rights to have children and to parent without the threat of harm. Not only did second parent adoption serve as a barrier to fulfillment of parenthood aspirations through pregnancy, but as a unique stressor experienced by SMW. Specifically, women acknowledged how the second parent adoption process and perceived need to proceed with it represented the ways in which the partner whose eggs contributed to embryo formation was erased as a parent. That erasure created social, economic, legal, and emotional burdens associated specifically with sexuality. The fact that she had invested so much in their early efforts to conceive with IUI but was unable to carry a pregnancy made it even more painful to consider adoption of their children once they were born. Her eggs contributed to the development of the embryos implanted in her wife, after all. Yet, her wife, not she, would be identified as the “legal parent” by the State. The rights of married same-sex couples who become parents and the parental rights of those who bear children using reciprocal IVF (sometimes called co-IVF or shared motherhood) have yet to be tested or clarified in America's courts.

Job Security and Anti-Discrimination Laws

SMW also shared how heteronormative assumptions regarding fertility spilled into other life domains. Across several interviews, participants shared their concerns over job security related to the absence of workplace non-discrimination policies specific to

gender identity and sexual orientation. Although all women are vigilant about the potential of job loss in the context of pregnancy, queer women are especially vulnerable because of the lack of protections for LGBTQ in workplace discrimination. Several participants described precautions they had to conceal their sexuality and/or take deliberate actions to avoid disclosures regarding their own or partner/wife's pregnancy in order to protect their jobs, income, and benefits. For example, one participant explained that in the state in which she works, bias and discrimination in the workplace threaten her job security. She discussed the level of caution she feels compelled to take not only with respect to her marriage, but also with regard to the couple's attempts to conceive with CAR:

I have a few people there that I trust and have befriended, um, and I have told there. But I am already very cautious of who I share that I'm a lesbian with and married to another women with, so, sharing that we're now going through the IVF process is not something that I openly just tell people that I work with. (18G)

With knowledge of active discrimination due to same-sex sexuality in the United States and the absence of legal protections against workplace discrimination, the stress of going through a biomedical path to pregnancy (with the time and resource demands that places on individuals) presented unique stressors. Queer women navigate workplace related pregnancy stressors and risks of sexual orientation related discrimination when trying to conceive as same-sex couples using fertility interventions, and risk coming out or being outed a second time when they themselves or a partner gives birth. For non-gestational partners who take parental leave after their spouse or partner gives birth, the birth event may present added challenges to negotiate not necessarily with employers but with clients they serve. Disruption of client relationships can introduce risks around job retention. Participants also shared the hypervigilance associated with workplace

disclosures about their pursuits of pregnancy within the context of same-sex relationships as well as how they might manage disclosures with pregnancy and parenthood. One SMW who contributed eggs while her wife carried the pregnancy, for example described that while she had paid parental leave employee benefits, informing clients that she would take leave after a child was born presented challenges.

One place that I'm struggling with that I'm not – I haven't done yet, but I am going to have – I'm gonna be out on leave, once the babies are born. I'm not pregnant. I work with clients and I'm 100 percent sure that not all of my – I know that not all of [them] would be okay with me being gay...I mean, *I'm gonna seek some mentorship trying to figure out how to do this*. But I will essentially have to out myself ... about taking leave, or lie, or be very quiet about why I'm taking leave. And that's gonna be an interesting. ...*they kind of assume we're married because we have wedding rings on. But they just – I'm sure they assume we're married to men*. And we don't spend a lot of time correcting them. We use very neutral language if we ever do talk about our families. So, that's something I'm a little bit worried about. I'm a little bit worried about the impact on clients and rapport. (22NG)

While paid parental leave exists as an employee benefit, women who do not carry the pregnancy and are not seen visibly pregnant worried getting about questioned about the nature and context of motherhood.

Clinical

Clinical level barriers include implementation of assisted reproductive care or technologies, and interactions with providers, staff, and clinical administrators. These sorts of barriers manifested as stress during CAR in numerous ways, often contextualized by industry reliance on a heteronormative, pathology-informed paradigm of fertility care. Anticipating how their new provider might view fertility assistance, one participant opened dialogue with a provider with the following clarifications:

We actually walked into our doctor's appointment and said to her, look, the only reason we're here is because we're two women, we – I would like you to presume that there's – I will have no trouble having the child. I don't need a lot of tests. I

don't need all this – I don't want all that, which is why other couples sit in their office because they're having trouble. (3G)

Another participant described a similar viewpoint about clinicians' paradigms in care delivery, which rests on assumptions of physiological subfertility or infertility rather than social infertility. As a result, the policies and practices implemented by the clinicians automatically included clinical interventions that were not necessary as far as this participant was concerned:

I just feel like it's really fucked up, because it's like, I don't need a trigger shot. I don't need to check my follicle. I don't need to check my progesterone. We've already done a thousand--I paid so much money to check my body. My body is like in fine condition. All I—the whole thing, the whole reason I need them is because I have frozen sperm and my donor's not in town. So, it's like, yeah. I just feel like that there is really a bit of extortion happening or it at least the experience of emotion feels like a little bit of extortion even though I love my doctor. (20G)

Her perception that the package of products and services delivered by fertility clinics equate to “extortion” belies a perception of injustice in trying to conceive. The level of frustration she and her wife conveyed in their interviews was palpable.

Within this framing, SMW also experienced microaggressions and overt discrimination during clinical encounters. For example, most participants described manifestations of heteronormative paradigms in clinical contexts. SMW's initial encounters with some providers, for example, included instances such as this clinic's assumptions about the nature of intimate partnerships among potential patients:

their paperwork... it just says your husband, your whatever. And I'm like, it's 2019. What are you doing? Like, you have to fix this. I've told them a lot of things about themselves [laughs]. So, I told them because they were not – their paperwork is not inclusive at all. Their language is not appropriate. (9G)

In this situation and numerous others, SMW who sought guidance and intervention from clinicians also did the work of advocacy and education during their

interactions. Another participant shared that because she and her wife fell outside of the normative fertility protocols, that communications were sometimes strained with the clinic.

And there's two doctors who work there. They have different protocols. So sometimes the other doctor responds to your email – and we're lesbians, so we don't have fertility issues, so we're not doing things the same way as protocol. So it's just been a little confusing sometimes. He's like usually we make you come in and do X, Y and Z. And we're not doing that. (20NG)

These assumptions of heterosexuality were present in administrative apparatus as well including the ways that electronic medical records are structured. One example of a couple from the Midwest who opted to try to conceive with reciprocal IVF encountered challenges with respect to proper patient status for both women, patient portals, and electronic medical records. This resulted in added investments of time, emotional labor, and financially related pressures to undo the heterosexually-based apparatus:

So, when we started, it was all focused on me...So, our doctor has a portal. And they originally signed [my wife] up in the portal because she was gonna be the carrying parent. So, everything was focused towards her. All the emails were coming to her. But I was trying to ask questions about me, and it was always assumed that we were a heterosexual couple. And I think it took four or five calls to say, we're doing reciprocal IVF, we need two separate portals, I'm the person having the retrieval, at this point in our process we need everything to be – to go through me, basically. So, that took ...quite a bit of calling and just, please write on both people's – all of our paperwork that we're married to a woman, it's okay to write this on our paperwork because we need you to know that we go together. And then, for billing purposes, it was really a pain because we were jointly paying for everything. So, I take care of all the bills. And for an IVF cycle, it was like, whatever it was, \$13,000, and that includes one transfer. So, we kept getting bills for [my wife's] transfer, even though I had paid for it in the cycle. But because it was under a different – because the IVF cycle was under my name, they weren't understanding that we had paid for that. So, it all worked out. They honored that. But it took a lot more effort on our part to tell them. (5NG)

Some participants, though cognitively aware of this and knowledgeable about how these systems formed, experienced distress when they faced the practical aspects of heterosexist assumptions and how they play out in the pursuit of pregnancy for sexual

minorities. Distress also came up when thinking about the absence of anti-discrimination protections in healthcare settings. One participant described anticipatory fears about what the absence of these protections implied:

I was just thinking about the other – I think the legislation about healthcare providers not having to give care to LGBTQ+ individuals if they don't want to has been really scary for me, and I'm grateful that we're at [hospital name] and I feel safe there and I like our providers there ... But it's terrifying, like if, I think if we –if that passes and that goes through, they could legally not save your life in the middle of childbirth, or a nurse could like – those ramifications of it, I think, are scary, and I think if things continue to go down this trajectory I think that I will prioritize being in a safe place. 22NG

While some individual clinicians with whom SMW worked had expansive and inclusive views of family formation and care for LGBTQ couples, the practical aspects of the care encounters and anticipatory fears about homonegativity created stress for SMW.

Individual

Participants shared how minority stress manifested at the level of the individual, which I define as the proximal (Meyer, 2003), interpersonal contexts in which stress may arise. Three manifestations I will elaborate on below include microaggressions in clinical encounters, financial burdens related to CAR contribute to their stress, and erasure of SMW partner's individual investment in the process of trying to conceive.

As they engage in CAR, SMW do the work of explaining who they are as lesbian, bisexual, queer or other non-heterosexual women in same-sex relationships that aspire to pregnancy and parenthood. These explanations sometimes come in encounters with clinical staff. For example, one participant mentioned an exchange with CNA who said, “can I ask you a question? I was like, sure. She wanted to know which one of us was the male – the man in the relationship... And just some other very inappropriate questions” (22G). Another participant reported this interaction in a clinical care setting: “So, I went

to get a progesterone draw because I was like seven days in and I did it at their office and the woman who drew my blood just talked about my husband and literally prayed to Jesus that I would get pregnant” (20G). In this case, the assumption communicated by this healthcare professional a) misidentified the participant’s sexual orientation, and b) went uncorrected because of the possible results of disclosure.

Cost and financial burden is a common experience across all people who rely on clinically assisted reproductive services. Many SMW participants shared how these burdens manifested among people in their social networks—both opposite-sex and same-sex couples. These burdens, however, manifested as stress in unique ways for SMW as costs can be tied to decisions informed by sexual orientation. A participant who works as a healthcare professional, for example, shared her experience with the expense of cryobank-sourced anonymous donor sperm:

It’s so expensive. And I think especially having had it not work out so far, and the thought of maybe even more money after spending all those thousands of dollars on this sperm specifically, so far, is really daunting. We saved money ... So I knew, going in, it’s an expensive process... And just – that’s one of those glaring things that makes our family different from another family, is that – is how expensive it is. And even differentiates us from people using a known donor, in that some people just have unlimited amounts of sperm, all the time, whenever they want it. And we are – have these six precious things that we spent so much money on. So, I think that that was – that’s one of the things that makes me kinda sad about the whole process. (3G)

She explains how the costs have become a financial burden that interconnects with a sense of differentness and sadness.

Other participants echoed this burden, acknowledging how the mounting costs of repeated IUI can take both a financial and emotional toll given the realities of resource constraints. This couple described the pressures of a limited budget with which to try to conceive:

I was also trying to, you know, calm myself, because just the stress of trying to get pregnant was probably the most stressful thing I've ever done, like. I mean I, it was literally on my mind from the moment I woke up to the moment I went to sleep, like you know ... Maybe I was obsessing over it, but I think when you, when you have so much on the line, like my whole life this is what I've wanted. I wanted a baby. I wanted to be a mom and I'm like, just spent 3,000 dollars like, make this work, make this work. (18G)

For many people the stress of consecutive unsuccessful tries could lead to mental health challenges. When this couple's last try at IUI did not work, for example, the participant became clinically depressed. During the interviews, a participant shared that she did not know how to support her wife even though she had professional training in counseling. Fortunately for this couple, months later, a surprise benefactor offered to fund part of the cost of additional interventions. At the time of study, participation they had begun reciprocal IVF.

As women, SMW couples start from a place of shared connection about what it is to inhabit a female body (e.g. mensural cycles, curvy bodies, breasts, sexual experiences, inhabiting space in the world). Yet, SMW reported that as they embarked on the fertility journey asymmetries in both the physical and emotional experiences of trying to conceive often led to a sense *knowing less* about how to provide support to their partners. As one woman shared,

I want to be able to support her. And even though I can't you know, go through all of the same things that she's going through, you know I can...you know a friend of ours does like all of the tracking for her wife on the app as far as like tracking you know her, her levels. And like when she's ovulating and all of that. And, I told her that she's making me look bad [laugther]...Um, but uh, you know just like knowing maybe a little more about how to support your partner. And like yea, just how to, how to be a support when you're not going through the same thing. (3NG)

Another participant expanded on the issue of the difference in physical experience impacted her perceptions of being a "good supporter and nurturer" to her wife.

Suddenly in this pregnancy thing I am not the person with the bodily experience and the embodiment and awareness, I found it really challenging to navigate that – those aspects of control and communication – through this last two-week period. And so I'm just like, oh, I don't know what to do and it's like your experience in that way that I'm trying to understand and relate to. I still feel confident, I think, to be a good supporter and nurturer, but I didn't realize how much that lack of control of the physical experience would influence me...I had no grounding in the experience. (20NG)

This participant emphasizes how the absence of physical experience challenged her definition of what it means to be “a good supporter”. The asymmetrical experience for many women, provoked a differently kind of stress in that they were used to being able to relate about, for example, what it is like to experience menstruation. For some, this experience shifted the dynamic in the sense of shared understanding and body knowledge.

One of the manifestations of stress that comes when two women plan pregnancies together can be the grief associated with letting go of hopes for pregnancy or gestation, or biological connection to future children. For one couple, a change in CAR plans brought into stark relief the grief involved in letting go of hope to carry the pregnancy. As her wife said, “She was grieving – slowly grieving this idea that she wouldn't be able to carry kids” (22G). Another non-gestational partner that engaged in reciprocal IVF spoke about her process in this way:

I think I've grieved, in some sense, not being the carrying parent. And I guess, also, what *it will mean to be asked who the parent is*. I don't know. I get – I'll tell you that I get emotional about everything, so it's fine. But – so, yeah. I worry that people will be insensitive in that respect” (5NG).

This grief often, but not always, came in the context of changes from initial plans for CAR to new methods and changing contributions from within the couple. From the

perspective of normative understandings of parenthood, pregnancy often confers parental status on cisgender women and not carrying a pregnancy brought up fears of invisibility in addition to letting go of deeply held desires and aspirations. For these women, and others, the added component of emotional labor related to desire for pregnancy and childbearing and an inability to carry that out, resulted in a form of sexual minority stress in that complicated feelings arose for these women in the contexts of their intimate partnership.

Even in light of these stressors, women recommended strategies to mitigate the stress. Recommendations included LGBTQ specific orientations to the process of trying to conceive, support groups (outside of Facebook forums or other online groups), and CAR protocols that may reduce cost by eliminating unnecessary steps.

Discussion

In this dissertation chapter, I describe how SMW experience CAR-related barriers as sexual minority stress at the structural, clinical, and individual levels. To date, no studies have examined the manifestations of sexual minority stress related to CAR and the process of trying to conceive. While researchers have demonstrated that fertility treatment for physiological infertility induces stress (Greil et al., 2010) and that minority stress may manifest in parenthood among SMW (Bos et al., 2004), none have addressed the manifestations of sexual minority stress among SMW who use CAR for pregnancy. This is particularly concerning as participants in this study shared the pervasiveness of heteronormativity in fertility assistance, leaving women feeling invisible within CAR systems. These findings align with prior research documenting the widespread heteronormativity embedded within assisted reproduction and perinatal healthcare

(Gregg, 2018; Hayman, Wilkes, Halcomb, et al., 2013; Rogalin & Brooks, 2018; Røndahl et al., 2009; Werner & Westerstahl, 2008). They also provide critical insights about the specific manifestations of minority stress at structural, clinical, and individual levels of CAR experience.

Sexual minority specific stressors at the structural level were reflected in women's lives including how regulatory guidance encumbered SMW's planning and collaboration with known donors, uncertainty related to LGBTQ civil protections and the integrity of families, and stigma and concealment of identity in the face of risks of being outed and job loss. Building upon the reproductive rights and justice framework, these findings underscore the need for greater policy and advocacy efforts to guarantee equal rights among sexual and gender minorities and their families through sociopolitical reform.

Alongside structural inequities in healthcare (Ard & Makadon, 2012; Makadon, 2011), SMW face legal uncertainties with respect to rights to have and raise children free from the threat of harm (Murray, 2017). While some participants did not believe that their parentage would be challenged, others made decisions to pursue all possible legal protections in the face of nationwide sociopolitical divisiveness and regulatory changes for LGBTQ+ populations. Despite the Supreme Court ruling in *Obergefell v. Hodges* ("*Obergefell v. Hodges*," 2015) establishing equal access to the rights and responsibilities associated with marriage for same-sex couples, the full spectrum of rights related to marriage (including parental rights) have not yet been tested in the courts extensively as they pertain to same-sex couples (Smith, 2017). Given the limited visibility of these issues on reproductive health for queer women, these data suggest a need for future

research and policy development that incorporates the voices and perspectives of SMW and streamlines the process for equal parenting rights and second-parent adoptions nationwide¹.

Limited visibility and data, paired with cautionary messages about reliance on constructs of family and coupledom, suggest a need for further investigations that leave room for innovative ways to consider structural changes that lead to reduced minority stress experiences in family formation. In prior research, scholars and activists have cautioned on the reliance on legal frameworks rooted in heterosexual coupledom as normative as it makes invisible the diverse constructions of queer kinship and the need for broader family protections (Mamo, 2007b; Nordqvist, 2011). In alignment with the tenets of the reproductive justice movement, which foregrounds the voices of Black, Indigenous, and other women of color, as well as other marginalized people including queer women and other SGM, my findings reinforce the need to move beyond a narrow focus on ‘traditional’ reproductive choice and access to fertility services (Ross, 2006; Ross & Solinger, 2017; Smietana, Thompson, & Twine, 2018). As policy makers consider structural implications of national and institutional policies, examination of fundamental assumptions that underlie policy development may benefit SMW and other SGM. Movement toward greater equity, including reproductive rights and justice, and person-centered care delivery will require recognition and intentional change of the heteronormative structural barriers experienced by SMW who seek to fulfill their

¹ For example, California signed into law the Modern Family Act (AB2344), which streamlines the second-parent adoption process for married spouses or domestic partners who intentionally form families through clinical assistance with donor sperm. It asks families to file specific forms as a means to establish legal parentage and protections, but no longer requires court hearings and home assessments conducted by a social worker.

parenthood aspirations through CAR. Even as interventions designed to reduce structural stigma instantiated in discriminatory laws and policies have expanded, including the right for same-sex couples to marry ("Obergefell v. Hodges," 2015), and the most recent U.S.S.C ruling that job discrimination on the basis of sexual orientation or gender identity are unconstitutional ("Bostock v. Clayton County, GA," 2020), more work remains. To mitigate the insidious and pernicious effects of sexual minority stress in family formation, continued movement toward more equitable and inclusive environments and institutions must take place, including cultural shifts and inclusive workplace policies that affirm women's ability to have children while participating in the labor force and work-related efforts that contribute to person-centered care (Dancet et al., 2011; Domar, 2020). Future empirical research that scrutinizes the mediating and moderating structural factors and burden of sexual minority stress on SGM who desire to form families is needed.

Consistent with prior literature, SMW experienced clinical barriers experienced by heterosexual women seeking access to CAR (Bell, 2009, 2010, 2016; Campbell, 2002; Farquhar et al., 2019; James-Abra et al., 2015; Johnson, 2012; Mehta et al., 2016; Wendland et al., 1996). In addition to these barriers, SMW faced heteronormatively oriented care, protocols, and practices that lacked recognition of their existence as same-sex couples and future parents. SMW's experiences with most clinics and clinicians was a predisposition to treating physiological rather than social infertility. As SMW reported, they encountered challenges in clinical encounters related to stigma reflected in direct discrimination and microaggressions, as well as fertility protocols that included elements they did not need (i.e. no evidence of physiological obstruction to infertility that would

support use of diagnostic procedures such as transvaginal ultrasound). Repeated exposure to these interactions resulted in the experience of sexual minority stress.

As long as SMW continue to seek clinical assistance for their reproductive goals, changes at the intersection of structural factors and their clinical manifestations seem critical. Clinical commitment to women's pregnancy and family formation aspirations at the system, clinical, and local levels was limited. For example, shifts away from heteronormative assumptions about who seeks fertility care and why, is fundamental to reshaping fertility and reproductive clinical care. Even within clinics perceived to be queer inclusive clinics, SMW acknowledged how heteronormative frameworks contributed to the paucity of tailored services directed toward those who may bear children in the queer community. Findings from this and prior research (Chapman et al., 2012; Gregg, 2018; Schwartz & Baral, 2015c) suggest that tailored clinician education (Bonvicini, 2017; Bonvicini & Perlin, 2003) are necessary if institutions and providers are to achieve their articulated aspirations (evidence by medical marketing materials from across the country) to meet LGBTQ healthcare needs and fertility goals. Thus, the fundamental assumptions that inform federal and state legislation and regulatory policies, insurance policy development and employee benefits, healthcare training curricula, and biomedical interventions and protocols require revision. Yet, such changes occur slowly (Chaudoir, Wang, & Pachankis, 2017). While these higher-level changes take place, stress mitigation strategies for SMW using CAR may help.

At the individual level, SMW encountered stressors including microaggressions, flawed assumptions, and discriminatory treatment from clinicians and staff as they were trying to fulfill a deeply meaningful and intimate shared aspiration. Additionally, costs

and resource constraints that mark their difference (from the hetero-norm) as families, constituted stressful experiences for some women, and could lead to anticipatory fears about future experiences legitimizing their families (Ben-Ari & Livni, 2006; Hayman & Wilkes, 2017; Hayman, Wilkes, Jackson, et al., 2013). Furthermore, newly encountered asymmetries in partners' physiologic changes and experiences made it difficult for women in non-gestational roles to know how to support their partners. Finally, some SMW endured grief as they let go of aspirations to carry their potential children as their partners took on childbearing. This led to complex emotional experiences as partners together worked through a dynamic process of family formation through CAR. These individual level stress processes, at least partially rooted in sexual orientation and the context of same-sex relationships, deserve further empirical attention to refine accessible and inclusive care.

In addition to clinician and staff education, participants acknowledged the importance of social support as they navigated CAR barriers and related stressors. Ancillary professional social support through clinical social workers and psychologists, or local support groups are sometimes part of the continuum of care. In addition, as one LGBTQ FQHC program has instituted, initial orientation programs that inform SMW about what assisted inseminations involves and discusses common emotional experiences that couples may encounter, as well as facilitation of LGBTQ community groups for people going through efforts to conceive at the same time, may be replicated in other clinics that provide CAR. Future research and intervention efforts seeking to reimaging sources of social support helpful to mitigate sexual minority related stress as SMW navigate sexual reproductive fertility care settings are warranted.

Limitations and Future Directions

This chapter has both limitations and strengths. The primary objective of this analysis was to elicit barriers and report how barriers manifest as minority stress in the lives of sexual minority women couples. Representation of couples from the four major census regions in the United States enabled me to report on regionally diverse experiences with CAR among queer couples; however, the homogenous sample characteristics of with respect to race, ethnicity, and socioeconomic status limits the breadth and diversity of SMW's experiences represented in the chapter. We know from previous research that the fertility industry in all of its forms represents a stratified system of inequalities (Bell, 2009, 2010, 2016; Karpman et al., 2018). The inequalities in accessibility across socioeconomic strata and race are reflected in the sample and data. Future work in this area may benefit from an emphasis on stratified sampling (Patton, 1990) across rural, urban, and suburban areas in several states within each region to gain a more nuanced sense of how queer women encounter barriers, how minority stress manifests, and how they overcome barriers and cope with stress. Expanding on the work of Ann Bell (Bell, 2009, 2010, 2014, 2016) and others (Karpman et al., 2018), future research broadening the representation of under-represented racial/ethnic and socioeconomic minorities will be essential. Through this continuous work, researchers will be able to extend the growing evidence of how the mechanisms of inequity function within fertility care, and to provide insights on how to move toward a more just and inclusive approach to person-centered reproductive care.

Conclusion

My analysis describes how pervasive heteronormative dimensions of CAR play out in the lives of SMW at the structural, clinical, and individual levels, and manifests as sexual minority stress. Regulatory and institutional policies that guide that impact SMW who seek to fulfill pregnancy aspirations and parenthood in their same-sex partnerships may benefit from the insights presented here. Clinical encounters may also result in stress for SMW as they may remain vigilant to the microaggressions and discrimination that occur in clinical settings. time, costs, regulatory guidance and regulations, legal rights and parentage, clinical encounters, the framing of care, and the individual level experience of microaggressions, discrimination, and invisibility of some SMW bodies. The invisible, ever present structures, including legal protections, clinical protocols and practice, and individual experiences of stigma, prejudice, and discrimination result in sexual minority stress among these potential “marginalized mothers” (Hayman & Wilkes, 2017).

A better understanding about the variation in stressors and manifestations of stress associated with queer women trying to conceive may provide important insights about a) how nurses and other clinicians who specialize in fertility care may improve their interactions and care for with SMW couples who seek their assistance, b) how to inform efforts seeking to tailor fertility services to the needs of SMW (and potentially other SGM who seek fertility supports), c) how to contribute to enhanced clinical education content related to care for SGM populations in nursing, medical, and social work training programs, d) how to reduce risks of adverse or negative outcomes and improve the likelihood of positive outcomes in fertility related care, and e) how to explore the ways in

which growth, resilience, or strengths associated with sexual minority status shed light on how to incorporate positive frames that benefit SMW as they try to conceive. Given that manifestations of stress processes have been associated with negative outcomes in fertility treatment settings (Boivin et al., 2012a; Borneskog, Sydsjö, et al., 2013; Gameiro et al., 2015; Gameiro et al., 2012; Gameiro, Canavarro, & Boivin, 2013; Porter & Bhattacharya, 2007), it is reasonable to believe that reduction of barriers that manifest as stress for SMW, or transformation of barriers from stressors to opportunities for enhanced resiliency, may promote positive outcomes. Future research examining how SMW leverage coping and resilience resources to offset sexual minority stress across structural, clinical and individual levels are warranted.

References

- Ard, K. L., & Makadon, H. J. (2012). Improving the health care of lesbian, gay, bisexual and transgender (LGBT) people: Understanding and eliminating health disparities. *The Fenway Institute*.
- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental psychology*, 51(5), 688.
- Bell, A. V. (2009). "It's Way out of my League" Low-income Women's Experiences of Medicalized Infertility. *Gender & Society*, 23(5), 688-709.
- Bell, A. V. (2010). Beyond (financial) accessibility: inequalities within the medicalisation of infertility. *Sociology of health & illness*, 32(4), 631-646.
- Bell, A. V. (2014). "I think about Oprah" social class differences in sources of health information. *Qualitative health research*, 24(4), 506-516.
- Bell, A. V. (2016). The margins of medicalization: Diversity and context through the case of infertility. *Social science & medicine* (1982), 156, 39-46. doi:10.1016/j.socscimed.2016.03.005 [doi]
- Bell, K. (2012). An exploration of women's psychosocial support needs in the context of assisted reproduction. *Social Work in Health Care*, 51(8), 695-709.
- Ben-Ari, A., & Livni, T. (2006). Motherhood Is Not a Given Thing: Experiences and Constructed Meanings of Biological and Nonbiological Lesbian Mothers. *Sex Roles*, 54(7), 521-531. doi:10.1007/s11199-006-9016-0
- Blanchfield, B., & Patterson, C. J. (2015). Racial and sexual minority women's receipt of medical assistance to become pregnant. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, 34(6), 571-579. doi:10.1037/hea0000124 [doi]
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C., & Verhaak, C. (2012a). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C. J. M., & Verhaak, C. (2012b). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Bonvicini, K. A. (2017). LGBT healthcare disparities: What progress have we made? *Patient Education and Counseling*, 100(12), 2357-2361.
- Bonvicini, K. A., & Perlin, M. J. (2003). The same but different: clinician–patient communication with gay and lesbian patients. *Patient Education and Counseling*, 51(2), 115-122.
- Borneskog, C., Sydsjo, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: a descriptive study. *BJOG : an international journal of obstetrics and gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214 [doi]
- Borneskog, C., Sydsjö, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: A descriptive study. *BJOG: An International Journal of Obstetrics and Gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214
- Bos, H. M. W., van Balen, F., van den Boom, D. C., & Sandfort, T. G. M. (2004).

- Minority stress, experience of parenthood and child adjustment in lesbian families. *Journal of Reproductive and Infant Psychology*, 22(4), 291-304. doi:10.1080/02646830412331298350
- Bostock v. Clayton County, GA, 590 1 (United States Supreme Court 2020).
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. *Handbook of Research Methods in Health Social Sciences*, 843-860.
- Campagne, D. M. (2006). Should fertilization treatment start with reducing stress? *Human Reproduction*, 21(7), 1651-1658.
- Campbell, S. (2002). Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self. In: JSTOR.
- Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., Hendrick, C. E., & Higgins, J. A. (2020). Pregnancy (im) possibilities: identifying factors that influence sexual minority women's pregnancy desires. *Social Work in Health Care*, 59(3), 180-198.
- Chabot, J. M., & Ames, B. D. (2004). "It wasn't 'let's get pregnant and go do it':" Decision Making in Lesbian Couples Planning Motherhood via Donor Insemination. *Family Relations*, 53(4), 348-356.
- Chapman, R., Wardrop, J., Zappia, T., Watkins, R., & Shields, L. (2012). The experiences of Australian lesbian couples becoming parents: deciding, searching and birthing. *Journal of Clinical Nursing*, 21(13-14), 1878-1885.
- Chaudoir, S. R., Wang, K., & Pachankis, J. E. (2017). What reduces sexual minority stress? A review of the intervention "toolkit". *Journal of Social Issues*, 73(3), 586-617.
- Chrisler, J. C. (2014). A reproductive justice approach to women's health. *Analyses of Social Issues and Public Policy*, 14(1), 205-209.
- Cousineau, T. M., & Domar, A. D. (2007). Psychological impact of infertility. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 21(2), 293-308.
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stan. L. Rev.*, 43, 1241.
- Creswell, J. W., & Miller, D. L. J. T. i. p. (2000). Determining validity in qualitative inquiry. 39(3), 124-130.
- Cwikel, J., Gidron, Y., & Sheiner, E. (2004). Psychological interactions with infertility among women. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 117(2), 126-131.
- Dancet, E., Van Empel, I., Rober, P., Nelen, W., Kremer, J., & d'Hooghe, T. (2011). Patient-centred infertility care: a qualitative study to listen to the patient's voice. *Human Reproduction*, 26(4), 827-833.
- Dedoose Version 8.3.17. (2019). Retrieved from www.dedoose.com
- Devlin, N., & Parkin, D. (2003). Funding fertility: issues in the allocation and distribution of resources to assisted reproduction technologies. *Human Fertility*, 6(sup2), S2-S6.
- Diamond-Smith, N., Warnock, R., & Sudhinaraset, M. (2018). Interventions to improve the person-centered quality of family planning services: a narrative review. *Reproductive health*, 15(1), 144.

- Domar, A. D. (2020). Patient Retention, Nursing Retention: The Importance of Empathic Communication and Nursing Support. *Patient-Centered Assisted Reproduction: How to Integrate Exceptional Care with Cutting-Edge Technology*, 146.
- Doyal, L. (1995). *What makes women sick: Gender and the political economy of health*: Macmillan International Higher Education.
- Dudgeon, M. R., & Inhorn, M. C. (2004). Men's influences on women's reproductive health: medical anthropological perspectives. *Social Science & Medicine*, 59(7), 1379-1395.
- Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., . . . Kjellgren, K. (2011). Person-centered care—ready for prime time. *European journal of cardiovascular nursing*, 10(4), 248-251.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A.-L. (2018). Mothers in same-sex relationships describe the process of forming a family as a stressful journey in a heteronormative world: a Swedish grounded theory study. *Maternal and child health journal*, 22(10), 1444-1450.
- Everett, B. G., McCabe, K. F., & Hughes, T. L. (2017). Sexual Orientation Disparities in Mistimed and Unwanted Pregnancy Among Adult Women. *Perspect Sex Reprod Health*, 49(3), 157-165. doi:10.1363/psrh.12032
- Farquhar, C. M., Bhattacharya, S., Repping, S., Mastenbroek, S., Kamath, M. S., Marjoribanks, J., & Boivin, J. (2019). Female subfertility. *Nature Reviews Disease Primers*, 5(1), 1-21.
- Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of behavioral medicine*, 38(1), 1-8.
- Gameiro, S., Boivin, J., Dancet, E., de Klerk, C., Emery, M., Lewis-Jones, C., . . . Verhaak, C. M. (2015). ESHRE guideline: routine psychosocial care in infertility and medically assisted reproduction—a guide for fertility staff. *Human Reproduction*, 30(11), 2476-2485.
- Gameiro, S., Boivin, J., Peronace, L., & Verhaak, C. M. (2012). Why do patients discontinue fertility treatment? A systematic review of reasons and predictors of discontinuation in fertility treatment. *Human reproduction update*, 18(6), 652-669.
- Gameiro, S., Canavarro, M. C., & Boivin, J. (2013). Patient centred care in infertility health care: direct and indirect associations with wellbeing during treatment. *Patient Education and Counseling*, 93(3), 646-654.
- Gleicher, N., Vanderlaan, B., Karande, V., Morris, R., Nadherney, K., & Pratt, D. (1996). Infertility treatment dropout and insurance coverage. *Obstetrics & Gynecology*, 88(2), 289-293.
- Gregg, I. (2018). The Health Care Experiences of Lesbian Women Becoming Mothers. *Nursing for Women's Health*, 22(1), 40-50. doi:10.1016/j.nwh.2017.12.003
- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: a review of recent literature. *Sociology of health & illness*, 32(1), 140-162.
- Hall, K. S., Samari, G., Garbers, S., Casey, S. E., Diallo, D. D., Orcutt, M., . . . McGovern, T. (2020). Centring sexual and reproductive health and justice in the global COVID-19 response. *The lancet*, 395(10231), 1175-1177.
- Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative*

- Research in Psychology*, 12(2), 91-106.
- Hayman, B., & Wilkes, L. (2017). De novo Families: Lesbian Motherhood. *Journal of homosexuality*, 64(5), 577-591. doi:10.1080/00918369.2016.1194119
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2013). Marginalised mothers: Lesbian women negotiating heteronormative healthcare services. *Contemporary Nurse*, 44(1), 120-127.
- Hayman, B., Wilkes, L., Jackson, D., & Halcomb, E. (2013). De Novo Lesbian Families: Legitimizing the Other Mother. *Journal of GLBT Family Studies*, 9(3), 273-287. doi:10.1080/1550428X.2013.781909
- Hequembourg, A. L., & Brallier, S. A. (2009). An exploration of sexual minority stress across the lines of gender and sexual identity. *Journal of homosexuality*, 56(3), 273-298.
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277-1288.
- James-Abra, S., Tarasoff, L. A., Green, D., Epstein, R., Anderson, S., Marvel, S., . . . Ross, L. E. (2015). Trans people's experiences with assisted reproduction services: a qualitative study. *Human reproduction (Oxford, England)*, 30(6), 1365-1374. doi:10.1093/humrep/dev087 [doi]
- Jin, H., & Dasgupta, S. (2016). Disparities between online assisted reproduction patient education for same-sex and heterosexual couples. *Human Reproduction*, 31(10), 2280-2284.
- Johnson, K. M. (2012). Excluding lesbian and single women? An analysis of U.S. fertility clinic websites. *Women's Studies International Forum*, 35(5), 394-402. doi:10.1016/j.wsif.2012.05.002
- Justice, A. C. f. R. (2005). *A NEW VISION FOR ADVANCING OUR MOVEMENT FOR REPRODUCTIVE HEALTH, REPRODUCTIVE RIGHTS, AND REPRODUCTIVE JUSTICE* Retrieved from <http://forwardtogether.org/assets/docs/ACRJ-A-New-Vision.pdf>.
- Karpman, H. E., Ruppel, E. H., & Torres, M. (2018). "It wasn't feasible for us": Queer Women of Color Navigating Family Formation. *Family Relations*, 67(1), 118-131. doi:10.1111/fare.12303
- LaSala, M. C. (2003). When Interviewing "Family" Maximizing the Insider Advantage in the Qualitative Study of Lesbians and Gay Men. . *Journal of Gay & Lesbian Social Services*, 15(1-2), 15-30.
- Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of consulting and clinical psychology*, 79(2), 159.
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521-548.
- Luce, J. (2010). *Beyond expectation: Lesbian/bi/queer women and assisted conception*: University of Toronto Press.
- Makadon, H. J. (2011). Ending LGBT invisibility in health care: The first step in ensuring equitable care. *Cleve Clin J Med*, 78(4), 220-224.
- Malmquist, A. (2015). A Crucial but Strenuous Process: Female Same-Sex Couples' Reflections on Second-Parent Adoption. *Journal of GLBT Family Studies*, 11(4), 351-374. doi:10.1080/1550428X.2015.1019169

- Mamo, L. (2005). Biomedicalizing kinship: Sperm banks and the creation of affinity-ties. *Science as Culture*, 14(3), 237-264. doi:10.1080/09505430500216833
- Mamo, L. (2007). *Queering reproduction: Achieving pregnancy in the age of technoscience*: Duke University Press.
- Mamo, L., & Alston-Stepnitz, E. (2015). Queer intimacies and structural inequalities: New directions in stratified reproduction. *Journal of Family Issues*, 36(4), 519-540.
- Mason, T. B., & Lewis, R. J. (2015). Minority stress and binge eating among lesbian and bisexual women. *Journal of homosexuality*, 62(7), 971-992.
- Medicine, I. o. (2003). Washington (DC): National Academies Press (US)
Copyright 2002 by the National Academy of Sciences. All rights reserved.
- Mehta, A., Nangia, A. K., Dupree, J. M., & Smith, J. F. (2016). Limitations and barriers in access to care for male factor infertility. *Fertility and sterility*, 105(5), 1128-1137.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of health and social behavior*, 38-56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, 129(5), 674.
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. *Handbook of psychology and sexual orientation*, 252-266.
- Meyrick, J. J. J. o. h. p. (2006). What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality. 11(5), 799-808.
- Murray, M. (2017). Intimate Choices, Public Threats - Reproductive and LGBTQ Rights under a Trump Administration. *New England Journal of Medicine*, 376(4), 301-303. doi:10.1056/NEJMp1615718
- Nordqvist, P. (2011). Choreographies of sperm donations: Dilemmas of intimacy in lesbian couple donor conception. *Social Science and Medicine*, 73(11), 1661-1668. doi:10.1016/j.socscimed.2011.09.033
- Obergefell v. Hodges. (2015). *S.Ct.*, 135(No. 14-556), 2071.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*: SAGE Publications, inc.
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.): Wolters Kluwer
- Porter, M., & Bhattacharya, S. (2007). Helping themselves to get pregnant: a qualitative longitudinal study on the information-seeking behaviour of infertile couples. *Human reproduction*, 23(3), 567-572.
- Rausch, M. A., & Wikoff, H. D. (2017). Addressing Concerns with Lesbian Couples Experiencing Fertility Treatment: Using Relational Cultural Theory. *Journal of LGBT Issues in Counseling*, 11(3), 142-155. doi:10.1080/15538605.2017.1346494
- Roberts, D. (1997). Killing the black body: Race, representation, and the meaning of liberty. *New York: Vintage*.
- Roberts, D. E. (1995). Race and the new reproduction. *Hastings LJ*, 47, 935.
- Rogalin, C. L., & Brooks, J. E. (2018). Lesbians achieving pregnancy: The intersections of social location and the heteronormative medicalization of infertility. *Sociology*

- Compass*, 12(11), e12637.
- Röndahl, G., Bruhner, E., & Lindhe, J. (2009). Heteronormative communication with lesbian families in antenatal care, childbirth and postnatal care. *Journal of advanced nursing*, 65(11), 2337-2344.
- Ross, L. (2006). Understanding reproductive justice: Transforming the pro-choice movement. *Off our backs*, 36(4), 14-19.
- Ross, L., Gutierrez, E., Gerber, M., & Silliman, J. (2016). *Undivided rights: Women of color organizing for reproductive justice*: Haymarket Books.
- Ross, L., & Solinger, R. (2017). *Reproductive justice: An introduction* (Vol. 1): Univ of California Press.
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18-23. doi:10.1016/j.midw.2017.02.011
- Schmidt, L. (2009). Social and psychological consequences of infertility and assisted reproduction—what are the research priorities? *Human Fertility*, 12(1), 14-20.
- Schwartz, S. R., & Baral, S. (2015). Fertility-related research needs among women at the margins. In (Vol. 23, pp. 30-46).
- Schwartz, S. R., & Baral, S. (2015). Fertility-related research needs among women at the margins. *Reproductive health matters*, 23(45), 30-46.
- Smietana, M., Thompson, C., & Twine, F. W. (2018). Making and breaking families—reading queer reproductions, stratified reproduction and reproductive justice together. *Reproductive Biomedicine & Society Online*, 7, 112-130.
- Smith, L. (2017). Tangling the web of legal parenthood: Legal responses to the use of known donors in lesbian parenting arrangements. In *Parental Rights and Responsibilities* (pp. 259-286): Taylor and Francis.
- Somers, S., Van Parys, H., Provoost, V., Buysse, A., Pennings, G., & De Sutter, P. (2017). How to create a family? Decision making in lesbian couples using donor sperm. *Sexual & Reproductive Healthcare*, 11, 13-18. doi:<https://doi.org/10.1016/j.srhc.2016.08.005>
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical education*, 51(1), 40-50.
- Watson, L. B., Grotewiel, M., Farrell, M., Marshik, J., & Schneider, M. (2015). Experiences of sexual objectification, minority stress, and disordered eating among sexual minority women. *Psychology of Women Quarterly*, 39(4), 458-470.
- Wendland, C. L., Burn, F., & Hill, C. (1996). Donor insemination: a comparison of lesbian couples, heterosexual couples and single women. *Fertility and sterility*, 65(4), 764-770. doi:S0015-0282(16)58211-9 [pii]
- Werner, C., & Westerstahl, A. (2008). Donor insemination and parenting: concerns and strategies of lesbian couples. A review of international studies. *Acta Obstetrica et Gynecologica Scandinavica*, 87(7), 697-701. doi:10.1080/00016340802011603 [doi]
- Wu, A. K., Elliott, P., Katz, P. P., & Smith, J. F. (2013). Time costs of fertility care: the

- hidden hardship of building a family. *Fertility and sterility*, 99(7), 2025-2030.
- Wu, A. K., Odisho, A. Y., Washington III, S. L., Katz, P. P., & Smith, J. F. (2014). Out-of-pocket fertility patient expense: data from a multicenter prospective infertility cohort. *The Journal of urology*, 191(2), 427-432.
- Wu, H. Y., Yin, O., Monseur, B., Selter, J., Collins, L. J., Lau, B. D., & Christianson, M. S. (2017). Lesbian, gay, bisexual, transgender content on reproductive endocrinology and infertility clinic websites. *Fertility and sterility*, 108(1), 183. doi:<https://doi.org/10.1016/j.fertnstert.2017.05.011>
- Yager, C., Brennan, D., Steele, L. S., Epstein, R., & Ross, L. E. (2010). Challenges and mental health experiences of lesbian and bisexual women who are trying to conceive. *Health and Social Work*, 35(3), 191-200. doi:10.1093/hsw/35.3.191

Chapter 4

Relationship Timelines Applied to Coupled Sexual Minority Women Pursuing Pregnancy

Abstract

Couple co-constructed relationship timelines are used to elicit milestones, shared decision making and shared lived experiences in the context of an intimate relationship. This dissertation chapter examines the methodologic significance of integrated relationship timelines constructed by 10 sexual minority women (SMW) couples who participated in a study examining their experiences with clinically assisted reproduction (CAR) and assisted reproduction technologies (ART). I adapted an established relationship timeline method to serve as the basis for dyadic interview data elicitation, construction of graphic representation of complex medical processes, and for analysis of qualitative narrative data. Co-created relationship timelines offered a useful and practical approach that aids in elicitation of rich, temporally situated, contextually based data, granting unique insights into the shared lived experience of couples engaged in a medical process.

Introduction

Couples who engage in elective or clinically indicated medical processes such as fertility treatment, cancer-related care, and management of chronic illness may be fundamentally changed by engaging in these experiences (Traa, De Vries, Bodenmann, & Den Oudsten, 2015). Such changes occur within relational and sociohistorical contexts (Berg & Upchurch, 2007; Fredriksen-Goldsen et al., 2014). Often these couples do not experience straightforward, clearly laid out trajectories and are frequently faced with making multifaceted decisions. This is particularly true of medical processes involving potentially lengthy treatment courses and uncertain outcomes, with undetermined endpoints and consequences. To better understand the experiences of these couples, co-constructed relationship timelines may be used to capture transitions, trajectories, and transformations. This is especially true of sexual minority couples whose shared lives remain under-researched.

Timelines

Timelines, also known as lifelines, have been used across disciplines to study life histories and life course development (de Vries, 2013; Elder Jr, 1998; Frank, 1984; Gramling & Carr, 2004; Gray & Dagg, 2018; Rappaport, Enrich, & Wilson, 1985). Timelines display life events, transitions, and trajectories in visual, sequential, linear representations (de Vries, 2013; de Vries et al., 2017; Gramling & Carr, 2004). Visual displays of life histories help to place clinical problems or processes in the context of other events, both personal and historical (Berends, 2011; Boyd, Hill, Holmes, & Purnell, 1998; de Vries, 2013; de Vries et al., 2017; Gramling & Carr, 2004) (Elder Jr, 1994, 1998). They can also aid in the examination of changes over time (de Vries, 2013; Elder

Jr, 1998) and encourage reflexivity among research participants (Berends, 2011; Gray & Dagg, 2018). Typically, individuals add significant life events or experiences and dates to the line according to their sequence and subjective importance. Scholars point to the benefit of timelines in data triangulation (Boyd et al., 1998; Gramling & Carr, 2004) and improved understanding of significance and meaning of health experiences (Berends, 2011; Gramling & Carr, 2004).

Though much of timeline data has been elicited at the individual level (de Vries, 2013), recent research has integrated couple-level co-constructed timelines (de Vries et al., 2017). As de Vries and colleagues (2017) have argued, a large proportion of events that appear in individual timelines are relational in nature (2017, p. 56). Dyadic data collection with co-constructed relationship timelines or other visual representations of shared life histories (and accompanying narratives) may facilitate disclosure of alternative perspectives and dimensions of experiences that individual lifelines and individually communicated narratives may overlook (de Vries, 2013; de Vries et al., 2017; Fals-Stewart, Birchler, & Kelley, 2003; Holmberg et al., 2003). As a timeline method, couple-level co-constructed relationship timelines employ graphic displays populated by jointly and allows for reflection on past events (retrospective), present engagement, and future aspirations (prospective), in a similar way to individual-level lifelines (Boyd et al., 1998). Dyadic co-construction offers participants an opportunity to negotiate timeline creation and narrative elaboration of shared experiences, which in turn can lead to unique insights fostered by collaboration and shared telling of chronologies.

The experiences and decision-making among same-sex couples engaged in clinically assisted reproduction (CAR) is well suited to a timeline methodology given the

importance of temporality in reproductive decisions, efforts, gestation, and childbearing. The behaviors associated with becoming pregnant via CAR have a sequential order, are contingent upon certain conditions, and occur within the context of lived lives at local- and societal-levels, within particular historical periods. The path to pregnancy with CAR may be lengthy, unpredictable, and without clear endpoints, for any couple. The paths to pregnancy might also be situated within a dyadic perspective, requiring the timelines to be co-constructed at the couple level. The goal of this paper is to illustrate the utility and richness of co-constructed relationship timelines from a larger study of coupled sexual minority women (SMW) engaged in CAR to try for pregnancy and family formation.

Actor Partner Interdependence Model

Jointly constructed timelines may afford the members of a couple the opportunity to influence the construction of timelines in addition to narrative elaborations of shared experiences, producing new types of data than could be acquired from individuals alone. Several theories, including the Actor Partner Interdependence Model (APIM; (Kashy & Kenny, 2000), have conceptually acknowledged the importance of relationality in decision making and behavior, focusing on interdependence of individuals in dyads like coupled SMW. APIM has been used successfully in relationship, family, and health research (Kashy & Kenny, 2000; Kenny & Ledermann, 2010; Peterson et al., 2008) to identify patterns of interdependence detected in observations. Moreover, it provides a framework by which actor (each partner's individual impact on his or her own outcome) and partner effects (one partner's impact on the other partner's outcome) can be disentangled and measured to understand health-related decision making.

Dyadic Interviews

Timeline co-creation may facilitate an open-ended, flexible approach to data elicitation that may capture dimensions of couple interdependence. A robust literature underscores the utility and value of qualitative dyadic research (Morgan, 2016).

Romantic couples are a particular construction of dyad through which to elicit unique perspectives in the context of a qualitative research (Reczek, 2014). Some have argued, through a symbolic interactionist lens, that publicly sharing stories of important life events, couples anchor into their couple identities (Holmberg et al., 2003). Researchers have created couple dyads through assembling individual accounts into “couple-level” or other group level accounts as a way to obtain insights that would be unrecognized through individual accounts alone (Eisikovits & Koren, 2010; Reczek, 2014; Reczek, Elliott, & Umberson, 2009). Others have used co-constructed narratives to identify shared meaning of significant events, wherein participants jointly communicate the most salient or important aspects of an event, decision, experience (Badgett, 2009; Morgan, 2016; Reczek, 2014; Umberson, Thomeer, Kroeger, Lodge, & Xu, 2015). Other advantages of dyadic interviews outlined by Morgan (2016, p. 24) include partners’ ability to add detail and fill in gaps, opportunities for partners to ask questions of one another to clarify points, completion of one another’s thoughts, pushing past general statements to create more complex accounts, and sharing alternative versions of shared experiences or events.

Purpose

This dissertation chapter examines the utility of the adapted relationship timeline method in qualitative data elicitation and analysis of couple-level data. To illustrate the utility, I will use the example of the method’s application as one component of larger

study of same-sex SMW couples from across the United States who were assisted by healthcare providers to try to conceive and form families of their own using MAR. The adapted relationship timeline exercise aimed to anchor individuals in their couple identities through collaborative action and dialogue, to elicit novel couple-level data from sexual minority couples engaged in a medical process, the use of which was sometimes out of clinical necessity and other times not. As they collectively shared narrative chronologies of their relationships and CAR experiences timelines, they provided details about their shared experience, relationship milestones, and salient events related to the process of trying to conceive. The study contributes to the existing literature on co-constructed timelines and dyadic data elicitation, as well as SMW family formation with MAR, which has rarely explicitly used couple-level data.

Methods

Study Design

This study, approved by the University of Pennsylvania Institutional Review Board, focused on the relationship trajectories and healthcare-decision making of cisfemale same-sex couples, where one or both women are physiologically and medically involved in the process of trying to conceive. Timeline exercises paired with dyadic interviews to elicit couple-level data of narrative chronologies of couples' relationships and clinically assisted reproductive experiences and fertility decision-making. The adapted relationship timeline exercise aimed to anchor individuals in their couple identities through collaborative action and dialogue, while offering joint, negotiated renderings of the relationship and fertility chronologies. Couple level data collection took place over a secure online video conferencing platform which allowed for audio and

video recording. Audio recordings were transcribed verbatim by a University of Pennsylvania IRB-approved transcription service and checked for accuracy.

The initial study proposal described the timeline exercise as completed jointly by participants at the time of the interview, similar to the process described by de Vries and colleagues (2017). However, because all participants opted to participate through a video conference platform, in-person co-constructed visual timelines was not feasible. The use of graphic illustration software in a virtual platform was also not feasible for this dissertation. As a result, I transformed the narrated chronologies provided by participants into visual graphic timelines similarly to those described by Boyd and colleagues (1998).

Study Recruitment and Sample

Recruitment occurred between June and August 2019 through social media ads on Instagram and Facebook, word of mouth or through snowball sampling. All potential participants were invited to complete an online screener via email. Potential participants clicked a link to a study interest form housed on the Qualtrics platform through secure University of Pennsylvania servers. Inclusion criteria consisted of residence in the United States; self-identify as lesbian, queer, bisexual, or some other non-heterosexual sexual orientation; identify as cisgender women over the age of 18; indicate being in a committed relationship; speak English fluently; and, report having or planning to have donor insemination or embryo transfer in the six months by the time we had our first interview. Exclusion criteria included inability to speak English sufficiently to engage in interviews, other than cisfemale, and efforts to conceive with health care provider assistance occurred more than six months from contact with research team.

Ethical Considerations

Informed consent was reviewed with study participants prior to initiating any study procedures and all questions or concerns were addressed. Participants were then asked to sign a PDF copy of the consent form and email it back to me. Participants retained a copy for their records. Signed consent forms were stored in a secure electronic file. Measures were taken to preserve the confidentiality and privacy of participants both in this report and graphic timeline representations. Some of these measures include use of pseudonyms, removal of detail that could compromise confidentiality (e.g., locations, professions), and independent checks of portrayals by advisers and colleagues to determine whether fact patterns or specific details should be modified to further protect privacy and confidentiality of participants.

Building Rapport

To create conditions that allow for clear communication and understanding between researcher and participant, efforts were made to build rapport in an egalitarian and empathetic manner that prioritized respect for participant boundaries and sensitivity of the subject matter. Mindful of my personal interests and investment in this project for the propagation of research that might benefit my own career (along with social justice objectives related to improvements in care delivery and family formation ecosystems for SGM populations), I aimed to be transparent and responsive to participants.

Procedures

Couples were asked to begin their timelines with narratives about when they met and to expand on details as they saw fit. They were also all asked to discuss the sequence of events related to family formation from the decision to start to where they were in the

process on the day of the interview. Probes and follow up questions addressed specific domains of interest related to their clinical and physiological experiences. Unlike some approaches to timelines that involve menus of a prior items to include, this study used elicitation of narrative chronologies based primarily on what couples deemed important, salient, and relevant. This was important given the exploratory purpose of timelines and varied clinical approaches to assisted reproduction available to same-sex cisfemale couples who participate. The timeline exercise provided an active method by which participants could cognitively move from the individual identity to their couple identity. In other words, it helped couples to transition from the individual perspective in one-on-one interviews, to the couple perspective in joint interviews.

A semi-structured interview guide (see Table 4.3) helped to focus narrative timeline co-construction and dyadic interview conversations. The semi-structured interview guide was flexible and used in a way that was responsive to participant needs, particularities of each interview, and previous interviews. Along with cognitive and behavioral aspects of the data elicitation objectives, I aimed to understand the meanings that participants might communicate about the process of family formation through clinically facilitated reproductive methods from individual and relational perspectives. Impressions and insights were recorded in fieldnotes and memos. Field notes and reflective logs were written immediately following each interview. Memos were written during data extraction and analysis to record impressions, questions, diagrams, and analytic thoughts about the timeline exercise and couples' shared experiences.

Post hoc Graphic Timeline Development

After couple interviews were completed, dates of significant events, experiences, and decisions were extracted from transcribed timeline exercises and dyadic interviews. These details and narrative descriptions were ordered chronologically and displayed in graphic, linear form. Individual interviews were consulted for dates and contextual information where such information was missing from the co-created timelines and couple interviews. Timelines were anchored by the date when couples met on the left side of the timeline, and the couple's hopes and dreams five to ten years in the future, or anticipated future, on the right side of the timeline. In between important milestones, events, experiences, and transformations were included with specific attention paid to their fertility journeys. Each timeline was scaled according to length of time in relationship, density of events during a given period of time (e.g. periods that involved many diagnostics, surgical interventions, and/or cycles of ART were densely populated in small time frames on the timeline and therefore viewed as high density time periods).

Several attempts were made to depict timelines visually using text and icons to describe and represent salient events, milestones, and experiences. In pared down versions of the graphic timeline representations, most text was removed, and icons representative of the "menu" of events, decisions, and experiences described by participants were incorporated (see **Figure 4.1**). It was useful to vary the color of icons based on attribution to an individual partner if the circumstances of the event or experience represented primarily one partner's engagement. For example, icons denoting inseminations or surgical interventions were given a color to designate which partner had said experience. For the purpose of differentiating between partners, those women

designated gestational partners *at the time of the couple interview* were represented by red icons, while non-gestational partners were represented by blue icons. Purple icons indicate a shared experience such as marriage or a move.

Analytic Strategy

Analysis occurred at all phases of the study, from data elicitation to the models presented in **Figures 4.1 to 4.11**. Timelines were a product of the sequential ordering of events after data elicitation and transcription. The resultant visual timelines enabled identification of patterns within individual couple timelines and across the set of timelines. Field notes and memos served an important source in assessing the value of this data elicitation method. They served as records of immediate insights and possible paths of interpretation.

Guided by Braun and Clarke's (2006) thematic analysis, I engaged with the data—recordings, transcripts, timeline renderings, fieldnotes, and memos—to evaluate dyadic interview transcripts and visual timelines to evaluate what useful contributions may have emerged from this adapted co-constructed timeline method. Braun and Clarke's thematic analysis (2006) outlines the following phases: familiarization, generating initial codes, searching for themes, defining and naming themes, and producing a report. After multiple examinations of the texts, I inductively coded specific timeline sections of the narrative transcripts (events, decisions, important milestones identified by participants). Deductive codes, taken from extant literature, were applied during a second round of coding. A priori codes included marriage date, initiation of care with a health care provider, selection of sperm donor, and first ART procedure. Once a codebook was established, two research assistants and I coded all transcripts for a third time. Consensus

was achieved amongst the three primary coders. Discrepancies were resolved through dialogue until we reached agreement. Coded data were evaluated for patterns.

Given the importance of context and situatedness of couples' chronological experience, I returned to the interview transcripts to re-orient myself to the specific context, situatedness, trajectories, and transformations of narrative timelines as a whole. Several thematic maps were devised to evaluate some of the larger methodological benefits. An iterative process of revisions to thematic maps, return to coded text, and analysis of timeline patterns and idiosyncrasies led to the development of themes. Informed by Lincoln's notion of voice and inquirer postures (Lincoln, 1997) I aimed to collapse codes and categories (Morse, 2008) into themes labeled from the point of view of inquirer posture from which analytic value was derived.

For organizational purposes, results were explored in the following groups to explore methodological value derived from this adapted relationship timeline: reflections of the interviewer, participant responses to the method, and reflections of the analyst. *Reflections of the interviewer* describe observations made in interviews (in vivo and transcription). These include anchoring into the couple identity, building rapport, reflexivity within couples, and deliberations about the future. Reflections of the analyst include insights about data management and transformation, interpretation, and opportunities for trends analysis within and across the set of timelines. Participant responses to timelines include explicit and implicit communications that reflect the experience of narrating a shared timeline.

Reflections of the interviewer, which describes results of analysis from the point of view of data collector and interviewer. *Participant responses* reflects verbal and/or

non-verbal reactions to participating in timeline construction *Reflections of the analyst* describes findings related to data management and analysis process as distinct from data collection. The approach to couple level data elicitation in the form of co-constructed narrative chronologies and dyadic interviews resulted in several important insights, descriptive and analytic opportunities, innovative data management and data transformation techniques, triangulation and reflexivity.

Findings

A total of 10 timelines exercises paired with narrative interviews took place (**Figures 4.2 – 4.10**). Taken together, timeline co-construction and joint interviews ranged in length from 30 to 90 minutes and varied by length of relationship, depth of detail couples provided, and the characteristics of each unique CAR journey. The results are organized according to reflections of the interviewer, participant responses to the method, and reflections of the analyst.

Reflections of the Interviewer

Anchoring in a Couple Identity

The dynamic and feel of couples' relationship timeline co-construction and dyadic interviews differed from the one-on-one, individual interviews (where chronology or order of events were not central to the method). Couples displayed multiple expressions of communication with one another reflected their anchoring together as a unit: glances exchanged, touch, verbal and nonverbal interactions. With the initial timeline exercise prompt, "when did you meet?" participants discussed when and how they first met. They extended their narratives with descriptions of how their relationships evolved and shared important aspects of their family formation journeys. Jody (31) and Amy (29) (couple

timeline in Figure 4.2), for example, a married couple from a small, rural town in the Midwest, explained what it was like to marry (a precursor to family formation for them) and be viewed as a lesbian couple in a small rural town.

Jody: Yeah. We got married here in town. And there were a couple of things here and there. Small town newspapers – they put in the paper marriage license. And we weren't comfortable with being quite that public. So there's some weird small town stuff – people talking. But overall, I mean, we've been pleasantly surprised at how – yeah – how kind people have been.

Interviewer: Yeah. That's great.

Jody: It's just all very public. I mean, people definitely know we're in the –

Amy: It feels like you're like the –

Jody: – five queer couples in town.

Amy: – token – yeah. Token lesbian couple.

In describing what it was like to marry and be seen publicly in the place they live they convey their couple identity in the context of the interview, and as corollary couple-level data a couple as unit of analysis. Fully anchored in their couple identity, they later described part of the decision-making process about donor sperm during a meeting with their healthcare provider:

Amy: when we went into our appointment in October, we were thinking we would probably use the sperm bank. But we didn't really –

Jody: We were like 90 percent sure. And then the doctor said – she basically said it's a lot harder to use a known donor, because of all of the testing and it takes longer. And that kind of sealed the deal for us.

Amy: And she just talked about – yeah. It's your timeline – the timeline that we had – it would have stretched it out a lot. And then, the legal process – just like if you're not totally sold on a known donor, then anonymous is a little bit of – more of a simpler way to go about it. Yes. A sperm bank. And so then we were like, okay. We'll just do that.

Reflexivity: Making Space for Within Couple Understanding

One of the strengths of the timeline exercise was the rare opportunity to witness and record dyadic reflections on important issues to them. Such reflexive moments periodically led to improved intra-couple understanding. For example, Bethany (32) and Sam (36) (Figure 4.8), a married couple who tried to conceive with IUI more than five times reflect on attending clinic visits together. For context about the complexity of this issues, each month of IUI might include ovulation tracking, multiple consecutive morning visits to a clinic for transvaginal ultrasound monitoring, scheduled medications whose administration require precise timing, and finally insemination. After insemination takes place, the two-week-wait until signs of a pregnancy may appear. In this excerpt, Bethany and Sam reflexively examined their experiences with fertility appointments in a way that enhances their appreciation of each other's feelings and preferences:

Bethany: I like it better when we're together. I mean, I'm always texting her ... the silly things you talk about. But it's always nice to be together.

Sam: Well, it's interesting to hear her say that because there've been a few times when I have offered to go on a weekday morning and Bethany's like, no, no, don't worry about it...But I haven't heard her verbalize that [before now].

Sam heard, for the first time, her wife's preference to be together for fertility appointments and pauses to reflect. The two were able to communicate about fertility appointments and gain new understanding of their respective experiences and desires around care.

Capturing Convergence and Divergence

Convergence: Shared meaning in an asymmetrically experienced medical process.

In many cases, couples entering into a medical process was experienced asymmetrically—the experiences may be lopsided and inequitable. For example, in the

case of fertility interventions where same-sex couples intend to share parenthood, both partners often do not necessarily simultaneously try to conceive and thus do not experience CAR at the same time. Yet, their interactions may reveal shared meaning making. In this case the features of the combined timeline and interview facilitate expression of shared meaning making or leave space for interpretations. This example of dialogue between Abbey and Avery illustrates this point. Abbey (30) and Avery (32) (Figure 4.9), a married couple who met in a university town and later moved to a suburban area in the South, reported an extensive LGBTQ social support network in the area, initiated care with a reproductive endocrinologist they knew, and had a known sperm donor. At the time of the interview Abbey was the intended genetic and gestational parent in the couple. Here they convey shared meaning about the implications of their first IUI, which they learned had not been successful on the morning of dyadic study participation.

Avery: And I think this morning too, we were just talking, too about the overwhelm of starting over. It's like it sounded like when we were planning this out, like oh we try once a month. It felt like a spread of time. And suddenly it's like, those two weeks are over, which means we have to start measuring the next two weeks if we're gonna do this again next month. Like, suddenly that means there are 3 or 4 more appointments in the next two weeks that we have to try to fit in.

Abbey: Yeah, right.

Avery: And then we have another one. It's just the time actually feels different than I logically envisioned.

Abbey and Avery explain a similar feeling about how they time has taken on new meaning in this process. They next agree on a characterization of the process as an “extracurricular” that is “nonstop”.

Abbey: Yeah, it's more like of a, it almost feels like an extracurricular.

Avery: Like a nonstop thing. Yeah.

Abbey: Yeah, that I'm doing now [inaudible] it's like an active thing that I'm doing.

Avery: Instead of having kind of pauses, which is how I kind of envisioned it.

Interviewer: Ok. Umm, when you say “non-stop extracurricular”, that's what you meant? Like, there are no pauses?

Avery: Yeah.

Interviewer: You're just, you don't know when the endpoint is?.

Avery: Yeah, you don't know when the endpoint is. We're process-, well we're starting to process that this one didn't work, which immediately means that you don't get to sit and process that for two weeks if you want to try again next month. We've gotta call the doctor. We've gotta get in to see the doctor while she's on her cycle so they can check this one. We've gotta go back in a week so they can check again and draw more bloods. It's like oh, we hardly are processing this thing and we're rolling right into the next one. Or, do we stop and wait? And if we stop and wait, what does that mean?

Abbey and Avery together describe the IUI process as an “extracurricular” activity, for which they cannot anticipate an endpoint. They converge on this description of the experience of finding out the initial IUI did not result in a pregnancy, which meant they would have to decide on whether to begin the monthly process again almost immediately after learning they did not conceive this time. This discussion reveals concordance around a new awareness about how time felt—an unexpected sense of time, which is an important insight about the process of trying to conceive for this SMW couple. This is one example of many in which couples discussed the order of events and how quickly they had to make decisions about their care, sometimes without adequate time to reflect and deliberate.

Divergence: Different meanings, shared experience

Other couples had divergent recollections about a medical process in which only one partner is the “patient”. In this couple-level dyadic interview, partners have the opportunity to reflect together on their respective experiences of the medical process. Talking from their unique positionality, for example, Bethany and Sam (Figure 4.8) discussed their respective physical and emotional experiences of an IUI cycle:

Bethany: It’s an interesting thing to always have, like, the first phase of it happen to me. Right? Like I get my period and there’s a moment when only I know that in the whole world and I feel those emotions right away and then I share it and then there’s like the joint emotions and Sam feels her emotions. So there’s this interesting kind of like layering of, like, it happens first to me and then to both of us, so I think that’s just kind of interesting about this process – Going through it together.

Sam: Yeah. Yeah. I think it’s like personally challenging, and I think it just depends on the personality of a non-carrying partner, but empathy and really trying to be empathetic towards something that like you may not really be experiencing at all is definitely like challenging for me because if you didn’t share any information with me I wouldn’t know anything. So it’s not something that I’m like physically experiencing, and if, if Bethany isn’t sharing this information – which she is – but right now she was just like – she has these personal moments. I’m not experiencing anything emotionally, either, so it’s like I have to be more aware of what my partner is going through um, and just try to keep tabs on that as kind of like another piece of emotional labor that I’m trying to do and like keep up with as we go through this process, I guess.

Bethany observes how as the patient or recipient of ART, she experiences physiological and emotional changes “first”. She describes it as “layering” where the thing happens first to her and then communicates with Sam about it. Sam acknowledges the divergent experience where the two entered into the process of ART with the same intention of shared parenthood through the birth of a child, but Bethany must share information about her direct experience of the stages of the process in order for Sam to know (in some way) the impact it has. Bethany communicates to Sam in order for Sam to

gain insight about the physical and emotional impact on Bethany. Then Sam can process her own emotions after having been informed by Bethany.

Mixed Convergence and Divergence

Linda (33) and Angie (30) (see Figure 4.6) intended for Linda to carry the pregnancy as she had dreamed of pregnancy and parenthood all her life. She did all physical preconception preparations and received fertility interventions. Below is an excerpt of our discussion about their the first IUI procedure. They continue, unprompted, to describe their timeline, and points of convergence and divergence regarding subsequent IUI experiences, including their final try:

Linda: Like, so I finally made the appointment and like, between our first appointment and when we actually started was a full year... It was exciting. It was-

Angie: Yeah. We were really hopeful.

Interviewer: Yeah.

Linda: And we would take a picture, like, this is the moment, like every every month we took a picture like as we were literally lying there on the table like, for that little twenty minutes and like, I look at those pictures now and I'm like there was nothing happening right there.

Angie: Well and I think, I think we kind of (pause) feel like we built ourselves up a lot. Like, we cleared out the spare room, and like, we bought the crib and we had decorated and, like we prepared for that. And we bought clothes and like, (crying)

Linda: Like we were, we were like so ready. We we are.

Angie: Like we were sure this is what was supposed to happen. And it was going to happen and when it didn't,

Linda: I know.

Angie: It was really bad.

Linda: It was crushing. It was crushing. But we like, I think we leaned on each other more than ever.

Angie elaborated on the divergent aspect of this venture they entered into together.

Angie, initially the non-gestational, non-physically involved partner, discussed the hopes she had for a child. And the impact of the year of hope and preparation transformed into something else—grief and depression, wherein she acted as supporter to her wife, Linda, but had no space to heal for herself.

Angie: Well and that's, that's what I said in my individual interview, like, the planning part of it, like I really didn't, the connection to it like the planning part of it and like picking the sperm like I didn't care. I just wanted, the kid and like, once it got to that point where we had prepped so much and like, we had gone through a year of like, this is gonna happen this year, like, we're gonna have a baby next year. And it,

Linda: Picked out names, and everything.

Angie: That really hit both of us really hard. And I think, like I didn't, um, vocalize that as much as Linda did because I felt like I had to be support for her, but like, you can see the depression in Linda like, would stay in bed on the weekends. Like she just got up cause she had to go to work, or a function went through the motions, and like I felt like I had to (pause) be the functioning partner at that point. But, it, I think for both of us like it was just, it was really like, it was a big let down.

Linda: Huh it was bad.

Linda and Angie convey couple-level agreement about the process of three IUI cycles that did not result in a positive pregnancy, then a divergence in their experience after the third try. While they shared hope throughout the time of trying to conceive and shared in the sadness and let down after the third unsuccessful try, the period of time after trying was characterized by divergence too. The third cycle ostensibly meant they would need to stop trying; they had used all of the resources they allocated to trying to conceive and did not have anything left to continue to try. This was a devastating time in their journey, and

their relationship. They as a couple were deeply committed to raising a family together, and this seemed to be the end of that dream.

Reconciliation

The timeline exercise provided an opportunity for members of the couple to reconcile divergences around sequence of events and other facts in their narratives. Thus, the exercise helped to facilitate reconciliation of narrative details. This excerpt from Eleanor (38) and Jenny's (40) timeline (Figure 4.10) highlights the ways in which some partners helped one another with recall. This married couple who live in the South intended to pursue pregnancy using at home insemination with a known donor from a distant location in another region in the U.S.. They tried to conceive without medical intervention for a long time, until they eventually chose to use IVF. In this passage Jenny helps to fill in a gap in the timeline as Eleanor does not recall a critical phone call in the process of deciding on their sperm donor:

Jenny: Yeah, they called, and they were like, do you want Adam to be your donor?

Eleanor: Okay. I don't remember this that well –

Jenny: You don't?

Eleanor: – which is weird – I remember everything.

...

Jenny: Yeah. That's okay.

Eleanor: Yeah, I'm sorry.

Jenny: I'll remember for you.

Eleanor: Okay. Tell me about this conversation.

Jenny: No, no, that was basically it. We were like we'll get back to you, and then we said yes.

Indeed, the timeline exercise allowed the couple to collectively clarify a part of their shared decision-making. We see Jenny provide details as Eleanor's memory of the events was challenged, and they together resolved the chronology in an important milestone in the process of family formation.

Deliberations about the Future

The timeline exercise provided some participants the opportunity to discuss new information and understanding, and potential future steps, as a consequence of recent diagnostic findings. The timeline exercise generated not only retrospective accounts, but deliberations about future possibilities related to medical decision-making or prospective data. In addition, the opportunity for relational engagement in the interview helped to reveal meanings held by participants. For example, Rory (35) and Jacqueline (36) (Figure 4.11) learned two days prior to their couple interview, just before a scheduled embryo transfer, that Rory's uterus showed what seemed to be impediments to implantation. During the timeline exercise, they had their first opportunity to discuss the most recent ultrasound findings, rank order possible options available to them as two women in pursuit of pregnancy and consider future decisions. In this exchange Jacqueline asked Rory for the first time about their next steps:

Rory: My thought – we haven't talked about it yet because we haven't had a chance. My thought is, I would do these two frozen transfers, then I would have to do another retrieval. Then, I would do a fresh transfer at that retrieval. And then, maybe if that didn't work, then Jacqueline would do frozen. But I also don't know how I'd feel. I may be like, actually, I wanna keep going.

Jacqueline: One thing I was talking to Patrina about is, I don't know how you rank your wants. Is your – is having a biological child and being pregnant on the same rank? Or does it go biological child, number one, pregnant, number two?

Rory: I think – well, I think my thinking – I don't know. I think I, before, was not so into the idea of reciprocal IVF because I was like, what's the point of going through that extra hurdle? But I think now I am ranking biological child above being pregnant.

Jacqueline: That's what I thought.

Rory: Because the possibility of being pregnant is starting to feel less likely...Right. I'm – I don't – I have a hard time, at this point, imagining giving up on the idea of a biological child. I think – I don't – I think I'd be more willing to go through the IVF and retrieval knowing that it was going to Jacqueline, because the part that I find the hardest is the not getting pregnant part. And I feel like if I repeatedly can't get pregnant – if it's now been – okay. So, now it's been seven attempts. So, if I get to the point where it's like 10 or 11 attempts with nothing to show for it, then I might be like, okay, I'm willing to put my body through the retrieval process a couple times and just focus on Jacqueline trying to get pregnant. I think that might be easier for me emotionally. But I'm also not at the point where I've actually had to make the decision that I'm not going to be pregnant, which – right? I don't wanna underestimate what that might feel like.

Rory and Jacqueline were able to reflect on Rory's reference to having tried seven times already and discussed possible future steps. Their temporal proximity to the new health findings after involvement in the fertility process for the past nine months gives them a different reference point than they had six months prior. Their lived experience to this point created a new frame from which to reflect on the next medical interventions and decisions they were willing to consider, the value of biological connection to a child, and bringing a sibling(s) into the world for daughter.

In addition to deliberations about medical decisions, couples spoke about their hopes for the future. Future hopes for safety, health, maintenance of quality relationships between partners, and looking forward to ordinary, everyday interactions in the context of these emerging families came up consistently.

Participant Responses

The diverse voices of participants regarding their responses to the timeline exercise and dyadic interview are noteworthy. Absent probes or predetermined questions aimed at elicitation of participant responses to the timeline exercise, most participants communicated their reactions to the timeline and dyadic interview. A spectrum of positive, negative, and neutral responses emerged at different points during the course of the exercise. A few participants began the timeline exercise with skepticism. Most of these participants slowly relaxed into the collaborative telling of their shared story. Most shared a combination of neutral to positive responses to the exercise.

Some couples commented that they found the exercise therapeutic or cathartic in that they could tell or share their story from the start to most recent experiences. One couple reached out months after their interviews to report how beneficial they found sharing openly about their respective experiences during fertility treatment in the context of narrating their timeline together. Some appreciated an outlet in which to identify family-oriented aspirations and hopes for the future. Further, couples expressed gratitude that their relationship timelines and narratives could be used to promote improvements in the overall process of queer family formation through pregnancy. For example, Riley (33) and Quinn (34), who had a lengthy and medically intensive pursuit of pregnancy, shared these reflections about the timeline exercise and couple interview:

Riley: I think, overall, we just feel grateful to have a chance to tell our story. I think, especially now that it's working.

Quinn: Yeah.

Riley: This wouldn't have been as fun if we were still on the journey.

Quinn: Probably not. Probably not. I think having you be pregnant and kinda past the first trimester [audio glitch] really good. But I think it's been healing, in some way, to talk about it. Because I think when we reflect back on everything we've been through – one, I forget half of it. And then it feels just kind of like this trauma of just going through everything and – yeah. I think it's been weird telling people, too. We're like, we're pregnant. They're like, yeah, that's so great. And even just part of us wants to be like, **this has been a really long journey, these are all the things that we kind of did to get here.** But people just don't get it.

Riley: Right. People don't even realize how great it is.

Quinn: Yeah. I think, as the second partner, how much I feel like I did for it that I feel like is –

Riley: People don't recognize how much you've done for this. It's hard.

Quinn: So, anyways, it was nice kinda talking about it and being validated in it.

They began their process intending that Quinn would conceive first for reasons related to career development trajectories. They planned to conceive through minimally invasive IUI. After many attempts, a miscarriage, and several medical and surgical interventions, they decided to try reciprocal IVF, in which Riley carried two embryos made from Quinn's extracted eggs. They reflect on the utility of sharing about the fertility process from start to finish. Riley being visibly pregnant and the two expecting twins (as it appears to most people in everyday life) does not tell the whole story or reflect the lengths to which Quinn went individually or to which they as a couple went to get to Riley's pregnancy. They say at the end of the excerpt that sharing the whole story offered an opportunity for validation in what can otherwise feel like an invisible process.

Reflections of the Analyst

Reflections of the analyst capture some potentially useful analytic insights gained from the analytic process.

Devising timelines post hoc: Data management, extraction, and reduction

After completion of the timeline exercises and semi-structured dyadic interviews, I assembled linear, graphic representations of the timelines shared with me. **Figures 4.2 to 4.11** reflect deidentified relationship timelines. Events and associated dates, as well as narrative detail were used to build timelines anchored by time at which couples met to the time of the interviews, extended five years into the future with reports of collective hopes and dreams for their evolving families.

As I put the timelines together, I found myself relying additionally on individual interviews for specific information missed during couple interviews because of my decisions to prioritize the organic flow of conversations and to refrain from asking redundant questions. That is to say, during our interviews, I made conscious choices to not duplicate questions about specific events if one or both participants addressed that content during individual interviews, if it appeared that to ask again may have interfered with the natural flow of conversation. For example, if each partner mentioned the date of their first IUI attempt, it would not be necessary to ask again specifically for that date when the IUI came up in the timeline described by the couple together. In only a few key moments, upon reflection, did I wish that I had probed further to obtain more specific information about the order of events. In these cases, I found that the sequence of events or timing of certain decisions or experiences were obscured by deviations in the conversation or exchanges between members of the couple—leaving key events without dates. For example, Linda and Angie began to care for two small children (both two years old) through the foster system after their third IUI attempt. They began to do so before starting reciprocal IVF procedures, but I failed to ask for the date upon which they began care for the two children. Importantly, the relative sequence of events related to fertility

journeys were mostly obvious after piecing together information from individual and couple interviews.

Initial renderings after data extraction.

Data extraction: I initially formatted data extracted from interviews in a Microsoft Word document in vertical bullet pointed list to order dates and associated narrative text. Narrative text and fieldnotes that described or contextualized events and decisions or provided other details about locations and emotional responses to experiences were added to these renderings. For each couple timeline, information was then taken and added to a horizontally formatted linear graphic representations in a Power Point slide. Timelines were identified with pseudonyms, the couple ID, interview date, and method and frequency of CAR used. Linear, graphic representations were first developed with the inclusion of month and year of event and text that described events. Such renderings proved too text-heavy and not easily interpretable. In addition, they included personal details judged too specific to maintain privacy and confidentiality of participants. Timelines evolved to highlight elements of couples' relationship timelines and fertility journeys that couples deemed important and/or salient, sequence and timing of events, and data relevant to the research question and useful in addressing aims of the study without compromising confidentiality. Examples of details removed from earlier versions of timelines include types of graduate programs or degrees earned by participants, specific names of places relevant to understanding cultural contexts in which couples lived their lives (but perhaps too revealing to include in the timelines), and other contextual information. A solution to the text-heaviness of timelines came in the form of incorporating icons to represent significant events, with minimal text to describe other

details as necessary. A key was then developed to convey the intent or meaning of each icon.

Notably, graphic, linear timelines tended to have periods of concentrated numbers of events within short timeframes. For example, couples delineated important decisions, events, diagnostic evaluations, communications, or travel associated with their efforts to conceive, which tended to concentrate around discreet time periods or over the course of several days, weeks, and months. These clusters of activity (cognitively, emotionally, physically, or financially demanding periods) appear crowded in the timelines.

Timeline Trends

Developing timelines conceptually and graphically allowed for analysis between timelines. One of the noteworthy observations that first came to my awareness were the shifts or transitions couples made in their paths to pregnancy. These shifts or transitions are depicted on timelines with yellow triangles to denote a *delta* or change in direction. Couples often shared about changes in plans, so it seemed worthy of particular attention in timelines. Visual analysis clearly demonstrates differences in these changes in direction across the set of co-constructed timelines. Within timelines, clustering or spread of changes is also made visible at a glance. The timelines provide a way to visually analyze patterns of change within the context of CAR and associated decisions related to pregnancy and family formation without having to read through narrative chronologies. In addition, shifts were corroborated in individual interviews, brought into greater relief, or clarified during couple-level data elicitation, and demonstrate a type of triangulation available in this the method.

Discussion

Couple-level co-constructed relationship timelines integrate concepts from the Actor-Partner Interdependence Model, dyadic interview, and timeline literatures. As a methodological tool, the relationship timelines allowed me to observe and explore the breadth and depth of couples' shared experiences in the context of their broader lives. As partners together shared their chronologies, they demonstrated dynamic movement into their couple-level identities—shifting from the individual identity inhabited during one-on-one interviews done with me previously into a more “we”-oriented identity. This was possible by design as the study sequence lent to the transition from *me* to *we*. In addition, the timeline exercise itself helped to establish within-couple rapport wherein couples established their own rules of engagement. Furthermore, without violating confidentiality established in the one-on-one interviews, the study's order of operations helped to set up the new dimension of couple-interviewer rapport relatively quickly. Additionally, the application of this method demonstrated opportunities for couple-level reflexivity, enhanced recall, and opportunities to together clarify important details. In addition to the convergence exhibited in each of these ways, points of divergence in their experiences with medical interventions, and the hopes embedded within the enactment of those processes, were also observed. These instances of divergence were especially rich and moving. In some cases, couples discussed their divergent experiences for the first time during the couple timeline exercise. Out of these instances of convergence and divergence in their stories came new understandings that emerged for them as individuals and couples.

As they verbally articulated their shared chronologies they provided details about shared experience, relationship milestones, and salient events related to the process of trying to conceive. Anchoring into the couple identity promoted enhanced relationality and data elicitation in the interview setting. The co-creation of the timelines also offered couples the opportunity to engage in real-time deliberations about medical decision-making. From a data management perspective, the post hoc timeline development was informative. Whereas text-only renderings proved too cluttered to effectively analyze, the icon-based timeline renderings enabled more efficient analysis that allowed for observation of trends across timelines and an enhanced ability to see counterfactual data. These graphic timelines enable comparison across the data set including of number of medical procedures a couple undertook, points of transition, and commonalities in sociohistorical contextual factors that may or may not have impacted conscious decision-making among SMW couples. Finally, couples shared responses to the timeline exercise unprompted, which revealed incidental benefits of sharing their relationship and fertility chronologies. In these ways, this study adds to the nascent couple-level timeline literature, along with, the more robust, lifeline literature that has primarily focused on the individual as a unit of analysis

This methods analysis builds on both individual-level lifeline literature and nascent dyadic timeline research. Similar to individual lifeline methods, the co-constructed timelines collaboratively developed in this study reflect sequence, transitions, and trajectories of lived experience within context (Boyd et al., 1998; de Vries et al., 2017; Frank, 1984; Gramling & Carr, 2004). Use of lifelines as a method, helped to highlight attribution of meaning as well (Boyd et al., 1998; de Vries et al., 2017;

Gramling & Carr, 2004). Like de Vries and colleagues (2017), application of the couple-level timeline exercise in this study reflects the strength of jointly completed timelines, which allowed for unique insights into couples' shared relationship narratives with focus on a particular type of medical process in which they were still actively involved. The use of lifelines for research, theory development, and clinical practice has been well documented (Gramling & Carr, 2004). The use of co-constructed relationship timelines in this study corroborates the idea that for health services researchers and clinicians, putting a clinical process or construct in the context of other life events and experiences can be very informative (Gramling & Carr, 2004).

Unlike de Vries and colleagues (2017) and Goldenberg and colleagues (2016), predetermined icons/symbols to represent milestones or experiences were not incorporated into the study protocol for the relationship timeline exercise. The inductive orientation to this study allowed for exploration, letting couples reveal their stories without a priori symbols or categories to apply. This allowed discovery of similarities and differences across couple timelines with room for patterns to emerge without trying to fit their experiences into predetermined categories. Rather, couples constructed timelines verbally, then, during analysis icons became a means by which to convey salient milestones minimally while narrative text elucidated nuances.

Future work that integrates technologies to enable remote participant researcher interactions (e.g. video conferencing) and simultaneous production of visual timelines could provide ways to glean new insights. Others, for example, have used Adobe Illustrator to enable participants to generate visual data during remote interactions (Zhu, Colgan, Reddy, & Choe, 2016). Two other research teams cited in this paper, de Vries et

al., 2017 and Goldenberg et al., 2016, asked participants to create timelines during interviews, which resulted in a flexible, responsive, and collaborate approach to data collection.

The use of timelines among same-sex couples offers an interesting applied case study to understand CAR. Research that focuses on the particular experiences of sexual minority female couples remains under-researched and consequently, relatively invisible. At the same time, the United States Supreme Court decision to recognize marriage equality in the United States has increased the visibility and acceptance of same-sex couples, while simultaneously highlighting historical challenges to basic fulfillment of relationship aspirations (de Vries et al., 2017, p. 56). During the same period of rapid civil rights expansion for sexual and gender minorities in the U.S., an acceleration has taken place in the evolution of medical and -omic technologies including expanded access to ART for sexual and gender minority couples. Yet very little research has taken the couple as a unit of analysis to examine the couple-level characteristics, decision making, and family formation timelines among coupled sexual minority women. Findings from this study suggest that couple timelines help couples elucidate issues related to decisions in the trajectory of relationships, when and under what circumstances couples initiate care to start to try to conceive, and the contexts under which transitions or deviations from originally intended CAR plans arise.

Conclusion

Similar to many other medical processes CAR efforts by couples impact the lives of both partners. The lived experience of these complex medical processes, often characterized by uncertain outcomes and indeterminate endpoints, may be apprehended

in unique ways through the application of co-constructed relationship timelines. This study illustrates one example of the use of timelines within dyadic interviews as a feasible and productive way in which to better ascertain how couples together share their accounts and make meaning out of uncertain and temporally situated experiences that occur in broader context. As a method, timelines have been used to better understand complex health related experiences in the context of larger is the first study of its kind to examine the effectiveness of timeline co-creation among same-sex SMW couples that focuses specifically on the period of engagement in CAR among those actively trying to conceive. This is a time characterized by transitions: transitions in relationship dynamics, community roles and commitments, individual-level conceptions of self, and the living in the space of hope to fulfil pregnancy and parenthood desires in a heteronormative society. The relational aspects of healthcare decision-making and clinical experiences make dyadic data elicitation with relationship timelines a potentially useful method for health researchers who explore a wide variety of phenomena and may contribute to instrument development and related interventions. Beyond the potential of co-created timelines as a data collection tool, co-constructed timelines may also serve as a clinical decision aid tool. Future research examining its feasibility and utility in clinical settings is warranted.

Table 4.1: Glossary of Terms

Term	Definition
Medically or clinically assisted reproduction (CAR)	Clinical techniques that aid in conception, including include donor insemination, drug therapies, in vitro fertilization, embryo donation, and genetic interventions.
Assisted reproductive technology (ART)	The Centers for Disease Control (CDC) defines ART as “all fertility treatments in which both eggs and embryos are handled” (CDC, 2017).
Sexual Minority Women (SMW)	Women who are non-heterosexual in sexual orientation, behavior, and attractions. May include lesbian, bisexual, queer, and other non-heterosexual identities.
Intrauterine Insemination (IUI)	Type of artificial insemination, in which sperm s delivered into uterine cavity by way of catheter around the time of ovulation improve chances of conceiving.
In vitro fertilization (IVF)	A form of ART in which mature eggs are retrieved from a person’s ovaries, followed by fertilization by sperm outside of the body. Embryo(s) are later transferred to uterus.































Table 4.2: Timeline Exercise Prompts

Anchors	Probes
When did you meet?	What was going on in your respective lives as that time?
When would you say your relationship started?	Do you live together? If so, about when did you start to cohabitate? When did you get married?]
When did you collectively decided to have children?	When did you decide to pursue biological conception of children as a way to start a family?
What were your first steps in making the desire to have children into a reality? When did you take the first steps? If different, when did you start to try to conceive using some form of assisted reproduction?	What was that like for you?
When did you make your first visit to the health care provider or clinic you are working with on healthcare provider assisted reproduction?	What was it like when you visited the health care providers you are working with for the first time together?
What are some hopes and dreams for future your family over the next five years? What are some goals or events you look forward to?	What are some goals or events you look forward to?
Additional Dyadic Interview Questions	
What has assisted reproduction been like for you as a couple?	Have there been differences in your experience? If so can you describe them?
What ART interventions have you used?	How would you describe making the decision to use XXX?
How would you describe the first month of trying? Subsequent tries? Provide an example if necessary.	What are some future plans for your family over the next five years? What are some goals or events you look forward to?
Have you had a positive pregnancy test since starting to try to conceive? Around when did that happen?	What was that like for each of you?

How have your families, friends, work associates responded to your efforts to conceive?	
Do you plan to have more than one biological child?	When do you hope to do that?

Figure 4.1. Timeline Icon Key

Icon Key

	Meet through online dating		New healthcare provider		In school
	Meet at workplace		Intracervical Insemination		Graduation
	Meet through social network		Intrauterine Insemination		New job
	Committed relationship		Trigger shot		Religious Conversion
	Engaged		Medication		Health Insurance Change
	Married		Egg retrieval		Surgery
	Move		Embryo transfer		HSG, Hysteroscopy
	Move in together		Known donor sperm donation events and storage		
	Buy home together		Fertility related travel		Miscarriage
	Renovate home together				Pregnancy
	Family formation conversations				Birth of child
	Known donor conversations				

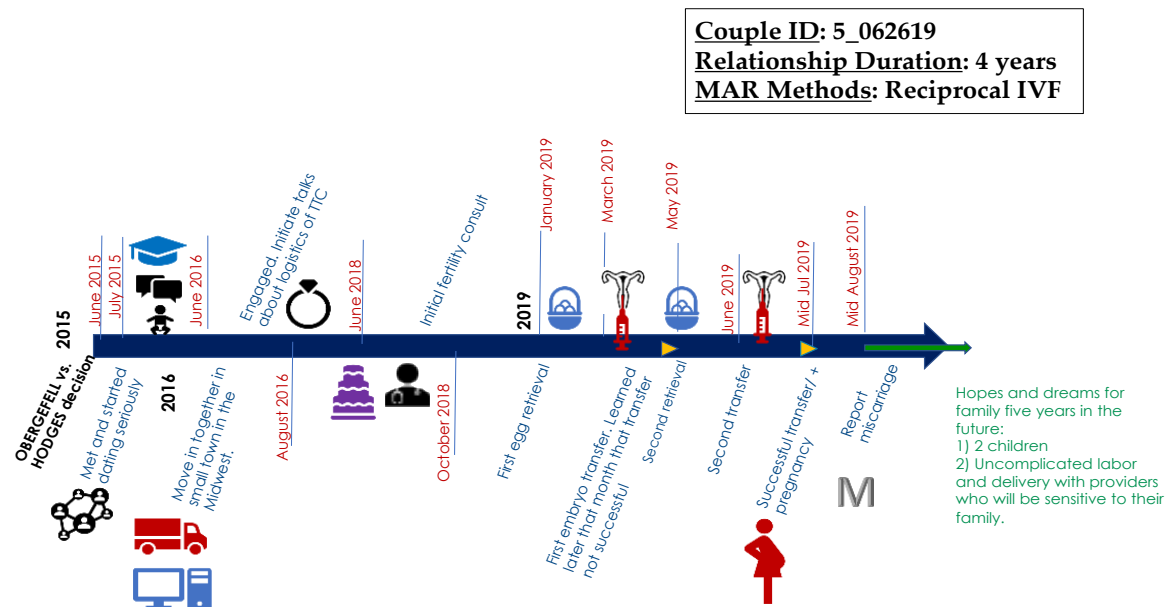


Figure 4.2. Couple Timeline Jody and Amy

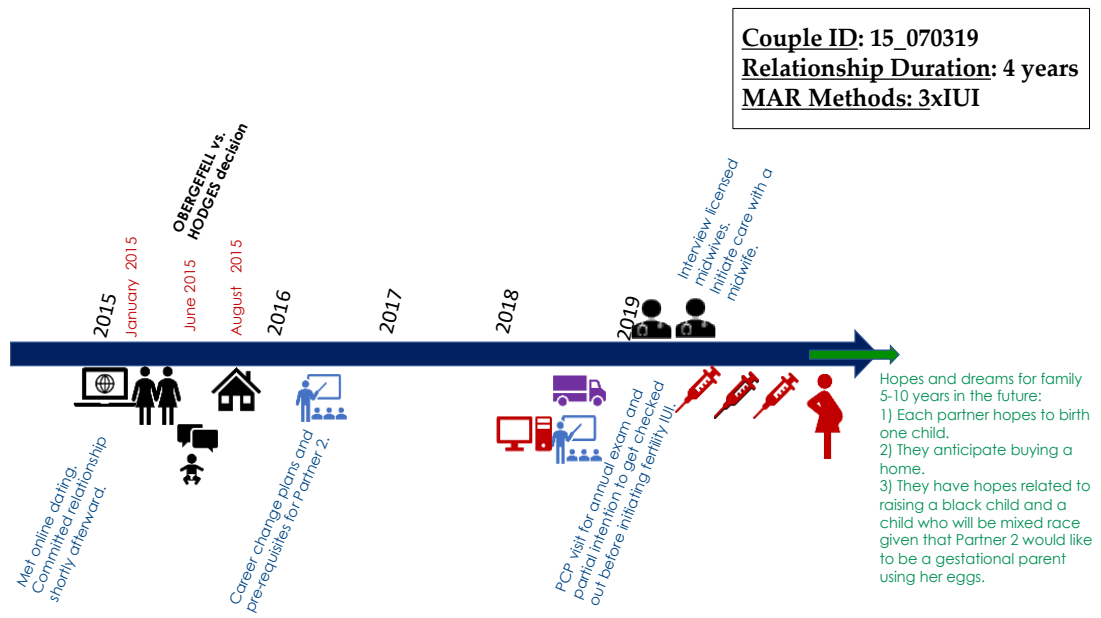


Figure 4.3. Couple Timeline Margaux and Steph

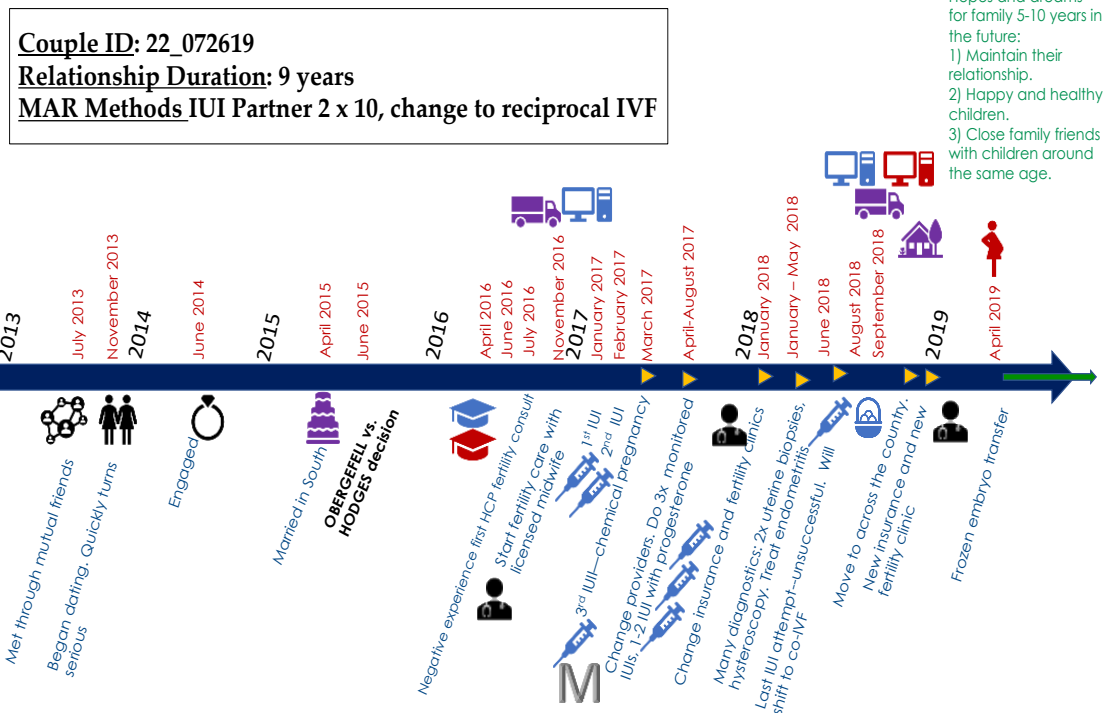


Figure 4.4. Couple Timeline Quinn and Riley

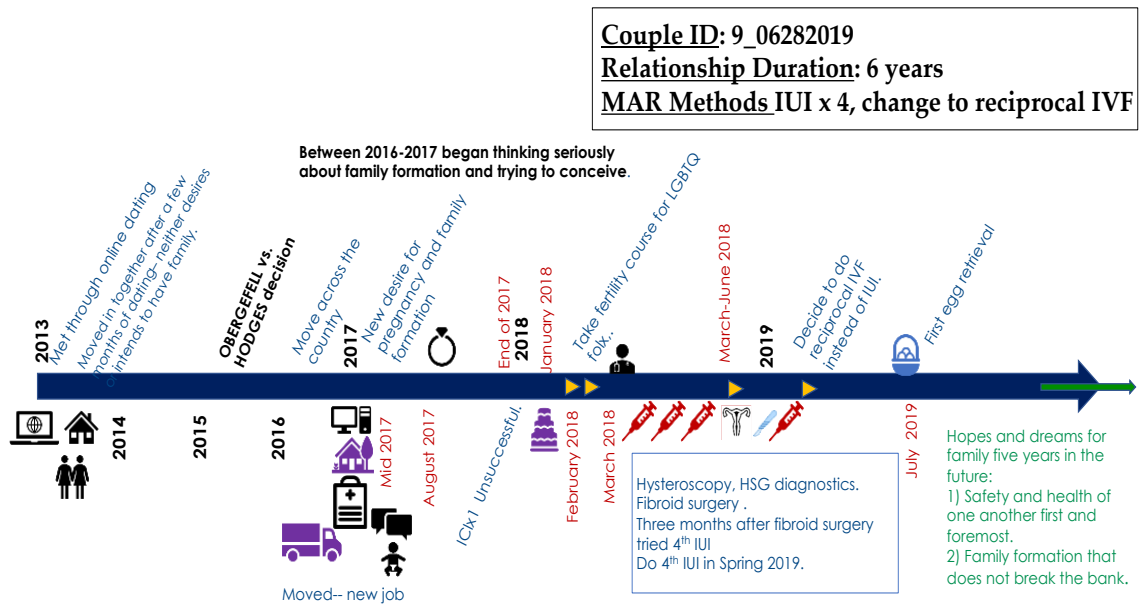


Figure 4.5. Couple Timeline Jane and Liza

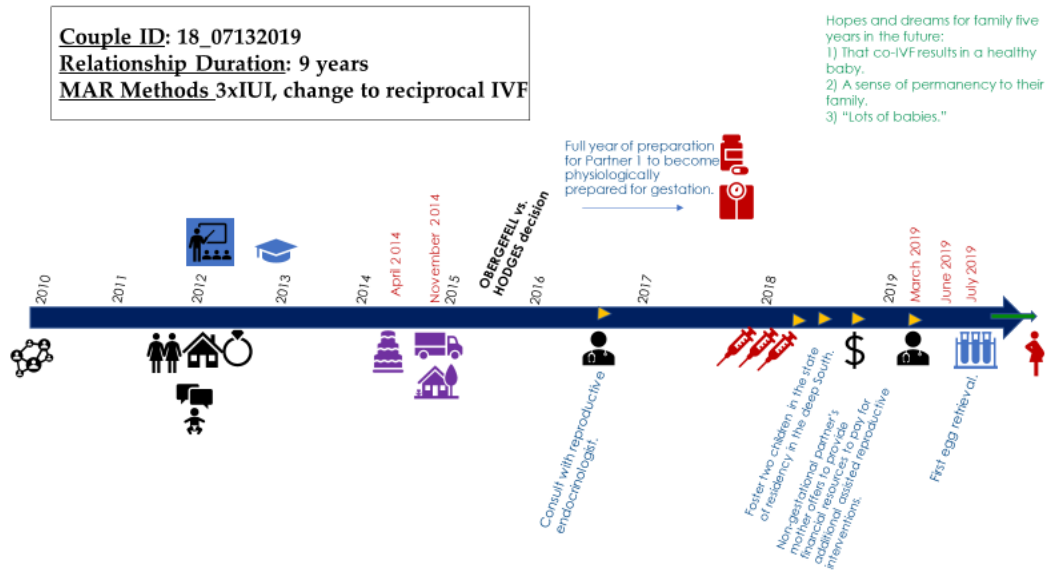


Figure 4.6. Couple Timeline Linda and Angie

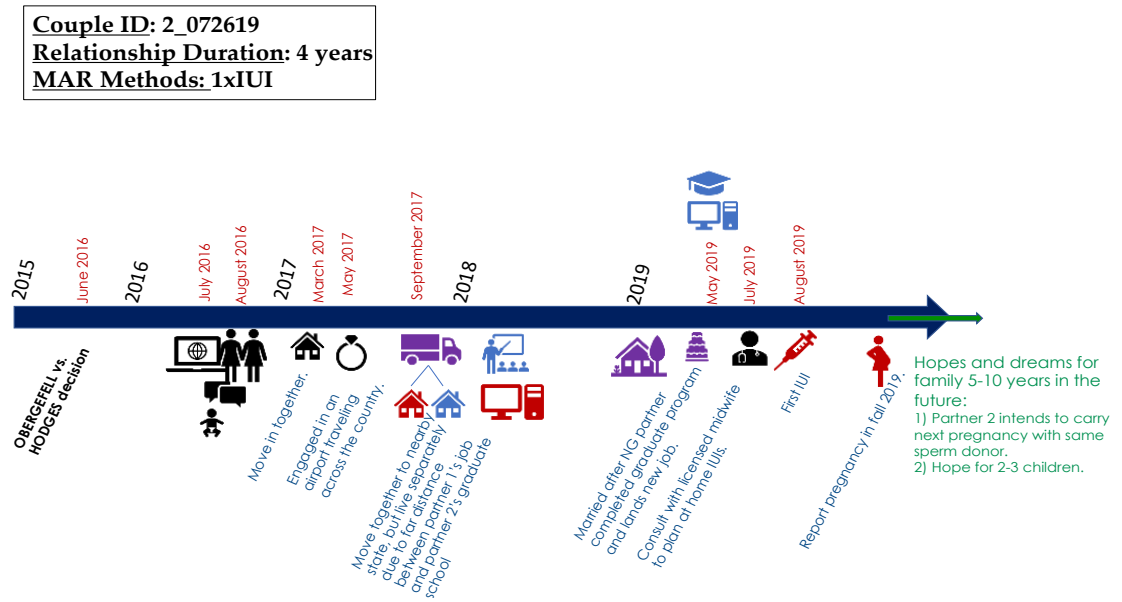


Figure 4.7. Couple Timeline Lisa and Renee

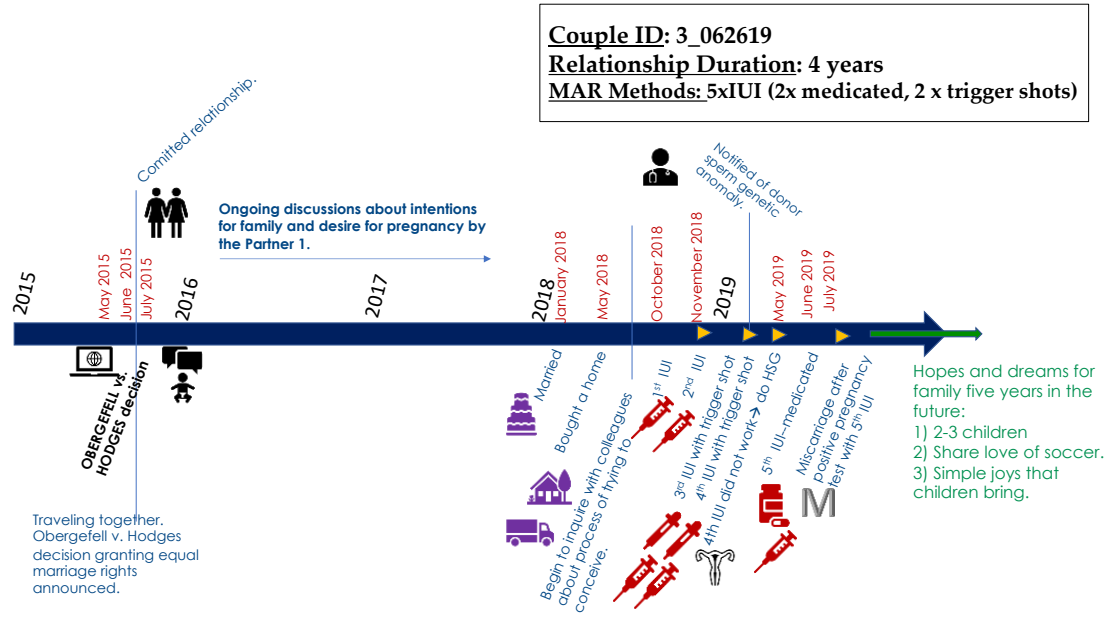


Figure 4.8. Couple Timeline Bethany and Sam

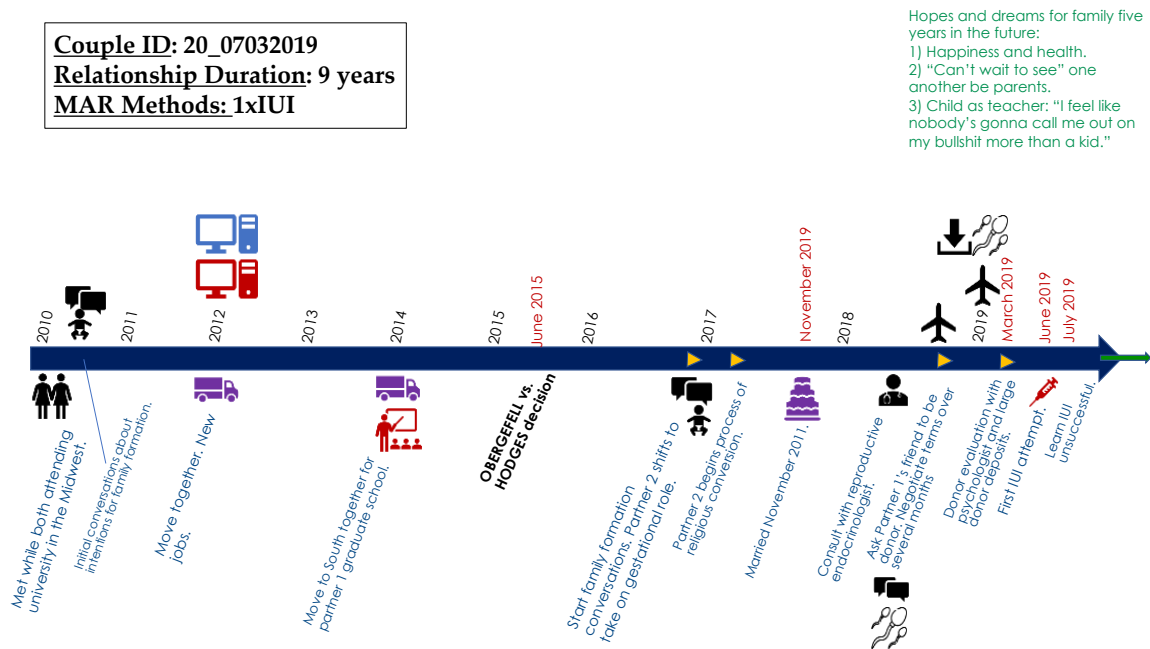


Figure 4.9. Couple Timeline Abbey and Avery

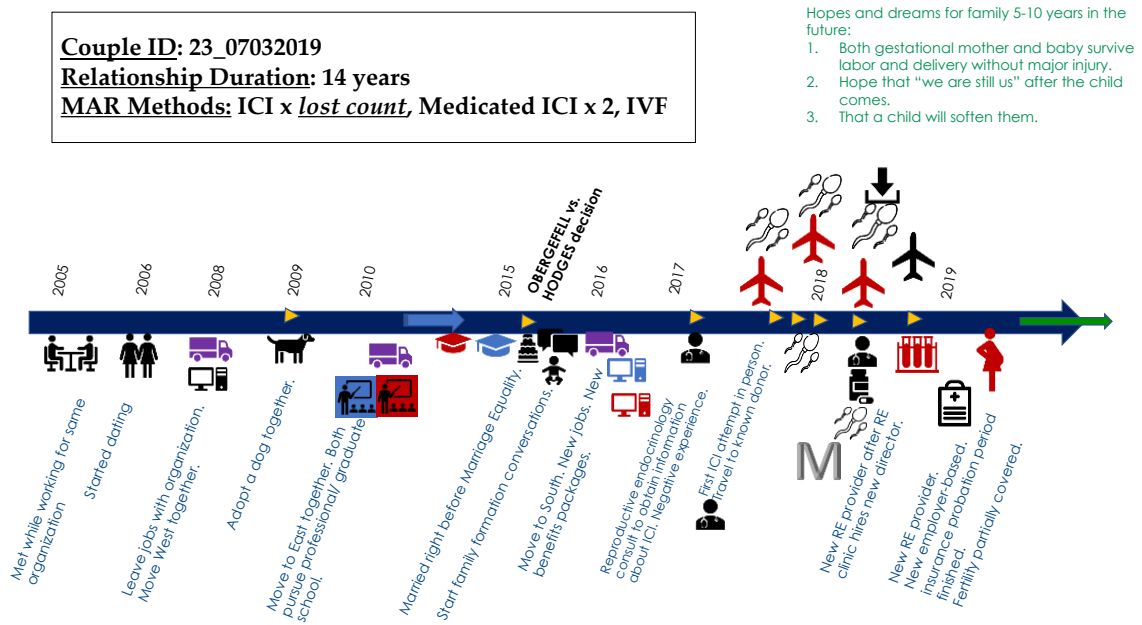


Figure 4.10. Couple Timeline Eleanor and Jenny

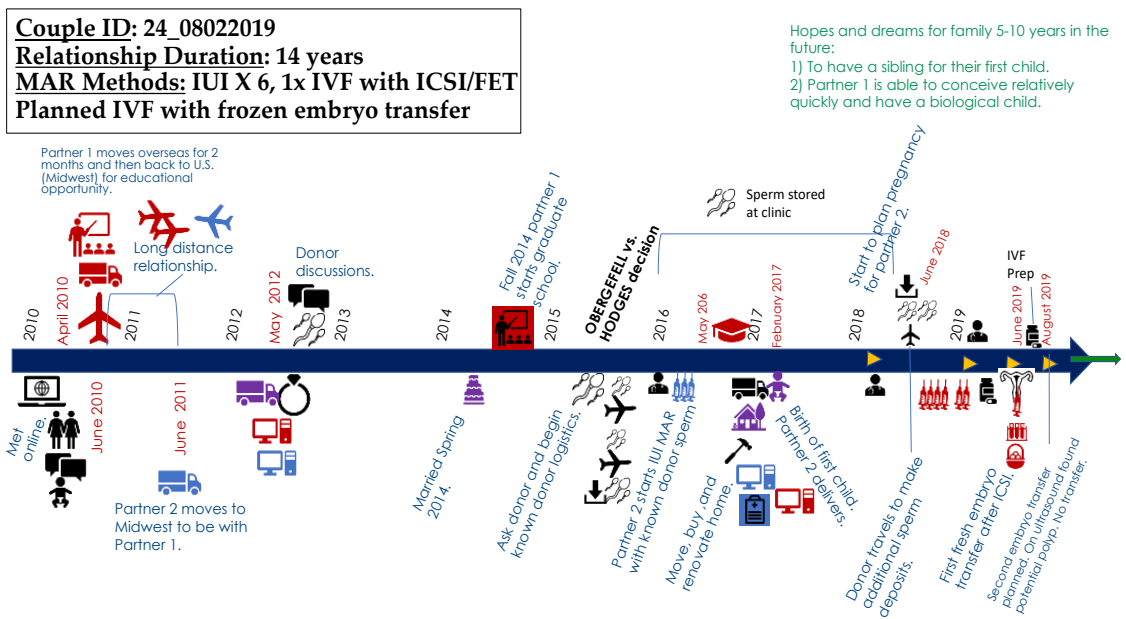


Figure 4.11. Couple Timeline Rory and Jacqueline

References

- Ajzen, I., & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. *J Demographic Research*, 29, 203-232.
- Almack, K. (2006). Seeking sperm: Accounts of lesbian couples' reproductive decision-making and understandings of the needs of the child. *International Journal of Law, Policy and the Family*, 20(1), 1-22. doi:10.1093/lawfam/ebi030
- Ard, K. L., & Makadon, H. J. (2012). Improving the health care of lesbian, gay, bisexual and transgender (LGBT) people: Understanding and eliminating health disparities. *The Fenway Institute*.
- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental psychology*, 51(5), 688.
- Badgett, M. L. (2009). *When gay people get married: What happens when societies legalize same-sex marriage*: NYU Press.
- Baptiste-Roberts, K., Oranuba, E., Werts, N., & Edwards, L. V. (2017). Addressing Health Care Disparities Among Sexual Minorities. *Obstetrics and gynecology clinics of North America*, 44(1), 71-80. doi:S0889-8545(16)30092-4 [pii]
- Batza, K. (2016). From sperm runners to sperm banks: Lesbians, assisted conception, and challenging the fertility industry, 1971–1983. *Journal of Women's History*, 28(2), 82-102.
- Bell, A. V. (2009). “It’s Way out of my League” Low-income Women’s Experiences of Medicalized Infertility. *Gender & Society*, 23(5), 688-709.
- Bell, A. V. (2010). Beyond (financial) accessibility: inequalities within the medicalisation of infertility. *Sociology of health & illness*, 32(4), 631-646.
- Bell, A. V. (2014). “I think about Oprah” social class differences in sources of health information. *Qualitative health research*, 24(4), 506-516.
- Bell, A. V. (2015). Overcoming (and maintaining) reproductive difference: Similarities in the gendered experience of infertility. *Qualitative Sociology*, 38(4), 439-458.
- Bell, A. V. (2016). The margins of medicalization: Diversity and context through the case of infertility. *Social science & medicine* (1982), 156, 39-46. doi:10.1016/j.socscimed.2016.03.005 [doi]
- Bell, K. (2012). An exploration of women's psychosocial support needs in the context of assisted reproduction. *Social Work in Health Care*, 51(8), 695-709.
- Ben-Ari, A., & Livni, T. (2006). Motherhood Is Not a Given Thing: Experiences and Constructed Meanings of Biological and Nonbiological Lesbian Mothers. *Sex Roles*, 54(7), 521-531. doi:10.1007/s11199-006-9016-0
- Berends, L. (2011). Embracing the visual: Using timelines with in-depth interviews on substance use and treatment. *The Qualitative Report*, 16(1), 1-9.
- Berg, C. A., & Upchurch, R. (2007). A developmental-contextual model of couples coping with chronic illness across the adult life span. *Psychological bulletin*, 133(6), 920.
- Biblarz, T. J., & Savci, E. (2010). Lesbian, gay, bisexual, and transgender families. *Journal of Marriage and Family*, 72(3), 480-497.
- Black, B. P., & Fields, W. S. (2014). Contexts of reproductive loss in lesbian couples.

- MCN *The American Journal of Maternal/Child Nursing*, 39(3), 157-162.
doi:10.1097/NMC.0000000000000032
- Blanchfield, B., & Patterson, C. J. (2015). Racial and sexual minority women's receipt of medical assistance to become pregnant. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, 34(6), 571-579. doi:10.1037/hea0000124 [doi]
- Bodri, D., Nair, S., Gill, A., Lamanna, G., Rahmati, M., Arian-Schad, M., . . . Macklon, N. (2018). Shared motherhood IVF: high delivery rates in a large study of treatments for lesbian couples using partner-donated eggs. *Reproductive BioMedicine Online*, 36(2), 130-136.
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C., & Verhaak, C. (2012a). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C. J. M., & Verhaak, C. (2012b). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Bonvicini, K. A. (2017). LGBT healthcare disparities: What progress have we made? *Patient Education and Counseling*, 100(12), 2357-2361.
- Bonvicini, K. A., & Perlin, M. J. (2003). The same but different: clinician–patient communication with gay and lesbian patients. *Patient Education and Counseling*, 51(2), 115-122.
- Borneskog, C., Sydsjo, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: a descriptive study. *BJOG : an international journal of obstetrics and gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214 [doi]
- Borneskog, C., Sydsjö, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: A descriptive study. *BJOG: An International Journal of Obstetrics and Gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214
- Bos, H., & van Balen, F. (2010). Children of the new reproductive technologies: Social and genetic parenthood. *Patient Education and Counseling*, 81(3), 429-435. doi:10.1016/j.pec.2010.09.012
- Bos, H. M. W., Van Balen, F., & Van Den Boom, D. C. (2005). Lesbian families and family functioning: An overview. *Patient Education and Counseling*, 59(3), 263-275. doi:10.1016/j.pec.2004.10.006
- Bos, H. M. W., van Balen, F., van den Boom, D. C., & Sandfort, T. G. M. (2004). Minority stress, experience of parenthood and child adjustment in lesbian families. *Journal of Reproductive and Infant Psychology*, 22(4), 291-304. doi:10.1080/02646830412331298350
- Bostock v. Clayton County, GA, 590 1 (United States Supreme Court 2020).
- Boyd, C. J., Hill, E., Holmes, C., & Purnell, R. (1998). Putting drug use in context: Life-lines of African American women who smoke crack. *Journal of Substance Abuse Treatment*, 15(3), 235-249.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for*

beginners: sage.

- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. *Handbook of Research Methods in Health Social Sciences*, 843-860.
- Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annu.Rev.Public Health*, 27, 167-194.
- Braveman, P. A., Kumanyika, S., Fielding, J., LaVeist, T., Borrell, L. N., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: the issue is justice. *American Journal of Public Health*, 101(S1), S149-S155.
- Brewaey, A., Ponjaert, I., Van Hall, E. V., & Golombok, S. (1997). Donor insemination: child development and family functioning in lesbian mother families. *Human reproduction (Oxford, England)*, 12(6), 1349-1359.
- Bushe, S., & Romero, I. L. (2017). *Lesbian pregnancy: care and considerations*. Paper presented at the Seminars in Reproductive Medicine.
- Callahan, E. J., Sitkin, N., Ton, H., Eidson-Ton, W. S., Weckstein, J., & Latimore, D. (2015). Introducing sexual orientation and gender identity into the electronic health record: one academic health center's experience. *Academic medicine : journal of the Association of American Medical Colleges*, 90(2), 154-160. doi:10.1097/ACM.0000000000000467 [doi]
- Campagne, D. M. (2006). Should fertilization treatment start with reducing stress? *Human Reproduction*, 21(7), 1651-1658.
- Campbell, S. (2002). Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self. In: JSTOR.
- Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., Hendrick, C. E., & Higgins, J. A. (2020). Pregnancy (im) possibilities: identifying factors that influence sexual minority women's pregnancy desires. *Social Work in Health Care*, 59(3), 180-198.
- Carvalho, P. G. C. d., Cabral, C. d. S., Ferguson, L., Gruskin, S., & Diniz, C. S. G. (2019). 'We are not infertile': challenges and limitations faced by women in same-sex relationships when seeking conception services in São Paulo, Brazil. *Culture, health & sexuality*, 21(11), 1257-1272. doi:10.1080/13691058.2018.1556343
- Case, D. O. (2007). *Looking for Information. A Survey of Research on Information Seeking, Needs and Behavior*. (2nd Ed. ed.). Amsterdam: Elsevier.
- Casu, G., Ulivi, G., Zaia, V., Fernandes Martins, M. d. C., Parente Barbosa, C., & Gremigni, P. (2018). Spirituality, infertility-related stress, and quality of life in Brazilian infertile couples: Analysis using the actor-partner interdependence mediation model. *Research in nursing & health*, 41(2), 156-165.
- Ceballo, R., Graham, E. T., & Hart, J. (2015). Silent and infertile: An intersectional analysis of the experiences of socioeconomically diverse African American women with infertility. *Psychology of Women Quarterly*, 39(4), 497-511.
- Chabot, J. M., & Ames, B. D. (2004). "It wasn't 'let's get pregnant and go do it':" Decision Making in Lesbian Couples Planning Motherhood via Donor Insemination. *Family Relations*, 53(4), 348-356.
- Chandra, A., Copen, C. E., & Stephen, E. H. (2014). *Infertility service use in the United States: data from the National Survey of Family Growth, 1982-2010: US Department of Health and Human Services, Centers for Disease Control and*

- Chapman, R., Wardrop, J., Zappia, T., Watkins, R., & Shields, L. (2012). The experiences of Australian lesbian couples becoming parents: deciding, searching and birthing. *Journal of Clinical Nursing*, 21(13-14), 1878-1885.
- Charlton, B. M., Corliss, H. L., Missmer, S. A., Rosario, M., Spiegelman, D., & Austin, S. B. (2013). Sexual orientation differences in teen pregnancy and hormonal contraceptive use: an examination across 2 generations. *American Journal of Obstetrics & Gynecology*, 209(3), 204. e201-204. e208.
- Charlton, B. M., Roberts, A. L., Rosario, M., Katz-Wise, S. L., Calzo, J. P., Spiegelman, D., & Austin, S. B. (2018). Teen pregnancy risk factors among young women of diverse sexual orientations. *Pediatrics*, 141(4).
- Chaudoir, S. R., Wang, K., & Pachankis, J. E. (2017). What reduces sexual minority stress? A review of the intervention "toolkit". *Journal of Social Issues*, 73(3), 586-617.
- Cherguit, J., Burns, J., Pettie, S., & Tasker, F. (2013). Lesbian co-mothers' experiences of maternity healthcare services. *Journal of advanced nursing*, 69(6), 1269-1278.
- Chrisler, J. C. (2014). A reproductive justice approach to women's health. *Analyses of Social Issues and Public Policy*, 14(1), 205-209.
- Cook, R. J., & Dickens, B. M. (2014). Reducing stigma in reproductive health. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics*, 125(1), 89-92. doi:10.1016/j.ijgo.2014.01.002 [doi]
- Corriher, B. (2016). Putting Equality to a Vote: Individual Rights, Judicial Elections, and the Arkansas Supreme Court. *UALR L. Rev.*, 39, 591.
- Coulter, R. W., Kenst, K. S., & Bowen, D. J. (2014). Research funded by the National Institutes of Health on the health of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health*, 104(2), e105-e112.
- Courtright, C. (2007). Context in information behavior research. *Annual review of information science and technology*, 41(1), 273-306.
- Cousineau, T. M., & Domar, A. D. (2007). Psychological impact of infertility. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 21(2), 293-308.
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stan. L. Rev.*, 43, 1241.
- Creswell, J. W., & Miller, D. L. J. T. i. p. (2000). Determining validity in qualitative inquiry. 39(3), 124-130.
- Cwikel, J., Gidron, Y., & Sheiner, E. (2004). Psychological interactions with infertility among women. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 117(2), 126-131.
- Dahl, B., Fylkesnes, A. M., Sørli, V., & Malterud, K. (2013). Lesbian women's experiences with healthcare providers in the birthing context: a meta-ethnography. *Midwifery*, 29(6), 674-681.
- Dahl, B., & Malterud, K. (2015). Neither father nor biological mother. A qualitative study about lesbian co-mothers' maternity care experiences. *Sexual & Reproductive Healthcare*, 6(3), 169-173.
- Dancet, E., Van Empel, I., Rober, P., Nelen, W., Kremer, J., & d'Hooghe, T. (2011). Patient-centred infertility care: a qualitative study to listen to the patient's voice. *Human Reproduction*, 26(4), 827-833.

- de Vries, B. (2013). Lifelines: A review of content and context. *The International Journal of Reminiscence and Life Review*, 1(1), 31-35.
- de Vries, B., LeBlanc, A. J., Frost, D. M., Alston-Stepnitz, E., Stephenson, R., & Woodyatt, C. R. (2017). The relationship timeline: A method for the study of shared lived experiences in relational contexts. *Advances in life course research*, 32, 55-64.
- Dedoose Version 8.3.17. (2019). Retrieved from www.dedoose.com
- Dervin, B. (2015). Dervin's Sense-Making Theory. In *Information seeking behavior and technology adoption: Theories and trends* (pp. 59-80): IGI Global.
- Dervin, B., & Naumer, C. M. (2017). Sense-making. In *Encyclopedia of library and information sciences* (pp. 4113-4124): CRC Press.
- Dervin, B., & Nilan, M. (1986). Information needs and uses. *Annual review of information science and technology*, 21, 3-33.
- Devlin, N., & Parkin, D. (2003). Funding fertility: issues in the allocation and distribution of resources to assisted reproduction technologies. *Human Fertility*, 6(sup2), S2-S6.
- Diamant, A. L., Wold, C., Spritzer, K., & Gelberg, L. (2000). Health behaviors, health status, and access to and use of health care: a population-based study of lesbian, bisexual, and heterosexual women. *Archives of family medicine*, 9(10), 1043.
- Diamond-Smith, N., Warnock, R., & Sudhinaraset, M. (2018). Interventions to improve the person-centered quality of family planning services: a narrative review. *Reproductive health*, 15(1), 144.
- Domar, A. D. (2020). Patient Retention, Nursing Retention: The Importance of Empathic Communication and Nursing Support. *Patient-Centered Assisted Reproduction: How to Integrate Exceptional Care with Cutting-Edge Technology*, 146.
- Donovan, C. (2000). Who needs a father? Negotiating biological fatherhood in British lesbian families using self-insemination. *Sexualities*, 3(2), 149-164.
- Donovan, C., & Wilson, A. R. (2008). Imagination and integrity: decision-making among lesbian couples to use medically provided donor insemination. *Culture, health & sexuality*, 10(7), 649-665. doi:10.1080/13691050802175739 [doi]
- Donovan, C., & Wilson, A. R. (2008). Imagination and integrity: decision-making among lesbian couples to use medically provided donor insemination. *Culture, health & sexuality*, 10(7), 649-665.
- Doyal, L. (1995). *What makes women sick: Gender and the political economy of health*: Macmillan International Higher Education.
- Dudgeon, M. R., & Inhorn, M. C. (2004). Men's influences on women's reproductive health: medical anthropological perspectives. *Social Science & Medicine*, 59(7), 1379-1395.
- Dunne, G. A. (2000). Opting into motherhood: Lesbians blurring the boundaries and transforming the meaning of parenthood and kinship. *Gender & Society*, 14(1), 11-35.
- Ehrensaft, D. (2008). Just molly and me, and donor makes three: Lesbian motherhood in the age of assisted reproductive technology. *Journal of Lesbian Studies*, 12(2-3), 161-178. doi:10.1080/10894160802161331
- Eisikovits, Z., & Koren, C. (2010). Approaches to and outcomes of dyadic interview analysis. *Qualitative health research*, 20(12), 1642-1655.

- Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., . . . Kjellgren, K. (2011). Person-centered care—ready for prime time. *European journal of cardiovascular nursing*, 10(4), 248-251.
- Elder Jr, G. H. (1994). Time, human agency, and social change: Perspectives on the life course. *Social psychology quarterly*, 4-15.
- Elder Jr, G. H. (1998). The life course as developmental theory. *Child development*, 69(1), 1-12.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A.-L. (2018). Mothers in same-sex relationships describe the process of forming a family as a stressful journey in a heteronormative world: a Swedish grounded theory study. *Maternal and child health journal*, 22(10), 1444-1450.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A. L. . (2018). Mothers in Same-Sex Relationships Describe the Process of Forming a Family as a Stressful Journey in a Heteronormative World: A Swedish Grounded Theory Study. *Maternal and child health journal*, 1-7.
- Erlandsson, K., Linder, H., & Häggström-Nordin, E. (2010). Experiences of gay women during their partner's pregnancy and childbirth. *British journal of midwifery*, 18(2), 99-103.
- Everett, B. G., McCabe, K. F., & Hughes, T. L. (2017). Sexual Orientation Disparities in Mistimed and Unwanted Pregnancy Among Adult Women. *Perspect Sex Reprod Health*, 49(3), 157-165. doi:10.1363/psrh.12032
- Ezabadi, Z., Mollaahmadi, F., Sazvar, S., Vesali, S., & Omani-Samani, R. (2019). Satisfaction with information provided to infertile patients who undergo assisted reproductive treatment. *International journal of fertility & sterility*, 12(4), 324.
- Fals-Stewart, W., Birchler, G. R., & Kelley, M. L. (2003). The timeline followback spousal violence interview to assess physical aggression between intimate partners: Reliability and validity. *Journal of Family Violence*, 18(3), 131-142.
- Farquhar, C. M., Bhattacharya, S., Repping, S., Mastenbroek, S., Kamath, M. S., Marjoribanks, J., & Boivin, J. (2019). Female subfertility. *Nature Reviews Disease Primers*, 5(1), 1-21.
- Finney Rutten, L. J., Blake, K. D., Greenberg-Worisek, A. J., Allen, S. V., Moser, R. P., & Hesse, B. W. (2019). Online Health Information Seeking Among US Adults: Measuring Progress Toward a Healthy People 2020 Objective. *Public Health Reports*, 134(6), 617-625.
- Fishbein, M. (1972). Toward an understanding of family planning behaviors. *Journal of Applied Social Psychology*, 2(3), 214-227.
- Fishbein, M., & Jaccard, J. J. (1973). Theoretical and methodological considerations in the prediction of family planning intentions and behavior. *Representative Research in Social Psychology*.
- Fox, S., & Jones, S. (2009). The social life of health information. Pew internet & American life project. Washington, DC.
- Frank, G. (1984). Life history model of adaptation to disability: the case of a 'congenital amputee'. *Social Science & Medicine*, 19(6), 639-645.
- Fredriksen-Goldsen, K. I., Kim, H.-J., Barkan, S. E., Balsam, K. F., & Mincer, S. L. (2010). Disparities in health-related quality of life: a comparison of lesbians and bisexual women. *American Journal of Public Health*, 100(11), 2255-2261.

- Fredriksen-Goldsen, K. I., Simoni, J. M., Kim, H.-J., Lehavot, K., Walters, K. L., Yang, J., . . . Muraco, A. (2014). The health equity promotion model: Reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. *American Journal of Orthopsychiatry*, 84(6), 653.
- Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of behavioral medicine*, 38(1), 1-8.
- Gamarel, K. E., Reisner, S. L., Laurenceau, J.-P., Nemoto, T., & Operario, D. (2014). Gender minority stress, mental health, and relationship quality: A dyadic investigation of transgender women and their cisgender male partners. *Journal of Family Psychology*, 28(4), 437.
- Gameiro, S., Boivin, J., Dancet, E., de Klerk, C., Emery, M., Lewis-Jones, C., . . . Verhaak, C. M. (2015). ESHRE guideline: routine psychosocial care in infertility and medically assisted reproduction—a guide for fertility staff. *Human Reproduction*, 30(11), 2476-2485.
- Gameiro, S., Boivin, J., Peronace, L., & Verhaak, C. M. (2012). Why do patients discontinue fertility treatment? A systematic review of reasons and predictors of discontinuation in fertility treatment. *Human reproduction update*, 18(6), 652-669.
- Gameiro, S., Canavarro, M. C., & Boivin, J. (2013). Patient centred care in infertility health care: direct and indirect associations with wellbeing during treatment. *Patient Education and Counseling*, 93(3), 646-654.
- Gartrell, N., Banks, A., Hamilton, J., Reed, N., Bishop, H., & Rodas, C. (1999). The National Lesbian Family Study: 2. Interviews with mothers of toddlers. *The American Journal of Orthopsychiatry*, 69(3), 362-369.
- Gartrell, N., Rothblum, E. D., Koh, A. S., van Beusekom, G., & Bos, H. (2019). “We Were Among the First Nontraditional Families”: Thematic Perceptions of Lesbian Parenting After 25 Years. *Frontiers in psychology*, 10, 2414.
- Gleicher, N., Vanderlaan, B., Karande, V., Morris, R., Nadherney, K., & Pratt, D. (1996). Infertility treatment dropout and insurance coverage. *Obstetrics & Gynecology*, 88(2), 289-293.
- Goldberg, A. E., & Allen, K. R. (2013). Donor, dad, or...? Young adults with lesbian parents' experiences with known donors. *Family process*, 52(2), 338-350. doi:10.1111/famp.12029 [doi]
- Goldberg, A. E., Gartrell, N. K., & Gates, G. J. (2014). Research report on LGB-parent families.
- Goldberg, A. E., Perry-Jenkins, M. J. J. o. S., & Relationships, P. (2007). The division of labor and perceptions of parental roles: Lesbian couples across the transition to parenthood. 24(2), 297-318.
- Goldberg, A. E., & Sweeney, K. K. (2019). LGBTQ parent families. In M. C. B. H. Fiese, K. Deater-Deckard, E. N. Jouriles, & M. A. Whisman (Ed.), *APA handbooks in psychology®. APA handbook of contemporary family psychology: Foundations, methods, and contemporary issues across the lifespan* (pp. 743-760): American Psychological Association.
- Goldberg, S. K., & Conron, K. J. (2018). *How many same-sex couples in the US are raising children?* : Williams Institute, UCLA School of Law.
- Goldberg, S. K., Reese, B. M., & Halpern, C. T. (2016). Teen Pregnancy Among Sexual

- Minority Women: Results From the National Longitudinal Study of Adolescent to Adult Health. *Journal of Adolescent Health*, 59(4), 429-437.
doi:10.1016/j.jadohealth.2016.05.009
- Goldenberg, T., Finneran, C., Andes, K. L., & Stephenson, R. (2016). Using participant-empowered visual relationship timelines in a qualitative study of sexual behaviour. *Journal of Global Public Health*, 11(5-6), 699-718.
- Golombok, S., & Tasker, F. (1994). Donor insemination for single heterosexual and lesbian women: issues concerning the welfare of the child. *Human reproduction (Oxford, England)*, 9(11), 1972-1976.
- Gonzales, G., Quinones, N., & Attanasio, L. (2019). Health and access to care among reproductive-age women by sexual orientation and pregnancy status. *Women's Health Issues*, 29(1), 8-16.
- Graham, R., Berkowitz, B., Blum, R., Bockting, W., Bradford, J., de Vries, B., . . . Kasprzyk, D. J. W., DC: Institute of Medicine. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding.
- Graham, R., Berkowitz, B., Blum, R., Bockting, W., Bradford, J., de Vries, B., & Makadon, H. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. *Washington, DC: Institute of Medicine*.
- Gramling, L. F., & Carr, R. L. (2004). Lifelines: A life history methodology. *Nursing Research*, 53(3), 207-210.
- Gray, J., & Dagg, J. (2018). Using reflexive lifelines in biographical interviews to aid the collection, visualisation and analysis of resilience. *Contemporary Social Science*, 1-16.
- Greenfeld, D. A., & Seli, E. (2016). Same-sex reproduction: Medical treatment options and psychosocial considerations. *Current Opinion in Obstetrics and Gynecology*, 28(3), 202-205. doi:10.1097/GCO.0000000000000266
- Gregg, I. (2018). The Health Care Experiences of Lesbian Women Becoming Mothers. *Nursing for Women's Health*, 22(1), 40-50. doi:10.1016/j.nwh.2017.12.003
- Greil, A. L. (1997). Infertility and psychological distress: a critical review of the literature. *Social Science & Medicine*, 45(11), 1679-1704.
- Greil, A. L., & McQuillan, J. (2004). Help-seeking patterns among subfecund women. *Journal of Reproductive and Infant Psychology*, 22(4), 305-319.
- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: a review of recent literature. *Sociology of health & illness*, 32(1), 140-162.
- Gurmankin, A. D., Caplan, A. L., & Braverman, A. M. (2005). Screening practices and beliefs of assisted reproductive technology programs. *Fertility and sterility*, 83(1), 61-67.
- Hall, K. S., Samari, G., Garbers, S., Casey, S. E., Diallo, D. D., Orcutt, M., . . . McGovern, T. (2020). Centring sexual and reproductive health and justice in the global COVID-19 response. *The lancet*, 395(10231), 1175-1177.
- Hammarberg, K., Zosel, R., Comoy, C., Robertson, S., Holden, C., Deeks, M., & Johnson, L. (2017). Fertility-related knowledge and information-seeking behaviour among people of reproductive age: a qualitative study. *Human Fertility*, 20(2), 88-95.

- Hammond, C. J. B. J. o. M. (2014). Exploring same sex couples' experiences of maternity care. *22*(7), 495-500.
- Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth: research evidence and clinical implications. *Pediatric Clinics*, *63*(6), 985-997.
- Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative Research in Psychology*, *12*(2), 91-106.
- Hayman, B., & Wilkes, L. (2017). De novo Families: Lesbian Motherhood. *Journal of homosexuality*, *64*(5), 577-591. doi:10.1080/00918369.2016.1194119
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2013). Marginalised mothers: Lesbian women negotiating heteronormative healthcare services. *Contemporary Nurse*, *44*(1), 120-127.
- Hayman, B., Wilkes, L., Jackson, D., & Halcomb, E. (2013). De Novo Lesbian Families: Legitimizing the Other Mother. *Journal of GLBT Family Studies*, *9*(3), 273-287. doi:10.1080/1550428X.2013.781909
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2015). Lesbian Women Choosing Motherhood: The Journey to Conception. *Journal of GLBT Family Studies*, *11*(4), 395-409. doi:10.1080/1550428X.2014.921801
- Health, U. S. D. o., Human Services Office of Disease, P., & Health, P. (2017a). Healthy People 2020. In (<https://www.healthypeople.gov/2020/topics-objectives/topic/lesbian-gay-bisexual-and-transgender-health> ed., Vol. 2017). Washington, D.C.
- Health, U. S. D. o., Human Services Office of Disease, P., & Health, P. (2017b). Healthy People 2020. *2017*(February).
- Hequembourg, A. L., & Brallier, S. A. (2009). An exploration of sexual minority stress across the lines of gender and sexual identity. *Journal of homosexuality*, *56*(3), 273-298.
- Hequembourg, A. L., & Farrell, M. P. (1999). Lesbian motherhood: Negotiating marginal-mainstream identities. *Gender & Society*, *13*(4), 540-557.
- Hodson, K., Meads, C., & Bewley, S. (2017). Lesbian and bisexual women's likelihood of becoming pregnant: a systematic review and meta-analysis. *BJOG: An International Journal of Obstetrics and Gynaecology*, *124*(3), 393-402. doi:10.1111/1471-0528.14449
- Holland, S. (2018). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*.
- Holland, S. (2019). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*, *41*(1), 52-66.
- Holmberg, D., Orbuch, T. L., & Veroff, J. (2003). *Thrice told tales: Married couples tell their stories*: Routledge.
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, *15*(9), 1277-1288.
- Institute of Medicine (2003) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health*

- Care. Washington (DC): National Academies Press (US); 2003.
- Institute of Medicine. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Washington, DC: Institute of Medicine, 10, 13128.
- James-Abra, S., Tarasoff, L. A., Green, D., Epstein, R., Anderson, S., Marvel, S., . . . Ross, L. E. (2015). Trans people's experiences with assisted reproduction services: a qualitative study. *Human reproduction (Oxford, England)*, 30(6), 1365-1374. doi:10.1093/humrep/dev087 [doi]
- Jin, H., & Dasgupta, S. (2016). Disparities between online assisted reproduction patient education for same-sex and heterosexual couples. *Human Reproduction*, 31(10), 2280-2284.
- Johnson, J. D., Andrews, J. E., & Allard, S. (2001). A model for understanding and affecting cancer genetics information seeking. *Library & Information Science Research*, 23(4), 335-349.
- Johnson, J. D., Donohue, W. A., Atkin, C. K., & Johnson, S. (1995). A comprehensive model of information seeking: Tests focusing on a technical organization. *Science Communication*, 16(3), 274-303.
- Johnson, K. M. (2012). Excluding lesbian and single women? An analysis of U.S. fertility clinic websites. *Women's Studies International Forum*, 35(5), 394-402. doi:10.1016/j.wsif.2012.05.002
- Johnson, M. J., & Nemeth, L. S. (2014). Addressing health disparities of lesbian and bisexual women: a grounded theory study. *Women's Health Issues*, 24(6), 635-640.
- Jordan, C., & Revenson, T. A. (1999). Gender differences in coping with infertility: a meta-analysis. *Journal of behavioral medicine*, 22(4), 341-358.
- Justice, A. C. f. R. (2005). *A NEW VISION FOR ADVANCING OUR MOVEMENT FOR REPRODUCTIVE HEALTH, REPRODUCTIVE RIGHTS, AND REPRODUCTIVE JUSTICE* Retrieved from <http://forwardtogether.org/assets/docs/ACRJ-A-New-Vision.pdf>.
- Karpman, H. E., Ruppel, E. H., & Torres, M. (2018). "It wasn't feasible for us": Queer Women of Color Navigating Family Formation. *Family Relations*, 67(1), 118-131. doi:10.1111/fare.12303
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. R. C. M. Judd (Ed.), *Handbook of research methods in social and personality psychology* (pp. 451-477): Cambridge University Press.
- Kenny, D. A., & Cook, W. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. *Personal relationships*, 6(4), 433-448.
- Kenny, D. A., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor-partner interdependence model. *Journal of Family Psychology*, 24(3), 359.
- Klein, D. A., Berry-Bibee, E. N., Baker, K. K., Malcolm, N. M., Rollison, J. M., & Frederiksen, B. N. (2018). Providing quality family planning services to LGBTQIA individuals: a systematic review. *Contraception*, 97(5), 378-391. Retrieved from <https://doi.org/10.1016/j.contraception.2017.12.016>
- Klitzman, R. (2019). *Designing Babies: How Technology is Changing the Ways We*

- Create Children: Oxford University Press, USA.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018a). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1-6.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018b). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1.
- Kuhlthau, C. C., Heinström, J., & Todd, R. J. (2008). The 'information search process' revisited: Is the model still useful. *Information research*, 13(4), 13-14.
- Lambert, S. D., & Loisel, C. G. (2007). Health information—seeking behavior. *Qualitative health research*, 17(8), 1006-1019.
- LaSala, M. C. (2003). When Interviewing “Family” Maximizing the Insider Advantage in the Qualitative Study of Lesbians and Gay Men. . *Journal of Gay & Lesbian Social Services*, 15(1-2), 15-30.
- Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of consulting and clinical psychology*, 79(2), 159.
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521-548.
- Lincoln, Y. S. (1997). Self, subject, audience, text: Living at the edge, writing in the margins. *Representation and the text: Re-framing the narrative voice*, 37-55.
- Luce, J. (2004). Imaging Bodies, Imagining Relations: Narratives of Queer Women and “Assisted Conception”. *Journal of Medical Humanities*, 25(1), 47-56.
- Luce, J. (2010). *Beyond expectation: Lesbian/bi/queer women and assisted conception*: University of Toronto Press.
- Luna, Z., & Luker, K. (2013). Reproductive justice.
- Magee, J. C., Bigelow, L., DeHaan, S., & Mustanski, B. S. (2012). Sexual health information seeking online: a mixed-methods study among lesbian, gay, bisexual, and transgender young people. *Health Education & Behavior*, 39(3), 276-289.
- Makadon, H. J. (2011). Ending LGBT invisibility in health care: The first step in ensuring equitable care. *Cleve Clin J Med*, 78(4), 220-224.
- Malmquist, A. (2015a). A Crucial but Strenuous Process: Female Same-Sex Couples’ Reflections on Second-Parent Adoption. *Journal of GLBT Family Studies*, 11(4), 351-374. doi:10.1080/1550428X.2015.1019169
- Malmquist, A. (2015b). Women in Lesbian Relations: Construing Equal or Unequal Parental Roles? *Psychology of Women Quarterly*, 39(2), 256-267. doi:10.1177/0361684314537225
- Malmquist, A., & Nelson, K. Z. (2014). Efforts to maintain a 'just great' story: Lesbian parents' talk about encounters with professionals in fertility clinics and maternal and child healthcare services. *Feminism and Psychology*, 24(1), 56-73. doi:10.1177/0959353513487532
- Mamo, L. (2005). Biomedicalizing kinship: Sperm banks and the creation of affinity-ties. *Science as Culture*, 14(3), 237-264. doi:10.1080/09505430500216833
- Mamo, L. (2007a). Negotiating conception: Lesbians' hybrid-technological practices. *Science Technology and Human Values*, 32(3), 369-393. doi:10.1177/0162243906298355

- Mamo, L. (2007b). *Queering reproduction: Achieving pregnancy in the age of technoscience*: Duke University Press.
- Mamo, L. (2018). Queering the fertility clinic. In *Beyond Bioethics: Toward a New Biopolitics* (pp. 328-338): University of California Press.
- Mamo, L., & Alston-Stepnitz, E. (2015). Queer intimacies and structural inequalities: New directions in stratified reproduction. *Journal of Family Issues*, 36(4), 519-540.
- Mamo, L., & Fishman, J. R. (2013). Why justice? Introduction to the special issue on entanglements of science, ethics, and justice. *Science, Technology, Human Values*, 38(2), 159-175.
- Maroufizadeh, S., Hosseini, M., Foroushani, A. R., Omani-Samani, R., & Amini, P. J. B. p. (2018). The relationship between marital satisfaction and depression in infertile couples: an actor-partner interdependence model approach. 18(1), 310.
- Mason Bergen, K., Suter, E. A., & Daas, K. L. (2006). "About as solid as a fish net": symbolic construction of a legitimate parental identity for nonbiological lesbian mothers. *The Journal of Family Communication*, 6(3), 201-220.
- Mason, T. B., & Lewis, R. J. (2015). Minority stress and binge eating among lesbian and bisexual women. *Journal of homosexuality*, 62(7), 971-992.
- McManus, A. J., Hunter, L. P., & Renn, H. (2006). Lesbian experiences and needs during childbirth: guidance for health care providers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 35(1), 13-23.
- McNair, R. (2004). *Outcomes for children born of ART in a diverse range of families*: Victorian Law Reform Commission Melbourne,, Australia.
- McQuillan, J., Greil, A. L., Shreffler, K. M., & Bedrous, A. V. (2015). The Importance of Motherhood and Fertility Intentions among U.S. Women. 58(1), 20-35. doi:10.1177/0731121414534393
- Mehta, A., Nangia, A. K., Dupree, J. M., & Smith, J. F. (2016). Limitations and barriers in access to care for male factor infertility. *Fertility and sterility*, 105(5), 1128-1137.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of health and social behavior*, 38-56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, 129(5), 674.
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. *Handbook of psychology and sexual orientation*, 252-266.
- Meyrick, J. J. J. o. h. p. (2006). What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality. 11(5), 799-808.
- Miller, W., Severy, L., & Pasta, D. J. P. s. (2004). A framework for modelling fertility motivation in couples. 58(2), 193-205.
- Miller, W. B. (1994). Childbearing Motivations, Desires, and Intentions: A Theoretical Framework. *Genetic, Social & General Psychology Monographs*, 120(2), 223-253.
- Miller, W. B., & Pasta, D. (1995). Behavioral Intentions: Which Ones Predict Fertility Behavior in Married Couples? 1. *Journal of Applied Social Psychology*, 25(6), 530-555.

- Montano, D., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health behavior: Theory, research and practice*, 95-124.
- Moore, M. R., & Stambolis-Ruhstorfer, M. (2013). LGBT sexuality and families at the start of the twenty-first century. *Annual Review of Sociology*, 39, 491-507.
- Morgan, D. L. (2016). *Essentials of dyadic interviewing*: Routledge.
- Morris, M., Cooper, R. L., Ramesh, A., Tabatabai, M., Arcury, T. A., Shinn, M., . . . Matthews-Juarez, P. (2019). Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC medical education*, 19(1), 325.
- Morse, J. M. (2008). Confusing categories and themes. *Qualitative health research*, 18, 727-728.
- Murray, M. (2017). Intimate Choices, Public Threats - Reproductive and LGBTQ Rights under a Trump Administration. *New England Journal of Medicine*, 376(4), 301-303. doi:10.1056/NEJMp1615718
- National Institutes of Health. (2010). Moving into the future with new dimensions and strategies: a vision for 2020 for women's health research. *Strategic plan—executive summary (NIH Publication No. 10–7606)*, NIOH Office of Research on Women's Health, US Department of Health and Human Services, Editor. Bethesda.
- National Institutes of Health. (2015). NIH FY 2016–2020 strategic plan to advance research on the health and well-being of sexual and gender minorities. *Bethesda, MD: National Institutes of Health*.
- Nölke, A.-I. (2018). Making diversity conform? An intersectional, longitudinal analysis of LGBT-specific mainstream media advertisements. *Journal of homosexuality*, 65(2), 224-255.
- Nordqvist, P. (2011a). Choreographies of sperm donations: Dilemmas of intimacy in lesbian couple donor conception. *Social Science and Medicine*, 73(11), 1661-1668. doi:10.1016/j.socscimed.2011.09.033
- Nordqvist, P. (2011b). 'Dealing with sperm': Comparing lesbians' clinical and non-clinical donor conception processes. *Sociology of Health and Illness*, 33(1), 114-129. doi:10.1111/j.1467-9566.2010.01279.x
- Nordqvist, P. J. C., Health, & Sexuality. (2012). Origins and originators: lesbian couples negotiating parental identities and sperm donor conception. 14(3), 297-311.
- Obergefell v. Hodges. (2015). *S.Ct.*, 135(No. 14-556), 2071.
- Olesker, E., & Walsh, L. V. (1984). Childbearing among lesbians: are we meeting their needs? *Journal of Nurse-Midwifery*, 29(5), 322-329.
- Patterson, C. J. (1994). Children of the lesbian baby boom: Behavioral adjustment, self-concepts, and sex-role identity. *Psychological perspectives on lesbian and gay issues*, 1, 156-175.
- Patterson, C. J., & Riskind, R. G. (2010). To Be a Parent: Issues in Family Formation among Gay and Lesbian Adults. *Journal of GLBT Family Studies*, 6(3), 326-340. doi:10.1080/1550428X.2010.490902
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*: SAGE Publications, inc.
- Pavan v. Smith, No. No. 16-992, 137 2075 (Supreme Court 2017).

- Pelka, S. (2009). Sharing motherhood: Maternal Jealousy among Lesbian co-mothers. *Journal of homosexuality*, 56(2), 195-217. doi:10.1080/00918360802623164
- Peterson, B. D., Newton, C. R., Rosen, K. H., & Skaggs, G. (2006). Gender differences in how men and women who are referred for IVF cope with infertility stress. *Human Reproduction*, 21(9), 2443-2449.
- Peterson, B. D., Pirritano, M., Christensen, U., & Schmidt, L. (2008). The impact of partner coping in couples experiencing infertility. *Human Reproduction*, 23(5), 1128-1137.
- Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual frameworks in information behavior. *Annual review of information science and technology (ARIST)*, 35(43-78).
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.): Wolters Kluwer
- Porter, M., & Bhattacharya, S. (2007). Helping themselves to get pregnant: a qualitative longitudinal study on the information-seeking behaviour of infertile couples. *Human reproduction*, 23(3), 567-572.
- Rappaport, H., Enrich, K., & Wilson, A. (1985). Relation between ego identity and temporal perspective. *Journal of Personality and Social Psychology*, 48(6), 1609.
- Rausch, M. A., & Wikoff, H. D. (2017). Addressing Concerns with Lesbian Couples Experiencing Fertility Treatment: Using Relational Cultural Theory. *Journal of LGBT Issues in Counseling*, 11(3), 142-155. doi:10.1080/15538605.2017.1346494
- Reczek, C. (2014). Conducting a multi family member interview study. *Family process*, 53(2), 318-335.
- Reczek, C., Elliott, S., & Umberson, D. (2009). Commitment without marriage: Union formation among long-term same-sex couples. *Journal of Family Issues*, 30(6), 738-756.
- Renaud, M. T. (2007). We are mothers too: Childbearing experiences of lesbian families. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 36(2), 190-199.
- Riskind, R. G., & Patterson, C. J. (2010). Parenting intentions and desires among childless lesbian, gay, and heterosexual individuals. *Journal of Family Psychology*, 24(1), 78-81. Retrieved from <http://dx.doi.org/10.1037/a0017941>
- Riskind, R. G., Patterson, C. J., & Nosek, B. A. (2013). Childless lesbian and gay adults' self-efficacy about achieving parenthood. *Couple and Family Psychology: Research and Practice*, 2(3), 222.
- Riskind, R. G., & Tornello, S. L. (2017). Sexual orientation and future parenthood in a 2011-2013 nationally representative United States sample. *Journal of Family Psychology*, 31(6), 792-798. doi:10.1037/fam0000316
- Roberts, D. (1997). Killing the black body: Race, representation, and the meaning of liberty. *New York: Vintage*.
- Roberts, D. E. (1995). Race and the new reproduction. *Hastings LJ*, 47, 935.
- Robson, A., & Robinson, L. (2015). The information seeking and communication model. *Journal of Documentation*, 71(5), 1043-1069. doi:10.1108/JD-01-2015-0023
- Rogalin, C. L., & Brooks, J. E. (2018). Lesbians achieving pregnancy: The intersections of social location and the heteronormative medicalization of infertility. *Sociology Compass*, 12(11), e12637.

- Röndahl, G., Bruhner, E., & Lindhe, J. (2009). Heteronormative communication with lesbian families in antenatal care, childbirth and postnatal care. *Journal of advanced nursing*, 65(11), 2337-2344.
- Ross, L. (2006). Understanding reproductive justice: Transforming the pro-choice movement. *Off our backs*, 36(4), 14-19.
- Ross, L., Gutierrez, E., Gerber, M., & Silliman, J. (2016). *Undivided rights: Women of color organizing for reproductive justice*: Haymarket Books.
- Ross, L., & Solinger, R. (2017). *Reproductive justice: An introduction* (Vol. 1): Univ of California Press.
- Ross, L. E., Steele, L. S., & Epstein, R. (2006a). Lesbian and bisexual women's recommendations for improving the provision of assisted reproductive technology services. *Fertility and sterility*, 86(3), 735-738. doi:10.1016/j.fertnstert.2006.01.049
- Ross, L. E., Steele, L. S., & Epstein, R. (2006b). Service Use and Gaps in Services for Lesbian and Bisexual Women During Donor Insemination, Pregnancy, and the Postpartum Period. *Journal of Obstetrics and Gynaecology Canada*, 28(6), 505-511. doi:10.1016/S1701-2163(16)32181-8
- Roth, A. (2017). (Queer) family values and “reciprocal IVF”: What difference does sexual identity make? *Kennedy Institute of Ethics journal*, 27(3), 443. doi:10.1353/ken.2017.0034
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017a). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18-23. doi:10.1016/j.midw.2017.02.011
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017b). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18. doi:10.1016/j.midw.2017.02.011
- Ryan, M. (2013). The gender of pregnancy: Masculine lesbians talk about reproduction. *Journal of Lesbian Studies*, 17(2), 119-133.
- Saewyc, E. M. (2014). Adolescent pregnancy among lesbian, gay, and bisexual teens. In *International handbook of adolescent pregnancy* (pp. 159-169): Springer.
- Saewyc, E. M., Bearinger, L. H., Blum, R. W., & Resnick, M. D. (1999). Sexual Intercourse, Abuse and Pregnancy among Adolescent Women: Does Sexual Orientation Make a Difference? *Perspectives on sexual and reproductive health*, 31(3), 127-131. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-0346657470&partnerID=40&md5=b2ebc93ddbb894e7efe0797f7da62056>
- Schmidt, L. (2009). Social and psychological consequences of infertility and assisted reproduction—what are the research priorities? *Human Fertility*, 12(1), 14-20.
- Schwartz, S. R., & Baral, S. (2015). Fertility-related research needs among women at the margins. *Reproductive health matters*, 23(45), 30-46.
- Schwartz, S. R., & Baral, S. (2015). Fertility-related research needs among women at the margins. In (Vol. 23, pp. 30-46).
- Simoni, J. M., Smith, L., Oost, K. M., Lehavot, K., & Fredriksen-Goldsen, K. (2017). Disparities in physical health conditions among lesbian and bisexual women: A systematic review of population-based studies. *Journal of homosexuality*, 64(1), 32-44.

- Slauson-Blevins, K. S. (2011). Infertility Help Seeking and Social Support: Do Conventional Theories Explain Internet Behaviors and Outcomes.
- Slauson-Blevins, K. S., McQuillan, J., & Greil, A. L. (2013). Online and in-person health-seeking for infertility. *Social Science & Medicine*, 99, 110-115.
- Smietana, M., Thompson, C., & Twine, F. W. (2018). Making and breaking families—reading queer reproductions, stratified reproduction and reproductive justice together. *Reproductive Biomedicine & Society Online*, 7, 112-130.
- Smith, L. (2017). Tangling the web of legal parenthood: Legal responses to the use of known donors in lesbian parenting arrangements. In *Parental Rights and Responsibilities* (pp. 259-286): Taylor and Francis.
- Somers, S., Van Parys, H., Provoost, V., Buysse, A., Pennings, G., & De Sutter, P. (2017). How to create a family? Decision making in lesbian couples using donor sperm. *Sexual & Reproductive Healthcare*, 11, 13-18.
doi:<https://doi.org/10.1016/j.srhc.2016.08.005>
- Spidsberg, B. D. (2007). Vulnerable and strong - Lesbian women encountering maternity care. *Journal of advanced nursing*, 60(5), 478-486. doi:10.1111/j.1365-2648.2007.04439.x
- Spidsberg, B. D. (2007). Vulnerable and strong—lesbian women encountering maternity care. *Journal of advanced nursing*, 60(5), 478-486.
- Stein, P., Willen, S., & Pavetic, M. (2014). Couples' fertility decision-making. *Demographic Research*, 30, 1697-1732.
- Touroni, E., & Coyle, A. (2002). Decision-making in planned lesbian parenting: an interpretative phenomenological analysis. *Journal of Community & Applied Social Psychology*, 12(3), 194-209.
- Traa, M. J., De Vries, J., Bodenmann, G., & Den Ouden, B. L. (2015). Dyadic coping and relationship functioning in couples coping with cancer: a systematic review. *British Journal of Health Psychology*, 20(1), 85-114.
- Umberson, D., Thomeer, M. B., Kroeger, R. A., Lodge, A. C., & Xu, M. (2015). Challenges and opportunities for research on same-sex relationships. *Journal of Marriage and Family*, 77(1), 96-111.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- van Gelderen, L., Bos, H. M., Gartrell, N., Hermanns, J., & Perrin, E. C. (2012). Quality of life of adolescents raised from birth by lesbian mothers: the US National Longitudinal Family Study. *Journal of developmental and behavioral pediatrics : JDBP*, 33(1), 17-23. doi:10.1097/DBP.0b013e31823b62af [doi]
- Van Parys, H., Provoost, V., Wyverkens, E., De Sutter, P., Pennings, G., & Buysse, A. (2016). Family Communication about the Donor Conception: A Multi-erspective Qualitative Study with Lesbian Parents and Their Children. *Qualitative health research*, 26(14), 1998-2008. doi:10.1177/1049732315606684
- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical education*, 51(1), 40-50.
- Voelker, R. (2008). Decades of work to reduce disparities in health care produce limited success. *JAMA*, 299(12), 1411-1413.

- Walschaerts, M., Bujan, L., Parinaud, J., Mieusset, R., & Thonneau, P. (2013). Treatment discontinuation in couples consulting for male infertility after failing to conceive. *Fertility and sterility*, 99(5), 1319-1323.
- Watson, L. B., Grotewiel, M., Farrell, M., Marshik, J., & Schneider, M. (2015). Experiences of sexual objectification, minority stress, and disordered eating among sexual minority women. *Psychology of Women Quarterly*, 39(4), 458-470.
- Wendland, C. L., Burn, F., & Hill, C. (1996). Donor insemination: a comparison of lesbian couples, heterosexual couples and single women. *Fertility and sterility*, 65(4), 764-770. doi:S0015-0282(16)58211-9 [pii]
- Werner, C., & Westerstahl, A. (2008). Donor insemination and parenting: concerns and strategies of lesbian couples. A review of international studies. *Acta Obstetrica et Gynecologica Scandinavica*, 87(7), 697-701. doi:10.1080/00016340802011603 [doi]
- West, T. V., Popp, D., & Kenny, D. A. (2008). A guide for the estimation of gender and sexual orientation effects in dyadic data: An actor-partner interdependence model approach. *Personality and Social Psychology Bulletin*, 34(3), 321-336.
- Wilson, T. D. (2000). Human information behavior. *Informing science*, 3(2), 49-56.
- Wingert, S., Harvey, C. D., Duncan, K. A., & Berry, R. E. (2005). Assessing the needs of assisted reproductive technology users of an online bulletin board. *International Journal of Consumer Studies*, 29(5), 468-478.
- Wingo, E., Ingraham, N., & Roberts, S. C. M. (2018). Reproductive Health Care Priorities and Barriers to Effective Care for LGBTQ People Assigned Female at Birth: A Qualitative Study. *Womens Health Issues*, 28(4), 350-357. doi:10.1016/j.whi.2018.03.002
- Wismont, J. M., & Reame, N. E. (1989). The lesbian childbearing experience: assessing developmental tasks. *Image--the journal of nursing scholarship*, 21(3), 137-141.
- Wojnar, D. (2007). Miscarriage Experiences of Lesbian Couples. *Journal of Midwifery and Women's Health*, 52(5), 479-485. doi:10.1016/j.jmwh.2007.03.015
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of preconception, pregnancy, and new motherhood for lesbian nonbiological mothers. *Journal of Obstetric, Gynecologic, Neonatal Nursing*, 43(1), 50-60.
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of Preconception, Pregnancy, and New Motherhood for Lesbian Nonbiological Mothers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 43(1), 50-60. doi:10.1111/1552-6909.12270
- Wu, A. K., Elliott, P., Katz, P. P., & Smith, J. F. (2013). Time costs of fertility care: the hidden hardship of building a family. *Fertility and sterility*, 99(7), 2025-2030.
- Wu, A. K., Odisho, A. Y., Washington III, S. L., Katz, P. P., & Smith, J. F. (2014). Out-of-pocket fertility patient expense: data from a multicenter prospective infertility cohort. *The Journal of urology*, 191(2), 427-432.
- Wu, H. Y., Yin, O., Monseur, B., Selter, J., Collins, L. J., Lau, B. D., & Christianson, M. S. (2017). Lesbian, gay, bisexual, transgender content on reproductive endocrinology and infertility clinic websites. *Fertility and sterility*, 108(1), 183. doi:<https://doi.org/10.1016/j.fertnstert.2017.05.011>
- Yager, C., Brennan, D., Steele, L. S., Epstein, R., & Ross, L. E. (2010). Challenges and mental health experiences of lesbian and bisexual women who are trying to conceive. *Health and Social Work*, 35(3), 191-200. doi:10.1093/hsw/35.3.191

Zhu, H., Colgan, J., Reddy, M., & Choe, E. K. (2016). *Sharing patient-generated data in clinical practices: an interview study*. Paper presented at the AMIA Annual Symposium Proceedings.

- Bureau, U. S. C. (2019, August 7, 2019). Subject Definitions. Retrieved from <https://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html#family>
- Collins, P. H. (2002). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*: Routledge.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, 129(5), 674.

Chapter 5

Conclusion

Dissertation Overview

Increased acceptance of sexual and gender minorities (SGM) has led to expansion of civil protections and increased visibility of same-sex couples and their families (Goldberg et al., 2014). Despite these developments and associated positive impacts in the lives of SGM populations, sexual minority women (SMW) continue to face significant health disparities (Ard & Makadon, 2012; Goldberg & Allen, 2013; Graham, Berkowitz, Blum, Bockting, Bradford, de Vries, & Makadon, 2011; Makadon, 2011; Simoni, Smith, Oost, Lehavot, & Fredriksen-Goldsen, 2017). Some of these disparities are particular to reproductive health (Chrisler, 2014; Cook & Dickens, 2014; Gonzales, Quinones, & Attanasio, 2019; Klein et al., 2018) and the well-being of SGM families (Bos & van Balen, 2010; Bos et al., 2005; Somers et al., 2017), including difficulties during the pursuit of pregnancy and family formation.

Research focused on SMW pregnancy and family formation has expanded in breadth and depth in recent decades. Yet, as both sociopolitical and technological developments continue to transform notions of kinship and family formation (Klitzman, 2019; Mamo, 2005, 2007b, 2018), the context and forces that shape coupled SMW's parenthood desires, intentions, expectations, and manifestations require further investigation. Moreover, consistent evidence finds that SMW face health disparities broadly (Ard & Makadon, 2012; Baptiste-Roberts et al., 2017; Fredriksen-Goldsen et al., 2010; Schwartz & Baral, 2015b), and reproductive and fertility health in particular (Everett et al., 2017; Gonzales et al., 2019; Schwartz & Baral, 2015b). Situated in health

equity and reproductive justice frameworks, this dissertation aligns with this larger literature by seeking to inform our understanding of coupled SMW's experiences and decision-making as they pursue pregnancy using clinically assisted reproduction (CAR) technologies. Specifically, I (1) investigated the information seeking behavior among SMW, (2) described barriers to CAR and their manifestations as sexual minority stress, and (3) introduced an adapted relationship timeline method for couple level data elicitation and development of graphic depictions of narrative timelines. Taken together this work contributes to the growing literature on the health and well-being of sexual minority women and their pursuits of pregnancy and family formation. Taking it a step beyond the well-defined borders of gender and sexual orientation used in this work, the findings from these chapters may also contribute to the larger literature on sexual and gender minority health and well-being.

Summary of Findings

In *Chapter II*, I drew on data elicited through in-depth interviews included in the Queer Pregnancy Decision-making Study (QPYD) to investigate fertility related health information behaviors (i.e. identification of information needs, information seeking, information appraisal, and use) among coupled SMW. In the absence of clear, coherent guidelines or consistent practices among clinicians in CAR, identification of knowledge gaps, information seeking, information appraisal, and information use were critical steps in the process of determining how to conceive. Guided by extant literature, my analysis focused on information needs, seeking, appraisal, and use among SMW couples who were actively in the process of using CAR to try to conceive. Using a step-by-step approach to thematic analysis (Braun & Clarke, 2006, 2013; Braun et al., 2019), I

analyzed semi-structured interview data to understand common patterns and divergencies in information behaviors among the SMW participants. Across interviews I identified three common themes. First, *contextual factors that shaped information seeking*, included aspects of women's lives that informed information seeking behaviors. These included heteronormative and sociopolitical environments, individual and couple-level situations (e.g. social, economic, developmental) that signaled to SMW, individuals and couples, readiness to begin to fill knowledge gaps about CAR. The second theme, *certainty-uncertainty* identifies the simultaneous understanding of the basics about human reproduction and persistent uncertainty and questions about how some aspects of CAR worked for same-sex couples using donor sperm (e.g. collaboration with known donors requiring legal steps and logistical challenges, tracking one's cycle and hormonal levels, whether resources to pursue the process would be available, or what type of interventions a couple might use along the way). The last theme labeled: *Cyclical, iterative, fundamentally unpredictable paths of trying to conceive: one step forward, more uncertainty revealed*. The label belies the realities of uncertainty and unpredictability that SMW encounter as they take up CAR. Women reported their experiences of what information behavior theorist might describe as persistent scanning of the environment for information gaps, seeking new information, use of information and evaluation of its usefulness (Case, 2007; Pettigrew et al., 2001) in cycles or ill-defined stages, that happened over time. These findings expand the nascent literature on SMW fertility information seeking, which has leveraged online data sources and focused primarily on the use of online fertility information among queer women (Holland, 2018; Ruppel et al., 2017), to include women's firsthand accounts. This approach allowed women to answer

specific questions about discuss the usefulness of resources, and broadens the discussion beyond online sources, seeking, and use.

Taken together, this evidence suggests that recognition of community sourced information about CAR is an important element of SMW's information behavior. In the interest of the development and dissemination of relevant and useful fertility-related health communication for this population, industry stake holders including healthcare providers and other clinicians, institutions, cryobanks, and professional counselors who assist SMW during family formation can expand the scope of fertility communication to include sexual and gender minorities who hope to form biologically connected families. Offering SMW information suitable to their needs may help to reduce information gaps and underlying uncertainty, and reduce frictions for SMW in a system that continues to imagine itself as serving primarily heterosexual married couples with physiological infertility. In that vein, tailored information that speaks to the particular needs of various populations will help to communicate their recognition and inclusion as aspiring parents. Reshaping information content and delivery to match the needs of SGM is part of larger movement toward reproductive justice and more equitable access to care, and must circumvent amplifying heteronormativity through CAR (Mamo & Alston-Stepnitz, 2015).

In *Chapter III*, I described barriers to CAR reported by coupled SMW and explored some ways that barriers manifest as sexual minority stress. Consistent with prior research, women reported common barriers to CAR, including financial burdens, challenges with communication and information, time pressures and constraints, social isolation, and heteronormativity woven into policies, care delivery, and interpersonal

interactions (Greil, 1997; Greil & McQuillan, 2004; Greil et al., 2010; Mamo, 2007b; Mamo & Alston-Stepnitz, 2015; Mamo & Fishman, 2013; Schwartz & Baral, 2015; Somers et al., 2017). Sexual minority stress manifested in structural (i.e. heterosexist paradigms in biomedicine, impact of regulations, parentage, and workplace discrimination), clinical (i.e. cost structure, presumption of heterosexuality among patients, clinical encounters, medical records, invisibility), and individual (i.e. discrimination, erasure of women's physical and emotional investment in pregnancy, and financial burdens) levels of experience. Widespread heteronormativity in assisted reproduction and perinatal healthcare have been documented in previous literature (Gregg, 2018; Hayman, Wilkes, Halcomb, et al., 2013; Rogalin & Brooks, 2018; Røndahl et al., 2009; Werner & Westerstahl, 2008). Calls for action toward equity in the form of reduced prejudice and discrimination in healthcare settings continue to be relevant (Fredriksen-Goldsen et al., 2014; Graham, Berkowitz, Blum, Bockting, Bradford, de Vries, Garofalo, et al., 2011; Department of Health & Human Services Office of Disease & Health, 2017). Additionally, though the U.S. fertility industry has fewer regulations than almost any other country, regulatory updates related to donor sperm and heteronormative approaches to biomedical oversight could also help to reduce disparities for SMW. At the structural level, I found that heteronormative assumptions and paradigms informed how structures and systems are devised, creating inequities for SMW at the foundation of assisted reproductive care. Alongside structural inequities in healthcare and related anticipatory fears about interactions with clinicians (Ard & Makadon, 2012; Makadon, 2011), SMW experienced minority stress and pointed to the

multifaceted forces that bear on queer women and threaten to derail their most valued aspirations associated with existential meaning.

To alleviate the barriers and associated stressors encountered by SMW across regions of the U.S., multilevel change is needed. At the clinical level, replication of successful models of CAR practice that approach both physiological and social forms of infertility is needed. In addition, some clinical models include education about financial and psychological supports for people who suffer from infertility. Such educational tools and social supports adapted to the particular needs of same-sex couples may contribute to reducing barriers and sexual minority stress among non-heterosexual people. Investment in research and interventions that assist SMW in coping with CAR-related sexual minority stress are warranted.

In *Chapter IV*, I examined the methodologic significance of integrated relationship timelines co-constructed by coupled SMW. I adapted and integrated, established approaches to timeline methods (Boyd et al., 1998; de Vries et al., 2017; Gramling & Carr, 2004) to serve as the basis for dyadic data elicitation, construction of graphic representation of complex medical processes, and analysis of qualitative narrative data. Co-created relationship timelines offered a useful, practical approach to aid elicitation of rich, temporally situated, contextually based data, granting unique insights into the shared lived experience of couples engaged in clinically intensive processes. Women in same-sex couples who began to try to conceive using CAR pursued the path to pregnancy not only as individuals, but as couples. This study design allowed for SMW to participate as dyads and to offer their perspective not only from an “I” voice but also from a “we” voice. This “we” voice demonstrated how research that only draws on

individual units of analysis may miss the nuances and uniqueness of interdependent voices. This interdependence is worth considering, not only in fertility contexts, but in other health-related spaces that have at least in recent history privileged the position of the individual and individual level autonomy in research and clinical contexts.

The use of lifelines in research, theory development, and clinical practice has been well documented (de Vries, 2013; Gramling & Carr, 2004). Less so with queer women and queer couples, however (de Vries et al., 2017). These co-constructed relationship timelines provide further support for the idea that for health services researchers and clinicians, putting a clinical process or construct in the context of other life events and experiences can be very informative (Gramling & Carr, 2004) and may help to both improve care and outcomes. Given the benefits of co-narrated timelines and their graphic representations, it may be useful to consider their incorporation in clinical contexts. Timelines as clinical tools to understand how couples interdependently view their fertility trajectories could assist providers to offer tailored care to those who navigate both physiological and/or social infertility.

Themes Across Studies

Three main themes stand out across the chapters of this dissertation: (1) the recognition that fertility involves more than a single body, (2) the resiliency and pregnancy aspirations of SMW in same-sex couples, and (3) the need to rethink existing frameworks of clinical approaches to (in)fertility and transform clinical services for people who seek assistance to overcome social impediments to pregnancy and family formation (i.e., social infertility) rather than physiological infertility. In the following

sections I discuss these themes in conversation with the existing SMW pregnancy and reproductive justice literature and highlight their clinical and policy implications.

Theme One: Recognition that fertility involves more than a single body

Queer women in same-sex couples explore how to make parenthood aspirations through pregnancy into a reality. Although the onus of fertility is often placed on women in heterosexual relationships, SMW demonstrated shared engagement in the fertility process. The work of information seeking, appraisal, and use as described by participants in this study involved both women though in all cases one would take up the work of gestation and childbirth. SMW couples sought information through individual, couple, and community perspectives. From this point of view, norms and behaviors associated with figuring out how to conceive engaged not only the body that would carry a pregnancy but also the couple and the community. Findings related to manifestations of stress suggest that SMW also shared these burdens, but also demonstrated the asymmetries in physical experience. Given these asymmetries, partners almost universally recommended some form of socioemotional preparation about “what to expect” in CAR for non-gestational partners, as well as social supports that provided guidance and coaching about how best to support one’s partner. For couples who chose to pursue reciprocal IVF, there are unique indications for development of interventions and clinical guidance about these types of supports. Reciprocal-IVF involves the members of an SMW couple to each contribute to the process of conception. The physical and emotional demands of the biomedical interventions have garnered attention from bioethicists who have questioned the risks involved outweigh the benefits (Roth, 2017).

These shared contributions also bring into focus cases in which two female bodies who happen to be in intimate partnership are involved in CAR.

Invoking the realization that women share consciousness about what it is to inhabit a female body, SMW couples contribute to a “we” voice to fill the gaps, express shared experience, and ask questions to clarify what they have walked through together as a same-sex couple. The relational aspects of this particular type of healthcare decision-making and clinical experiences demonstrate how important understanding the interdependence of queer couples is and the unique manifestations of that interdependence given sociohistorical contexts and histories of marginalization within healthcare and other spaces—particularly reproductive healthcare spaces. If we are going to think about SMW pregnancy, we need to think beyond the body as a fertility vessel and expand pregnancy supports to encompass the needs of the whole person, their intimate partnerships, and their communities. In the context of clinical infrastructure that may look like intake documentation, EMRs, and billing software platforms that take the couple as “patient” or provide ways in which to conceptualize who counts in clinical care. Additionally, it could be useful to construct these information systems in ways that do not assume gender and sexuality of patients and partners

Theme Two: Hope and resiliency among SMW in same-sex couples who pursue pregnancy

A cross-cutting theme of my dissertation is the importance of hope and resiliency in women’s journeys. One participant explained how “profoundly hopeful it is that lesbians do this at all because it’s crazy.” Despite a daunting path and conditions, hope motivates SMW couples to persist in what can be emotionally, physically, financially,

relationally difficult. In *Chapter II* of this dissertation, I argued that the challenges to information seeking and acquisition made apparent the unknowns and uncertainties relating to how to go about the path to pregnancy. Even as the path to pregnancy remains unclear for most sexual and gender minorities, the hope that it is possible is generative and moves people to try to understand how to make their desires realities. SMW sought information from multiple formal and informal, vetted and unvetted sources of information. They sought guidance from primary care providers, OB/Gyns, clinics that offered fertility webinars, other forms of information dissemination about SGM family formation, Internet searches, informal crowd sourced information, and mutual support within communities of SGM who had experience with CAR. All of the participants, including the medical professionals among them, sought information with the hope that they would find answers in what can feel like a process filled with opacities. For SMW it was not uncommon to come across prejudices among providers in the context of preconception counseling, and other barriers to accessible and accurate information. Even as these challenges were described by participants, they continued to search (within the boundaries of the type of searches that were feasible, and emotionally and psychologically acceptable).

In *Chapter III*, I explored the ways breadth of barriers identified by SMW, including those related to information and communication, and how barriers manifested as sexual minority stress. SMW first listed barriers in survey responses; during their interviews they described how those barriers manifested as minority stress that shaped their journeys. The desire for pregnancy and the potential to build families together through their intimate partnerships sustained them at times. Though SMW questioned

their ability to keep going and wondered how much stamina they would have in continuous engagement with CAR, and the underlying heteronormative assumptions and systems not meant for them, at the time of our interviews. SMW explained both the exhaustion and disappointment they experienced as well as hope that somehow their dreams could be fulfilled. Importantly, the hope was about becoming pregnant, but also what pregnancy and childbearing and bringing a child into their lives and communities meant. There was hope communicated by their discussions of the promise of instilling values in their children, and contributing to religious, racial, ethnic, and other forms of diversity through their progeny. Even as SMW experienced numerous SMW-specific barrier sand associated sexual minority stress, they demonstrated willingness to continue to pursue their fertility goals. This suggests that in the context of trying to conceive, resilience become manifests along with minority stress.

In *Chapter IV*, I make the case for a co-constructed relationship timeline method. Extant evidence that points to the importance of interdependence in shared clinical experiences (Casu et al., 2018; Gamarel, Reisner, Laurenceau, Nemoto, & Operario, 2014; Kenny & Ledermann, 2010; Maroufizadeh et al., 2018; Traa et al., 2015; Van Parys et al., 2016; West, Popp, & Kenny, 2008), together with findings form this Chapter, illustrated the richness and specificity of contributions made at the level of the couple. Continued research in the area of actor partner interdependence among queer couples may reveal more nuanced insights about relationship between resilience and intimate partnership for SMW engaged in CAR. Women's shared chronologies demonstrated how they marked time in terms of clinical encounters, inseminations, diagnostics. The intimacies shared in the context of dyadic interviews, punctuated by milestones and parts

of their fertility journeys that they together deemed relevant, revealed their collective dedication to their fertility efforts and the ways that the first hope marked by a shared desire for a family together replicated in multiple examples of resilience along the way. Together, dyadic narrative interviews and construction of graphic timelines three observations relevant to this theme came into stark relief: 1) the challenges of trying to conceive with CAR, 2) the interdependence expressed and the implication that this interdependence and prevailing hope helped them to overcome challenges, and 3) how hope at times gave way to resilience in the presence of despair and grief.

SMW couples' efforts to conceive pose significant social, legal, and biological challenges in a society built and sustained by subjugation of bodies and the primacy of capital and consumption. Indeed, it is a "profoundly hopeful" venture to even try as one participant put it. The flip side of hope in the face of loss or the inability to venture further in reproductive assistance, can also give way to deep despair and immense grief. The grief and despair reflected in survey data and interviews, and woven throughout the three papers of the dissertation, mirror findings in extant literature (Black & Fields, 2014; Wojnar, 2007). Despite the daunting path and emotional burdens associated with disappointment, despair, and grief that may come for each woman separately and as units, participants somehow kept their hopes alive to have children and conceive and carry and have families of their own.

"Just like limits of your logic. This feels like that, in general. It isn't logical to spend all this money and it isn't logical to drive ourselves nuts with this but it is the love. That's so gross to say, so cliché, but whatever. The hopefulness is not logical, but it is what it is" (20G).

Despite the absence of logic and financial demands, SMW forged ahead. From a clinical perspective this is worth noting. Some evidence related to heterosexual couples who use CAR, points to discontinued treatment, with calls for investigation of factors associated with discontinuation (Gameiro et al., 2012; Walschaerts, Bujan, Parinaud, Mieuxset, & Thonneau, 2013). An alternative question that may be worth asking among SMW, is why and how do SMW persist in CAR? On the whole, evidence of the power of hope, indicators of couple-level strengths, and demonstrated resilience, mixed with despair and disappointment, suggest that innovations in clinical approaches to CAR framed by better understanding SMW hope and resilience. Simultaneously, evaluations of government and institutional policies that implicitly privilege and give access to heterosexual people who want to reproduce must be taken into consideration.

Theme Three: Need to rethink the existing frameworks of clinical approaches to (in)fertility and transform clinical services for people who seek assistance to overcome social impediments to pregnancy and family formation (i.e., social infertility) rather than physiological infertility.

Sexual minority women and their health cannot remain invisible. With the continued advancement of LGBT rights, health systems have to continue to expand their capacity to understand relevant aspects SMW specific needs related to their health and well-being. Given the complexity and resource demands of trying to conceive with CAR as a means to overcome social impediments to fertility (and who rarely meet criteria for insurance coverage of fertility interventions (at least initially), my findings suggest that clinical approaches require some reimagining. One possible shift would involve comprehensive orientations to CAR with extensive explanations of what SWM might

expect along the way. Various aspects of CAR including clinic-specific protocols, cost and finance, common experiences among SMW couples as they try for pregnancy could be included in early programming. In *Chapter II*, I made the case that in the absence of formal guidelines, SMW face significant information inadequacies as they try to navigate the various dimensions of CAR (and its financial, legal, and social implications for SMW couples). These inadequacies and pitfalls can have severe consequences across physical, financial, emotional, relational, social, and legal domains. For example, evidence suggested that some SMW faced risks to job security due to discrimination based on sexual orientation if employers learned of sexual orientation, relationship status, or plans for family formation. The consequences of job loss are far reaching and could render a family already vulnerable due to lack of protections more vulnerable given economic and legal insecurities. Solutions to these circumstances that reflect inequities and prejudicial systems in which we function, could include more expansive insurance benefits for fertility services that exist outside of employer-based insurance policies. Furthermore, the recent Supreme Court decision ("Bostock v. Clayton County, GA," 2020) may promote protections against job discrimination and prove beneficial for LGBTQ individuals and families. Future legal cases will shed more light on how robust the decision will be when tested in the courts.

Related to SGM employees, the threat of job loss due to sexuality-based discrimination for SMW who hope for pregnancy and parenthood creates a unique form of stress. As extant evidence has shown and *Chapter III* of this dissertation reveal, job related minority stress becomes intertwined in SMW's navigation of pregnancy within same-sex couples. Stress related to the threat of job loss found in *Chapter III* illustrated

the challenges for SMW who become pregnant or whose partners' become pregnant to conceal their identities and relationship status, as well as their efforts to become parents, or if successful the realities of the transition to parenthood with infants. In *Chapter IV*, I make the case for partner interdependence, which suggests the theoretical impact of one partner on the other. These findings align with prior research suggesting the presence of partner effects in the context of fertility treatment (Casu et al., 2018; Maroufizadeh et al., 2018). In recognition of these findings, dyadic-level interventions focused on SMW couples throughout the CAR process may be warranted.

In *Chapter III*, evidence pointed to multiple policy, institutional and clinical shortcomings in meeting the needs of SMW couples. Some of these could be remedied by more extensive clinical training about LGBTQ issues. The near complete absence of any such training in most medical and nursing training programs, including fertility specialties, has been documented (Bonvicini & Perlin, 2003; Callahan et al., 2015). Furthermore, investment in training and professional development that focuses on LGBTQ health has been slow to be implemented (Morris et al., 2019). Adaptations to basic curricula and continuing education that contribute to more inclusive, understanding, knowledgeable clinicians who can provide up-to-date and accurate information in CAR contexts would be a boon to multidimensional improvements in the delivery of CAR services to queer couples. These changes might enable clinical services to support biomedically oriented decision-making for same-sex couples. Investment in implementation of empirically supported interventions and innovations in CAR are also necessary.

Reproductive choices including the rules that govern how to access donor sperm through cryobanks relate back to issues of reproductive justice and access to the tools of ART and gametes that make pregnancy possible in ways that promote the dignity of persons (Luna & Luker, 2013). For example, cryobanks such as The Sperm Bank of California report on their public marketing materials that state and federal regulations require a medical provider to be registered to ensure that recipients of donated sperm are working with a medical professionals “to ensure access to care” during a pregnancy (www.thespermbankofca.org/faqs).

Alongside these efforts, however, it remains crucial to ensure tangible and informational supports including financial resources throughout the CAR process. Financial services that offer transparent information about clinical fee structures and help SMW model potential costs of care specific to their needs might cost over time may aid couples in accessing accurate information and reducing initial and ongoing barriers. More empirical investigation must be done to evaluate such interventions. While not all health insurance policies include benefits for infertility treatment, those that do often make coverage contingent upon diagnosis. Such diagnoses consider six to 12 months of unprotected penile-vaginal sex without positive outcomes signs for concern that warrant infertility diagnostics and interventions. Insurance benefits that presume heterosexual sexual intercourse as the primary path to pregnancy exclude same-sex couples and gender minorities from consideration for health insurance benefits. However, as SGM become more visible, socially accepted, and obtain greater civil protections, employers and insurers must keep pace by providing more innovative and expansive health insurance benefits.

Taken together, this dissertation indicates the importance of additional research to investigate useful system level adaptations, clinical interventions, policies, and programs that target the whole person, the couple as a unit, and communities' roles in support of SMW paths to pregnancy and parenthood. Cultural and legal dimensions of CAR cannot be overlooked in their relevance to stability of queer families and reduction of potential harms that result from insufficient protections. For example, *Chapter III* findings show that employer discrimination can lead to job loss and can impact financial, health, and overall stability of historically vulnerable queer families. These stressors can affect how SMW think about their fertility decisions and communication about the important milestone that is family formation in couples' lives. Additionally, second parent adoptions that many SMW couples pursue for security reasons, reflects the hypervigilance that many SMW live with, and the extra steps they will take to legally protect their family integrity and parent identities. SMW together share in the efforts to conceive and bear children, and reflect the unique forms of stress and resilience in their lives during these periods of family development. Thinking globally about the array of factors that impact family formation with CAR, holistic approaches in the tradition of reproductive justice are crucial.

Limitations and Strengths

This dissertation has several important limitations and strengths. The sampling design for my study was not intended to yield a representative and generalizable set of conclusions. Rather, I focused on recruiting a small, convenience sample of SMW couples across the United States who were undergoing CAR in order to have in-depth discussions of their experiences through their journey. Thus, the emphasis of the data-

based chapters in this dissertation focused on the contribution to useful insights and methodological innovations that may inform future research and clinical practice. Additionally, the design of this study had similarities to others that focus on queer women and other SGM who seek to form families and transitions to parenthood. Given the methodological consistencies in many studies, it may be useful to generate questions from existing literature to guide development of multi- and mixed-methods research expand on existing evidence using different research tools.

Like other studies, participants in this dissertation were primarily non-Hispanic White, highly educated, and reported high household income. Several studies have explored the experience of Black women and women with lower SES trying to conceive (Bell, 2009, 2010, 2014, 2016; Karpman et al., 2018; Schwartz & Baral, 2015), which show distinct disparities and creative solutions to information needs, barriers. I am cognizant of the need to broaden whose stories were not represented in this work in future research. Questions about equitable representation in research and receipt of clinical care persist (Braveman, 2006; Braveman et al., 2011; Fredriksen-Goldsen et al., 2014; Voelker, 2008). Expanding on the work of Ann Bell (Bell, 2009, 2010, 2014, 2015, 2016) and others (Ceballo, Graham, & Hart, 2015), future research that expands the focus to under-represented racial and ethnic minorities and socioeconomically disadvantaged populations will be essential.

Finally, the cross-sectional study design allowed me to collect data at a specific moment during couples' paths to pregnancy. Beliefs, attitudes, perceptions, and stamina can change while trying to conceive with CAR. With each consecutive try at pregnancy through donor insemination, embryo transfer, and the numerous other interventions and

surveillance that happens along the way, women's understanding about the processes, their interior lives, and relational dynamics transform. Actively *trying* to conceive with CAR changes SMW individuals and couples. Data elicitation occurred at a single point in time. Thus, future research using prospective designs relying on in-depth interviews and other forms of data collection may help document and describe the changing experiences of SMW and their partners over the course of their CAR efforts.

Directions for Future Research

Each chapter of this dissertation identifies areas for research and clinical innovation, as well as possible directions for future research related to sexual minority women's paths to pregnancy and family formation. In *Chapter II*, I suggested further investigations that may contribute to development and dissemination of information relevant to SMW's paths to pregnancy, which often start from a place of social rather than physiological infertility. While participants' reports of information seeking mirrored evidence about infertility information seeking, it also revealed the absences and invisibility of queer women's lives from formal sources including healthcare providers. As suggested in Theme III, existing fertility care frameworks must expand to include those not in opposite-sex relationships if CAR is to successfully meet SGM needs. However, there is limited literature on the content and mechanisms that might address information needs among SGM. Future research may benefit from engagement with community members through community based participatory research to ask SMW and other SGM populations about their unique information needs. Furthermore, future research should recruit people who are not well represented in this study including women from diverse racial and ethnic backgrounds, diverse educational and

socioeconomic backgrounds, and trans and gender non-conforming individuals interested in their reproductive options to better understand their specific information needs and how best to reach them.

Chapter III offered recommendations to reduce barriers and sexual minority stress experiences, and elucidated coping strategies for among SMW participants. First, the ongoing disparities faced by women with multiple marginal identities, require action. Additional barriers and constraints to parenthood aspirations exist for those at the intersection of multiple marginal identities, which have far reaching social, economic, political impact, in their paths to pregnancy. Through this continuous work, researchers will be able to use growing understanding of the mechanisms of inequity within healthcare, and fertility care specifically, to provide insights on how to move toward more just and equitable approaches to person-centered reproductive care. Beyond understanding, however, there must be a will to address inequity, to reckon with the tradeoffs made that render equity elusive. Extending this work beyond a homogenous sample of cisgender, primary White, middle to upper and upper-middle class people is critical if we are committed to social justice objectives including reproductive self-determination (ACRJ, 2005). Collaboration with researchers well positioned to expand on existing work that includes more people who live at the intersection of multiple marginalized identities may provide important insights and perspectives that can aid in promotion of more just, inclusive, equitable structures that create opportunities to reach optimal health and well-being (Braveman et al., 2011; Hatzenbuehler, Phelan, & Link, 2013). Community based participatory research is one strategy that could broaden the reach of this work and inform praxis in important ways.

In *Chapter IV*, I recommended future research of couple-level dynamics using quantitative empirical approaches and APIM. Additionally, co-constructed relationship timelines helped to facilitate understanding of social and emotional needs of queer couples in the context of CAR but could transfer to other contexts that explicitly or implicitly involve healthcare decision-making (e.g. coupled LGBTQ and aging). The co-constructed relationship timelines may provide a useful way to consider multiple phenomena and situations related to health and well-being, including social, emotional, financial, and health implications among diverse groups. Future research using co-constructed relationship timelines may also benefit from analysis using more sophisticated dyadic analysis. For example, dyadic narrative analysis and ethnographic techniques using available data could reveal important findings and generate additional research questions that aim to better understand SGM individual and family health in the context of evolving legal, social, and political conditions.

In the context of clinical care, timelines may be adapted into clinical tools and added to intake visits to help clinicians to understand the configuration of women's lives. Intervention research that tests the feasibility and relative utility of co-constructed timeline use in CAR contexts deserve attention. Timelines help to elucidate shared lives as couples in context, temporally situated. They can be used remotely with online graphic tools and can contribute to formation of more holistic views of SMW and other couples who seek fertility care. Insights gained from such an exercise could create more efficient, targeted, person-centered care environments that may also reduce overall costs to couples who often pay for CAR out of pocket. Given the resource constraints faced by most

sectors, the ability to address cost efficiency using a simple relational tool may benefit all stake holders. Furthermore, improved patient satisfaction may result.

Apart from chapter-based recommendations, evidence from this dissertation suggests the need to further investigate the use of reciprocal IVF among SMW and gender minorities. A growing body of clinical, quantitative research and ethical reports have focused on the technological innovations of reciprocal IVF used increasingly. Yet surprisingly little qualitative research has explored the experiences of those who decide to approach pregnancy and parenthood through this pathway. Much remains to investigate in the domain of reproductive health and pursuits of pregnancy among SMW and other SGM.

Conclusions

The purpose of this dissertation was to qualitatively explore SMW couples' experiences with clinically assisted reproductive paths to pregnancy. While national level investments in fertility research and clinical outcomes privileges opposite-sex married couples and heteronormative frameworks, SMW and other SGM also have pregnancy and parenthood aspirations. Yet, informational limitations, barriers, and manifestations of minority stress introduce challenges specific to these populations. Nevertheless, SMW in this study demonstrated remarkable resilience and offered throughout our interviews offered recommendations for structural, clinical, and individual level improvements to support the path to parenthood. In addition, couple-level data elicitation and visual representations for SMW in intimate partnerships proved to be a feasible and acceptable research tool with potential clinical applications. Taken together, my dissertation findings highlight key issues related to SMW's experiences with CAR that require further action

and inquiry. Future research, including the systematic evaluation of clinical improvements and policy changes to address SMW needs seeking out CAR, are warranted if we are to create an equitable and just society where SMW and SGM populations are affirmed within reproductive and pregnancy spaces.

References

- Asian Communitites for Reproductive Justice. (2005). *A new vision for advancing our movement for reproductive health, reproductive rights, and reproductivejustice*. Retrieved from <http://forwardtogether.org/assets/docs/ACRJ-A-New-Vision.pdf> June 12, 2020.
- Agarwal, N. K. (2012). Making sense of sense-making: tracing the history and development of Dervin's Sense-Making Methodology. *Int. Perspect. Hist. Inf. Sci. Technol. Proc. ASIS & T*, 13.
- Ajzen, I., & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. *J Demographic Research*, 29, 203-232.
- Almack, K. (2006). Seeking sperm: Accounts of lesbian couples' reproductive decision-making and understandings of the needs of the child. *International Journal of Law, Policy and the Family*, 20(1), 1-22. doi:10.1093/lawfam/ebi030
- Ard, K. L., & Makadon, H. J. (2012). Improving the health care of lesbian, gay, bisexual and transgender (LGBT) people: Understanding and eliminating health disparities. *The Fenway Institute*.
- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental psychology*, 51(5), 688.
- Badgett, M. L. (2009). *When gay people get married: What happens when societies legalize same-sex marriage*: NYU Press.
- Baptiste-Roberts, K., Oranuba, E., Werts, N., & Edwards, L. V. (2017). Addressing Health Care Disparities Among Sexual Minorities. *Obstetrics and gynecology clinics of North America*, 44(1), 71-80. doi:S0889-8545(16)30092-4 [pii]
- Batza, K. (2016). From sperm runners to sperm banks: Lesbians, assisted conception, and challenging the fertility industry, 1971–1983. *Journal of Women's History*, 28(2), 82-102.
- Bell, A. V. (2009). "It's Way out of my League" Low-income Women's Experiences of Medicalized Infertility. *Gender & Society*, 23(5), 688-709.
- Bell, A. V. (2010). Beyond (financial) accessibility: inequalities within the medicalisation of infertility. *Sociology of health & illness*, 32(4), 631-646.
- Bell, A. V. (2014). "I think about Oprah" social class differences in sources of health information. *Qualitative health research*, 24(4), 506-516.
- Bell, A. V. (2015). Overcoming (and maintaining) reproductive difference: Similarities in the gendered experience of infertility. *Qualitative Sociology*, 38(4), 439-458.
- Bell, A. V. (2016). The margins of medicalization: Diversity and context through the case of infertility. *Social science & medicine (1982)*, 156, 39-46. doi:10.1016/j.socscimed.2016.03.005 [doi]
- Bell, K. (2012). An exploration of women's psychosocial support needs in the context of assisted reproduction. *Social Work in Health Care*, 51(8), 695-709.
- Ben-Ari, A., & Livni, T. (2006). Motherhood Is Not a Given Thing: Experiences and Constructed Meanings of Biological and Nonbiological Lesbian Mothers. *Sex Roles*, 54(7), 521-531. doi:10.1007/s11199-006-9016-0
- Berends, L. (2011). Embracing the visual: Using timelines with in-depth interviews on substance use and treatment. *The Qualitative Report*, 16(1), 1-9.

- Berg, C. A., & Upchurch, R. (2007). A developmental-contextual model of couples coping with chronic illness across the adult life span. *Psychological bulletin*, 133(6), 920.
- Black, B. P., & Fields, W. S. (2014). Contexts of reproductive loss in lesbian couples. *MCN The American Journal of Maternal/Child Nursing*, 39(3), 157-162. doi:10.1097/NMC.0000000000000032
- Blanchfield, B., & Patterson, C. J. (2015). Racial and sexual minority women's receipt of medical assistance to become pregnant. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, 34(6), 571-579. doi:10.1037/hea0000124 [doi]
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C., & Verhaak, C. (2012a). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C. J. M., & Verhaak, C. (2012b). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.
- Bonvicini, K. A. (2017). LGBT healthcare disparities: What progress have we made? *Patient Education and Counseling*, 100(12), 2357-2361.
- Bonvicini, K. A., & Perlin, M. J. (2003). The same but different: clinician–patient communication with gay and lesbian patients. *Patient Education and Counseling*, 51(2), 115-122.
- Borneskog, C., Sydsjö, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: a descriptive study. *BJOG : an international journal of obstetrics and gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214 [doi]
- Borneskog, C., Sydsjö, G., Lampic, C., Bladh, M., & Svanberg, A. S. (2013). Symptoms of anxiety and depression in lesbian couples treated with donated sperm: A descriptive study. *BJOG: An International Journal of Obstetrics and Gynaecology*, 120(7), 839-846. doi:10.1111/1471-0528.12214
- Bos, H., & van Balen, F. (2010). Children of the new reproductive technologies: Social and genetic parenthood. *Patient Education and Counseling*, 81(3), 429-435. doi:10.1016/j.pec.2010.09.012
- Bos, H. M. W., Van Balen, F., & Van Den Boom, D. C. (2005). Lesbian families and family functioning: An overview. *Patient Education and Counseling*, 59(3), 263-275. doi:10.1016/j.pec.2004.10.006
- Bos, H. M. W., van Balen, F., van den Boom, D. C., & Sandfort, T. G. M. (2004). Minority stress, experience of parenthood and child adjustment in lesbian families. *Journal of Reproductive and Infant Psychology*, 22(4), 291-304. doi:10.1080/02646830412331298350
- Bostock v. Clayton County, GA, 590 1 (United States Supreme Court 2020).
- Boyd, C. J., Hill, E., Holmes, C., & Purnell, R. (1998). Putting drug use in context: Life-lines of African American women who smoke crack. *Journal of Substance Abuse Treatment*, 15(3), 235-249.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for*

beginners: sage.

- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. *Handbook of Research Methods in Health Social Sciences*, 843-860.
- Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annu.Rev.Public Health*, 27, 167-194.
- Braveman, P. A., Kumanyika, S., Fielding, J., LaVeist, T., Borrell, L. N., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: the issue is justice. *American Journal of Public Health*, 101(S1), S149-S155.
- Brewaey, A., Ponjaert, I., Van Hall, E. V., & Golombok, S. (1997). Donor insemination: child development and family functioning in lesbian mother families. *Human reproduction (Oxford, England)*, 12(6), 1349-1359.
- Bushe, S., & Romero, I. L. (2017). *Lesbian pregnancy: care and considerations*. Paper presented at the Seminars in Reproductive Medicine.
- Callahan, E. J., Sitkin, N., Ton, H., Eidson-Ton, W. S., Weckstein, J., & Latimore, D. (2015). Introducing sexual orientation and gender identity into the electronic health record: one academic health center's experience. *Academic medicine : journal of the Association of American Medical Colleges*, 90(2), 154-160. doi:10.1097/ACM.0000000000000467 [doi]
- Campagne, D. M. (2006). Should fertilization treatment start with reducing stress? *Human Reproduction*, 21(7), 1651-1658.
- Campbell, S. (2002). Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self. In: JSTOR.
- Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., Hendrick, C. E., & Higgins, J. A. (2020). Pregnancy (im) possibilities: identifying factors that influence sexual minority women's pregnancy desires. *Social Work in Health Care*, 59(3), 180-198.
- Carvalho, P. G. C. d., Cabral, C. d. S., Ferguson, L., Gruskin, S., & Diniz, C. S. G. (2019). 'We are not infertile': challenges and limitations faced by women in same-sex relationships when seeking conception services in São Paulo, Brazil. *Culture, health & sexuality*, 21(11), 1257-1272. doi:10.1080/13691058.2018.1556343
- Case, D. O. (2007). *Looking for Information. A Survey of Research on Information Seeking, Needs and Behavior*. (2nd Ed. ed.). Amsterdam: Elsevier.
- Casu, G., Ulivi, G., Zaia, V., Fernandes Martins, M. d. C., Parente Barbosa, C., & Gremigni, P. (2018). Spirituality, infertility-related stress, and quality of life in Brazilian infertile couples: Analysis using the actor-partner interdependence mediation model. *Research in nursing & health*, 41(2), 156-165.
- Ceballo, R., Graham, E. T., & Hart, J. (2015). Silent and infertile: An intersectional analysis of the experiences of socioeconomically diverse African American women with infertility. *Psychology of Women Quarterly*, 39(4), 497-511.
- Chabot, J. M., & Ames, B. D. (2004). "It wasn't 'let's get pregnant and go do it':" Decision Making in Lesbian Couples Planning Motherhood via Donor Insemination. *Family Relations*, 53(4), 348-356.
- Chandra, A., Copen, C. E., & Stephen, E. H. (2014). *Infertility service use in the United States: data from the National Survey of Family Growth, 1982-2010: US Department of Health and Human Services, Centers for Disease Control and*

- Chapman, R., Wardrop, J., Zappia, T., Watkins, R., & Shields, L. (2012). The experiences of Australian lesbian couples becoming parents: deciding, searching and birthing. *Journal of Clinical Nursing*, 21(13-14), 1878-1885.
- Charlton, B. M., Corliss, H. L., Missmer, S. A., Rosario, M., Spiegelman, D., & Austin, S. B. (2013). Sexual orientation differences in teen pregnancy and hormonal contraceptive use: an examination across 2 generations. *American Journal of Obstetrics & Gynecology*, 209(3), 204. e201-204. e208.
- Charlton, B. M., Roberts, A. L., Rosario, M., Katz-Wise, S. L., Calzo, J. P., Spiegelman, D., & Austin, S. B. (2018). Teen pregnancy risk factors among young women of diverse sexual orientations. *Pediatrics*, 141(4).
- Chaudoir, S. R., Wang, K., & Pachankis, J. E. (2017). What reduces sexual minority stress? A review of the intervention "toolkit". *Journal of Social Issues*, 73(3), 586-617.
- Cherguit, J., Burns, J., Pettie, S., & Tasker, F. (2013). Lesbian co-mothers' experiences of maternity healthcare services. *Journal of advanced nursing*, 69(6), 1269-1278.
- Chrisler, J. C. (2014). A reproductive justice approach to women's health. *Analyses of Social Issues and Public Policy*, 14(1), 205-209.
- Cook, R. J., & Dickens, B. M. (2014). Reducing stigma in reproductive health. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics*, 125(1), 89-92. doi:10.1016/j.ijgo.2014.01.002 [doi]
- Corriher, B. (2016). Putting Equality to a Vote: Individual Rights, Judicial Elections, and the Arkansas Supreme Court. *UALR L. Rev.*, 39, 591.
- Coulter, R. W., Kenst, K. S., & Bowen, D. J. (2014). Research funded by the National Institutes of Health on the health of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health*, 104(2), e105-e112.
- Courtright, C. (2007). Context in information behavior research. *Annual review of information science and technology*, 41(1), 273-306.
- Cousineau, T. M., & Domar, A. D. (2007). Psychological impact of infertility. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 21(2), 293-308.
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stan. L. Rev.*, 43, 1241.
- Creswell, J. W., & Miller, D. L. J. T. i. p. (2000). Determining validity in qualitative inquiry. 39(3), 124-130.
- Cwikel, J., Gidron, Y., & Sheiner, E. (2004). Psychological interactions with infertility among women. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 117(2), 126-131.
- Dahl, B., Fylkesnes, A. M., Sørli, V., & Malterud, K. (2013). Lesbian women's experiences with healthcare providers in the birthing context: a meta-ethnography. *Midwifery*, 29(6), 674-681.
- Dahl, B., & Malterud, K. (2015). Neither father nor biological mother. A qualitative study about lesbian co-mothers' maternity care experiences. *Sexual & Reproductive Healthcare*, 6(3), 169-173.
- Dancet, E., Van Empel, I., Rober, P., Nelen, W., Kremer, J., & d'Hooghe, T. (2011). Patient-centred infertility care: a qualitative study to listen to the patient's voice. *Human Reproduction*, 26(4), 827-833.

- de Vries, B. (2013). Lifelines: A review of content and context. *The International Journal of Reminiscence and Life Review*, 1(1), 31-35.
- de Vries, B., LeBlanc, A. J., Frost, D. M., Alston-Stepnitz, E., Stephenson, R., & Woodyatt, C. R. (2017). The relationship timeline: A method for the study of shared lived experiences in relational contexts. *Advances in life course research*, 32, 55-64.
- Dedoose Version 8.3.17. (2019). Retrieved from www.dedoose.com
- Dervin, B. (2015). Dervin's Sense-Making Theory. In *Information seeking behavior and technology adoption: Theories and trends* (pp. 59-80): IGI Global.
- Dervin, B., & Naumer, C. M. (2017). Sense-making. In *Encyclopedia of library and information sciences* (pp. 4113-4124): CRC Press.
- Dervin, B., & Nilan, M. (1986). Information needs and uses. *Annual review of information science and technology*, 21, 3-33.
- Devlin, N., & Parkin, D. (2003). Funding fertility: issues in the allocation and distribution of resources to assisted reproduction technologies. *Human Fertility*, 6(sup2), S2-S6.
- Diamant, A. L., Wold, C., Spritzer, K., & Gelberg, L. (2000). Health behaviors, health status, and access to and use of health care: a population-based study of lesbian, bisexual, and heterosexual women. *Archives of family medicine*, 9(10), 1043.
- Diamond-Smith, N., Warnock, R., & Sudhinaraset, M. (2018). Interventions to improve the person-centered quality of family planning services: a narrative review. *Reproductive health*, 15(1), 144.
- Domar, A. D. (2020). Patient Retention, Nursing Retention: The Importance of Empathic Communication and Nursing Support. *Patient-Centered Assisted Reproduction: How to Integrate Exceptional Care with Cutting-Edge Technology*, 146.
- Donovan, C. (2000). Who needs a father? Negotiating biological fatherhood in British lesbian families using self-insemination. *Sexualities*, 3(2), 149-164.
- Donovan, C., & Wilson, A. R. (2008). Imagination and integrity: decision-making among lesbian couples to use medically provided donor insemination. *Culture, health & sexuality*, 10(7), 649-665. doi:10.1080/13691050802175739 [doi]
- Donovan, C., & Wilson, A. R. (2008). Imagination and integrity: decision-making among lesbian couples to use medically provided donor insemination. *Culture, health & sexuality*, 10(7), 649-665.
- Doyal, L. (1995). *What makes women sick: Gender and the political economy of health*: Macmillan International Higher Education.
- Dudgeon, M. R., & Inhorn, M. C. (2004). Men's influences on women's reproductive health: medical anthropological perspectives. *Social Science & Medicine*, 59(7), 1379-1395.
- Dunne, G. A. (2000). Opting into motherhood: Lesbians blurring the boundaries and transforming the meaning of parenthood and kinship. *Gender & Society*, 14(1), 11-35.
- Ehrensaft, D. (2008). Just molly and me, and donor makes three: Lesbian motherhood in the age of assisted reproductive technology. *Journal of Lesbian Studies*, 12(2-3), 161-178. doi:10.1080/10894160802161331
- Eisikovits, Z., & Koren, C. (2010). Approaches to and outcomes of dyadic interview analysis. *Qualitative health research*, 20(12), 1642-1655.

- Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., . . . Kjellgren, K. (2011). Person-centered care—ready for prime time. *European journal of cardiovascular nursing*, 10(4), 248-251.
- Elder Jr, G. H. (1994). Time, human agency, and social change: Perspectives on the life course. *Social psychology quarterly*, 4-15.
- Elder Jr, G. H. (1998). The life course as developmental theory. *Child development*, 69(1), 1-12.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A.-L. (2018). Mothers in same-sex relationships describe the process of forming a family as a stressful journey in a heteronormative world: a Swedish grounded theory study. *Maternal and child health journal*, 22(10), 1444-1450.
- Engström, H. A., Häggström-Nordin, E., Borneskog, C., & Almqvist, A. L. . (2018). Mothers in Same-Sex Relationships Describe the Process of Forming a Family as a Stressful Journey in a Heteronormative World: A Swedish Grounded Theory Study. *Maternal and child health journal*, 1-7.
- Erlandsson, K., Linder, H., & Häggström-Nordin, E. (2010). Experiences of gay women during their partner's pregnancy and childbirth. *British journal of midwifery*, 18(2), 99-103.
- Everett, B. G., McCabe, K. F., & Hughes, T. L. (2017). Sexual Orientation Disparities in Mistimed and Unwanted Pregnancy Among Adult Women. *Perspect Sex Reprod Health*, 49(3), 157-165. doi:10.1363/psrh.12032
- Ezabadi, Z., Mollaahmadi, F., Sazvar, S., Vesali, S., & Omani-Samani, R. (2019). Satisfaction with information provided to infertile patients who undergo assisted reproductive treatment. *International journal of fertility & sterility*, 12(4), 324.
- Fals-Stewart, W., Birchler, G. R., & Kelley, M. L. (2003). The timeline followback spousal violence interview to assess physical aggression between intimate partners: Reliability and validity. *Journal of Family Violence*, 18(3), 131-142.
- Farquhar, C. M., Bhattacharya, S., Repping, S., Mastenbroek, S., Kamath, M. S., Marjoribanks, J., & Boivin, J. (2019). Female subfertility. *Nature Reviews Disease Primers*, 5(1), 1-21.
- Finney Rutten, L. J., Blake, K. D., Greenberg-Worisek, A. J., Allen, S. V., Moser, R. P., & Hesse, B. W. (2019). Online Health Information Seeking Among US Adults: Measuring Progress Toward a Healthy People 2020 Objective. *Public Health Reports*, 134(6), 617-625.
- Fishbein, M. (1972). Toward an understanding of family planning behaviors. *Journal of Applied Social Psychology*, 2(3), 214-227.
- Fishbein, M., & Jaccard, J. J. (1973). Theoretical and methodological considerations in the prediction of family planning intentions and behavior. *Representative Research in Social Psychology*.
- Fox, S., & Jones, S. (2009). The social life of health information. Pew internet & American life project. Washington, DC.
- Frank, G. (1984). Life history model of adaptation to disability: the case of a 'congenital amputee'. *Social Science & Medicine*, 19(6), 639-645.
- Fredriksen-Goldsen, K. I., Kim, H.-J., Barkan, S. E., Balsam, K. F., & Mincer, S. L. (2010). Disparities in health-related quality of life: a comparison of lesbians and bisexual women. *American Journal of Public Health*, 100(11), 2255-2261.

- Fredriksen-Goldsen, K. I., Simoni, J. M., Kim, H.-J., Lehavot, K., Walters, K. L., Yang, J., . . . Muraco, A. (2014). The health equity promotion model: Reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. *American Journal of Orthopsychiatry*, 84(6), 653.
- Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of behavioral medicine*, 38(1), 1-8.
- Gamarel, K. E., Reisner, S. L., Laurenceau, J.-P., Nemoto, T., & Operario, D. (2014). Gender minority stress, mental health, and relationship quality: A dyadic investigation of transgender women and their cisgender male partners. *Journal of Family Psychology*, 28(4), 437.
- Gameiro, S., Boivin, J., Dancet, E., de Klerk, C., Emery, M., Lewis-Jones, C., . . . Verhaak, C. M. (2015). ESHRE guideline: routine psychosocial care in infertility and medically assisted reproduction—a guide for fertility staff. *Human Reproduction*, 30(11), 2476-2485.
- Gameiro, S., Boivin, J., Peronace, L., & Verhaak, C. M. (2012). Why do patients discontinue fertility treatment? A systematic review of reasons and predictors of discontinuation in fertility treatment. *Human reproduction update*, 18(6), 652-669.
- Gameiro, S., Canavarro, M. C., & Boivin, J. (2013). Patient centred care in infertility health care: direct and indirect associations with wellbeing during treatment. *Patient Education and Counseling*, 93(3), 646-654.
- Gartrell, N., Banks, A., Hamilton, J., Reed, N., Bishop, H., & Rodas, C. (1999). The National Lesbian Family Study: 2. Interviews with mothers of toddlers. *The American Journal of Orthopsychiatry*, 69(3), 362-369.
- Gleicher, N., Vanderlaan, B., Karande, V., Morris, R., Nadherney, K., & Pratt, D. (1996). Infertility treatment dropout and insurance coverage. *Obstetrics & Gynecology*, 88(2), 289-293.
- Goldberg, A. E., & Allen, K. R. (2013). Donor, dad, or...? Young adults with lesbian parents' experiences with known donors. *Family process*, 52(2), 338-350. doi:10.1111/famp.12029 [doi]
- Goldberg, A. E., Gartrell, N. K., & Gates, G. J. (2014). Research report on LGB-parent families.
- Goldberg, A. E., Perry-Jenkins, M. J. J. o. S., & Relationships, P. (2007). The division of labor and perceptions of parental roles: Lesbian couples across the transition to parenthood. 24(2), 297-318.
- Goldberg, A. E., & Sweeney, K. K. (2019). LGBTQ parent families. In M. C. B. H. Fiese, K. Deater-Deckard, E. N. Jouriles, & M. A. Whisman (Ed.), *APA handbooks in psychology®. APA handbook of contemporary family psychology: Foundations, methods, and contemporary issues across the lifespan* (pp. 743-760): American Psychological Association.
- Goldberg, S. K., & Conron, K. J. (2018). *How many same-sex couples in the US are raising children?* : Williams Institute, UCLA School of Law.
- Goldberg, S. K., Reese, B. M., & Halpern, C. T. (2016). Teen Pregnancy Among Sexual Minority Women: Results From the National Longitudinal Study of Adolescent to Adult Health. *Journal of Adolescent Health*, 59(4), 429-437. doi:10.1016/j.jadohealth.2016.05.009

- Goldenberg, T., Finneran, C., Andes, K. L., & Stephenson, R. (2016). Using participant-empowered visual relationship timelines in a qualitative study of sexual behaviour. *Journal of Global Public Health*, 11(5-6), 699-718.
- Golombok, S., & Tasker, F. (1994). Donor insemination for single heterosexual and lesbian women: issues concerning the welfare of the child. *Human reproduction (Oxford, England)*, 9(11), 1972-1976.
- Gonzales, G., Quinones, N., & Attanasio, L. (2019). Health and access to care among reproductive-age women by sexual orientation and pregnancy status. *Women's Health Issues*, 29(1), 8-16.
- Graham, R., Berkowitz, B., Blum, R., Bockting, W., Bradford, J., de Vries, B., . . . Kasprzyk, D. J. W., DC: Institute of Medicine. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding.
- Graham, R., Berkowitz, B., Blum, R., Bockting, W., Bradford, J., de Vries, B., & Makadon, H. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. *Washington, DC: Institute of Medicine*.
- Gramling, L. F., & Carr, R. L. (2004). Lifelines: A life history methodology. *Nursing Research*, 53(3), 207-210.
- Gray, J., & Dagg, J. (2018). Using reflexive lifelines in biographical interviews to aid the collection, visualisation and analysis of resilience. *Contemporary Social Science*, 1-16.
- Greenfeld, D. A., & Seli, E. (2016). Same-sex reproduction: Medical treatment options and psychosocial considerations. *Current Opinion in Obstetrics and Gynecology*, 28(3), 202-205. doi:10.1097/GCO.0000000000000266
- Gregg, I. (2018). The Health Care Experiences of Lesbian Women Becoming Mothers. *Nursing for Women's Health*, 22(1), 40-50. doi:10.1016/j.nwh.2017.12.003
- Greil, A. L. (1997). Infertility and psychological distress: a critical review of the literature. *Social Science & Medicine*, 45(11), 1679-1704.
- Greil, A. L., & McQuillan, J. (2004). Help-seeking patterns among subfecund women. *Journal of Reproductive and Infant Psychology*, 22(4), 305-319.
- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: a review of recent literature. *Sociology of health & illness*, 32(1), 140-162.
- Gurmankin, A. D., Caplan, A. L., & Braverman, A. M. (2005). Screening practices and beliefs of assisted reproductive technology programs. *Fertility and sterility*, 83(1), 61-67.
- Hall, K. S., Samari, G., Garbers, S., Casey, S. E., Diallo, D. D., Orcutt, M., . . . McGovern, T. (2020). Centring sexual and reproductive health and justice in the global COVID-19 response. *The lancet*, 395(10231), 1175-1177.
- Hammarberg, K., Zosel, R., Comoy, C., Robertson, S., Holden, C., Deeks, M., & Johnson, L. (2017). Fertility-related knowledge and information-seeking behaviour among people of reproductive age: a qualitative study. *Human Fertility*, 20(2), 88-95.
- Hammond, C. J. B. J. o. M. (2014). Exploring same sex couples' experiences of maternity care. 22(7), 495-500.
- Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth:

- research evidence and clinical implications. *Pediatric Clinics*, 63(6), 985-997.
- Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health*, 103(5), 813-821.
- Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative Research in Psychology*, 12(2), 91-106.
- Hayman, B., & Wilkes, L. (2017). De novo families: Lesbian motherhood. *Journal of homosexuality*, 64(5), 577-591.
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2013). Marginalised mothers: Lesbian women negotiating heteronormative healthcare services. *Contemporary Nurse*, 44(1), 120-127.
- Hayman, B., Wilkes, L., Jackson, D., & Halcomb, E. (2013). De Novo Lesbian Families: Legitimizing the Other Mother. *Journal of GLBT Family Studies*, 9(3), 273-287. doi:10.1080/1550428X.2013.781909
- Hayman, B., Wilkes, L., Halcomb, E., & Jackson, D. (2015). Lesbian Women Choosing Motherhood: The Journey to Conception. *Journal of GLBT Family Studies*, 11(4), 395-409. doi:10.1080/1550428X.2014.921801
- Health, U. S. D. o., Human Services Office of Disease, P., & Health, P. (2017a). Healthy People 2020. 2017(February).
- Health, U. S. D. o., Human Services Office of Disease, P., & Health, P. (2017b). Healthy People 2020. In (<https://www.healthypeople.gov/2020/topics-objectives/topic/lesbian-gay-bisexual-and-transgender-health> ed., Vol. 2017). Washington, D.C.
- Hequembourg, A. L., & Brallier, S. A. (2009). An exploration of sexual minority stress across the lines of gender and sexual identity. *Journal of homosexuality*, 56(3), 273-298.
- Hequembourg, A. L., & Farrell, M. P. (1999). Lesbian motherhood: Negotiating marginal-mainstream identities. *Gender & Society*, 13(4), 540-557.
- Hodson, K., Meads, C., & Bewley, S. (2017). Lesbian and bisexual women's likelihood of becoming pregnant: a systematic review and meta-analysis. *BJOG: An International Journal of Obstetrics and Gynaecology*, 124(3), 393-402. doi:10.1111/1471-0528.14449
- Holland, S. (2018). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*.
- Holland, S. (2019). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of health & illness*, 41(1), 52-66.
- Holmberg, D., Orbuch, T. L., & Veroff, J. (2003). *Thrice told tales: Married couples tell their stories*: Routledge.
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277-1288.
- James-Abra, S., Tarasoff, L. A., Green, D., Epstein, R., Anderson, S., Marvel, S., . . . Ross, L. E. (2015). Trans people's experiences with assisted reproduction services: a qualitative study. *Human reproduction (Oxford, England)*, 30(6), 1365-1374. doi:10.1093/humrep/dev087 [doi]

- Jin, H., & Dasgupta, S. (2016). Disparities between online assisted reproduction patient education for same-sex and heterosexual couples. *Human Reproduction*, 31(10), 2280-2284.
- Johnson, J. D., Andrews, J. E., & Allard, S. (2001). A model for understanding and affecting cancer genetics information seeking. *Library & Information Science Research*, 23(4), 335-349.
- Johnson, J. D., Donohue, W. A., Atkin, C. K., & Johnson, S. (1995). A comprehensive model of information seeking: Tests focusing on a technical organization. *Science Communication*, 16(3), 274-303.
- Johnson, K. M. (2012). Excluding lesbian and single women? An analysis of U.S. fertility clinic websites. *Women's Studies International Forum*, 35(5), 394-402. doi:10.1016/j.wsif.2012.05.002
- Johnson, M. J., & Nemeth, L. S. (2014). Addressing health disparities of lesbian and bisexual women: a grounded theory study. *Women's Health Issues*, 24(6), 635-640.
- Jordan, C., & Revenson, T. A. (1999). Gender differences in coping with infertility: a meta-analysis. *Journal of behavioral medicine*, 22(4), 341-358.
- Karpman, H. E., Ruppel, E. H., & Torres, M. (2018). "It wasn't feasible for us": Queer Women of Color Navigating Family Formation. *Family Relations*, 67(1), 118-131. doi:10.1111/fare.12303
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. R. C. M. Judd (Ed.), *Handbook of research methods in social and personality psychology* (pp. 451-477): Cambridge University Press
- Kenny, D. A., & Cook, W. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. *Personal relationships*, 6(4), 433-448.
- Kenny, D. A., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor-partner interdependence model. *Journal of Family Psychology*, 24(3), 359.
- Klein, D. A., Berry-Bibee, E. N., Baker, K. K., Malcolm, N. M., Rollison, J. M., & Frederiksen, B. N. (2018). Providing quality family planning services to LGBTQIA individuals: a systematic review. *Contraception*, 97(5), 378-391. Retrieved from <https://doi.org/10.1016/j.contraception.2017.12.016>
- Klitzman, R. (2019). *Designing Babies: How Technology is Changing the Ways We Create Children*: Oxford University Press, USA.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018a). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1.
- Kreines, F. M., Farr, A., Chervenak, F. A., & Grünebaum, A. (2018b). Quality of web-based family-building information for LGBTQ individuals. *The European Journal of Contraception & Reproductive Health Care*, 1-6.
- Kuhlthau, C. C., Heinström, J., & Todd, R. J. (2008). The 'information search process' revisited: Is the model still useful. *Information research*, 13(4), 13-14.
- Lambert, S. D., & Loiselle, C. G. (2007). Health information—seeking behavior. *Qualitative health research*, 17(8), 1006-1019.

- LaSala, M. C. (2003). When Interviewing “Family” Maximizing the Insider Advantage in the Qualitative Study of Lesbians and Gay Men. . *Journal of Gay & Lesbian Social Services*, 15(1-2), 15-30.
- Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of consulting and clinical psychology*, 79(2), 159.
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521-548.
- Lincoln, Y. S. (1997). Self, subject, audience, text: Living at the edge, writing in the margins. *Representation and the text: Re-framing the narrative voice*, 37-55.
- Luce, J. (2004). Imaging Bodies, Imagining Relations: Narratives of Queer Women and “Assisted Conception”. *Journal of Medical Humanities*, 25(1), 47-56.
- Luce, J. (2010). *Beyond expectation: Lesbian/bi/queer women and assisted conception*: University of Toronto Press.
- Luna, Z., & Luker, K. (2013). Reproductive justice.
- Magee, J. C., Bigelow, L., DeHaan, S., & Mustanski, B. S. (2012). Sexual health information seeking online: a mixed-methods study among lesbian, gay, bisexual, and transgender young people. *Health Education & Behavior*, 39(3), 276-289.
- Makadon, H. J. (2011). Ending LGBT invisibility in health care: The first step in ensuring equitable care. *Cleve Clin J Med*, 78(4), 220-224.
- Malmquist, A. (2015a). A Crucial but Strenuous Process: Female Same-Sex Couples’ Reflections on Second-Parent Adoption. *Journal of GLBT Family Studies*, 11(4), 351-374. doi:10.1080/1550428X.2015.1019169
- Malmquist, A. (2015b). Women in Lesbian Relations: Construing Equal or Unequal Parental Roles? *Psychology of Women Quarterly*, 39(2), 256-267. doi:10.1177/0361684314537225
- Malmquist, A., & Nelson, K. Z. (2014). Efforts to maintain a 'just great' story: Lesbian parents' talk about encounters with professionals in fertility clinics and maternal and child healthcare services. *Feminism and Psychology*, 24(1), 56-73. doi:10.1177/0959353513487532
- Mamo, L. (2005). Biomedicalizing kinship: Sperm banks and the creation of affinity-ties. *Science as Culture*, 14(3), 237-264. doi:10.1080/09505430500216833
- Mamo, L. (2007a). Negotiating conception: Lesbians' hybrid-technological practices. *Science Technology and Human Values*, 32(3), 369-393. doi:10.1177/0162243906298355
- Mamo, L. (2007b). *Queering reproduction: Achieving pregnancy in the age of technoscience*: Duke University Press.
- Mamo, L. (2018). Queering the fertility clinic. In *Beyond Bioethics: Toward a New Biopolitics* (pp. 328-338): University of California Press.
- Mamo, L., & Alston-Stepnitz, E. (2015). Queer intimacies and structural inequalities: New directions in stratified reproduction. *Journal of Family Issues*, 36(4), 519-540.
- Mamo, L., & Fishman, J. R. (2013). Why justice? Introduction to the special issue on entanglements of science, ethics, and justice. *Science, Technology, Human Values*, 38(2), 159-175.
- Maroufizadeh, S., Hosseini, M., Foroushani, A. R., Omani-Samani, R., & Amini, P. J. B.

- p. (2018). The relationship between marital satisfaction and depression in infertile couples: an actor–partner interdependence model approach. *18*(1), 310.
- Mason Bergen, K., Suter, E. A., & Daas, K. L. (2006). "About as solid as a fish net": symbolic construction of a legitimate parental identity for nonbiological lesbian mothers. *The Journal of Family Communication*, *6*(3), 201-220.
- Mason, T. B., & Lewis, R. J. (2015). Minority stress and binge eating among lesbian and bisexual women. *Journal of homosexuality*, *62*(7), 971-992.
- McManus, A. J., Hunter, L. P., & Renn, H. (2006). Lesbian experiences and needs during childbirth: guidance for health care providers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, *35*(1), 13-23.
- McNair, R. (2004). *Outcomes for children born of ART in a diverse range of families*: Victorian Law Reform Commission Melbourne,, Australia.
- McQuillan, J., Greil, A. L., Shreffler, K. M., & Bedrous, A. V. (2015). The Importance of Motherhood and Fertility Intentions among U.S. Women. *58*(1), 20-35.
doi:10.1177/0731121414534393
- Medicine, I. o. (2003). Washington (DC): National Academies Press (US)
Copyright 2002 by the National Academy of Sciences. All rights reserved.
- Medicine, I. o. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Retrieved from
- Mehta, A., Nangia, A. K., Dupree, J. M., & Smith, J. F. (2016). Limitations and barriers in access to care for male factor infertility. *Fertility and sterility*, *105*(5), 1128-1137.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of health and social behavior*, 38-56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, *129*(5), 674.
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. *Handbook of psychology and sexual orientation*, 252-266.
- Meyrick, J. J. J. o. h. p. (2006). What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality. *11*(5), 799-808.
- Miller, W., Severy, L., & Pasta, D. J. P. s. (2004). A framework for modelling fertility motivation in couples. *58*(2), 193-205.
- Miller, W. B. (1994). Childbearing Motivations, Desires, and Intentions: A Theoretical Framework. *Genetic, Social & General Psychology Monographs*, *120*(2), 223-253.
- Miller, W. B., & Pasta, D. (1995). Behavioral Intentions: Which Ones Predict Fertility Behavior in Married Couples? 1. *Journal of Applied Social Psychology*, *25*(6), 530-555.
- Montano, D., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health behavior: Theory, research and practice*, 95-124.
- Moore, M. R., & Stambolis-Ruhstorfer, M. (2013). LGBT sexuality and families at the start of the twenty-first century. *Annual Review of Sociology*, *39*, 491-507.
- Morgan, D. L. (2016). *Essentials of dyadic interviewing*: Routledge.
- Morris, M., Cooper, R. L., Ramesh, A., Tabatabai, M., Arcury, T. A., Shinn, M., . . .

- Matthews-Juarez, P. (2019). Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC medical education*, 19(1), 325.
- Morse, J. M. (2008). Confusing categories and themes. *Qualitative health research*, 18, 727-728.
- Murray, M. (2017). Intimate Choices, Public Threats - Reproductive and LGBTQ Rights under a Trump Administration. *New England Journal of Medicine*, 376(4), 301-303. doi:10.1056/NEJMp1615718
- National Institutes of Health. (2010). Moving into the future with new dimensions and strategies: a vision for 2020 for women's health research. *Strategic plan—executive summary (NIH Publication No. 10–7606)*, NIOH Office of Research on Women's Health, US Department of Health and Human Services, Editor. Bethesda.
- National Institutes of Health. (2015). NIH FY 2016–2020 strategic plan to advance research on the health and well-being of sexual and gender minorities. Bethesda, MD: National Institutes of Health.
- Nölke, A.-I. (2018). Making diversity conform? An intersectional, longitudinal analysis of LGBT-specific mainstream media advertisements. *Journal of homosexuality*, 65(2), 224-255.
- Nordqvist, P. (2011a). Choreographies of sperm donations: Dilemmas of intimacy in lesbian couple donor conception. *Social Science and Medicine*, 73(11), 1661-1668. doi:10.1016/j.socscimed.2011.09.033
- Nordqvist, P. (2011b). 'Dealing with sperm': Comparing lesbians' clinical and non-clinical donor conception processes. *Sociology of Health and Illness*, 33(1), 114-129. doi:10.1111/j.1467-9566.2010.01279.x
- Nordqvist, P. J. C., Health, & Sexuality. (2012). Origins and originators: lesbian couples negotiating parental identities and sperm donor conception. 14(3), 297-311.
- Obergefell v. Hodges. (2015). *S.Ct.*, 135(No. 14-556), 2071.
- Olesker, E., & Walsh, L. V. (1984). Childbearing among lesbians: are we meeting their needs? *Journal of Nurse-Midwifery*, 29(5), 322-329.
- Patterson, C. J. (1994). Children of the lesbian baby boom: Behavioral adjustment, self-concepts, and sex-role identity. *Psychological perspectives on lesbian and gay issues*, 1, 156-175.
- Patterson, C. J., & Riskind, R. G. (2010). To Be a Parent: Issues in Family Formation among Gay and Lesbian Adults. *Journal of GLBT Family Studies*, 6(3), 326-340. doi:10.1080/1550428X.2010.490902
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*: SAGE Publications, inc.
- Pavan v. Smith, No. No. 16-992, 137 2075 (Supreme Court 2017).
- Pelka, S. (2009). Sharing motherhood: Maternal Jealousy among Lesbian co-mothers. *Journal of homosexuality*, 56(2), 195-217. doi:10.1080/00918360802623164
- Peterson, B. D., Newton, C. R., Rosen, K. H., & Skaggs, G. (2006). Gender differences in how men and women who are referred for IVF cope with infertility stress. *Human Reproduction*, 21(9), 2443-2449.
- Peterson, B. D., Pirritano, M., Christensen, U., & Schmidt, L. (2008). The impact of partner coping in couples experiencing infertility. *Human Reproduction*, 23(5),

1128-1137.

- Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual frameworks in information behavior. *Annual review of information science and technology (ARIST)*, 35(43-78).
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.): Wolters Kluwer
- Porter, M., & Bhattacharya, S. (2007). Helping themselves to get pregnant: a qualitative longitudinal study on the information-seeking behaviour of infertile couples. *Human reproduction*, 23(3), 567-572.
- Qualtrics. (2020). In.
- Rappaport, H., Enrich, K., & Wilson, A. (1985). Relation between ego identity and temporal perspective. *Journal of Personality and Social Psychology*, 48(6), 1609.
- Rausch, M. A., & Wikoff, H. D. (2017). Addressing Concerns with Lesbian Couples Experiencing Fertility Treatment: Using Relational Cultural Theory. *Journal of LGBT Issues in Counseling*, 11(3), 142-155.
doi:10.1080/15538605.2017.1346494
- Reczek, C. (2014). Conducting a multi family member interview study. *Family process*, 53(2), 318-335.
- Reczek, C., Elliott, S., & Umberson, D. (2009). Commitment without marriage: Union formation among long-term same-sex couples. *Journal of Family Issues*, 30(6), 738-756.
- Renaud, M. T. (2007). We are mothers too: Childbearing experiences of lesbian families. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 36(2), 190-199.
- Riskind, R. G., & Patterson, C. J. (2010). Parenting intentions and desires among childless lesbian, gay, and heterosexual individuals. *Journal of Family Psychology*, 24(1), 78-81. Retrieved from <http://dx.doi.org/10.1037/a0017941>
- Riskind, R. G., Patterson, C. J., & Nosek, B. A. (2013). Childless lesbian and gay adults' self-efficacy about achieving parenthood. *Couple and Family Psychology: Research and Practice*, 2(3), 222.
- Riskind, R. G., & Tornello, S. L. (2017). Sexual orientation and future parenthood in a 2011-2013 nationally representative United States sample. *Journal of Family Psychology*, 31(6), 792-798. doi:10.1037/fam0000316
- Roberts, D. (1997). Killing the black body: Race, representation, and the meaning of liberty. *New York: Vintage*.
- Roberts, D. E. (1995). Race and the new reproduction. *Hastings LJ*, 47, 935.
- Robson, A., & Robinson, L. (2015). The information seeking and communication model. *Journal of Documentation*, 71(5), 1043-1069. doi:10.1108/JD-01-2015-0023
- Rogalin, C. L., & Brooks, J. E. (2018). Lesbians achieving pregnancy: The intersections of social location and the heteronormative medicalization of infertility. *Sociology Compass*, 12(11), e12637.
- Röndahl, G., Bruhner, E., & Lindhe, J. (2009). Heteronormative communication with lesbian families in antenatal care, childbirth and postnatal care. *Journal of advanced nursing*, 65(11), 2337-2344.
- Ross, L. (2006). Understanding reproductive justice: Transforming the pro-choice movement. *Off our backs*, 36(4), 14-19.
- Ross, L., Gutierrez, E., Gerber, M., & Silliman, J. (2016). *Undivided rights: Women of*

- color organizing for reproductive justice*: Haymarket Books.
- Ross, L., & Solinger, R. (2017). *Reproductive justice: An introduction* (Vol. 1): Univ of California Press.
- Ross, L. E., Steele, L. S., & Epstein, R. (2006a). Lesbian and bisexual women's recommendations for improving the provision of assisted reproductive technology services. *Fertility and sterility*, 86(3), 735-738.
doi:10.1016/j.fertnstert.2006.01.049
- Ross, L. E., Steele, L. S., & Epstein, R. (2006b). Service Use and Gaps in Services for Lesbian and Bisexual Women During Donor Insemination, Pregnancy, and the Postpartum Period. *Journal of Obstetrics and Gynaecology Canada*, 28(6), 505-511. doi:10.1016/S1701-2163(16)32181-8
- Roth, A. (2017). (Queer) family values and “reciprocal IVF”: What difference does sexual identity make? *Kennedy Institute of Ethics journal*, 27(3), 443.
doi:10.1353/ken.2017.0034
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017a). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18-23. doi:10.1016/j.midw.2017.02.011
- Ruppel, E. H., Karpman, H. E., Delk, C. E., & Merryman, M. (2017b). Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*, 48, 18. doi:10.1016/j.midw.2017.02.011
- Ryan, M. (2013). The gender of pregnancy: Masculine lesbians talk about reproduction. *Journal of Lesbian Studies*, 17(2), 119-133.
- Saewyc, E. M. (2014). Adolescent pregnancy among lesbian, gay, and bisexual teens. In *International handbook of adolescent pregnancy* (pp. 159-169): Springer.
- Saewyc, E. M., Bearinger, L. H., Blum, R. W., & Resnick, M. D. (1999). Sexual Intercourse, Abuse and Pregnancy among Adolescent Women: Does Sexual Orientation Make a Difference? *Perspectives on sexual and reproductive health*, 31(3), 127-131. Retrieved from
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-0346657470&partnerID=40&md5=b2ebc93ddb894e7efe0797f7da62056>
- Schmidt, L. (2009). Social and psychological consequences of infertility and assisted reproduction—what are the research priorities? *Human Fertility*, 12(1), 14-20.
- Schwartz, S. R., & Baral, S. (2015a). Fertility-related research needs among women at the margins. In (Vol. 23, pp. 30-46).
- Schwartz, S. R., & Baral, S. (2015b). Fertility-related research needs among women at the margins. *Reprod Health Matters*, 23(45), 30-46.
doi:10.1016/j.rhm.2015.06.006
- Schwartz, S. R., & Baral, S. (2015c). Fertility-related research needs among women at the margins. *Reproductive health matters*, 23(45), 30-46.
- Simoni, J. M., Smith, L., Oost, K. M., Lehavot, K., & Fredriksen-Goldsen, K. (2017). Disparities in physical health conditions among lesbian and bisexual women: A systematic review of population-based studies. *Journal of homosexuality*, 64(1), 32-44.
- Slauson-Blevins, K. S. (2011). Infertility Help Seeking and Social Support: Do Conventional Theories Explain Internet Behaviors and Outcomes.
- Slauson-Blevins, K. S., McQuillan, J., & Greil, A. L. (2013). Online and in-person

- health-seeking for infertility. *Social Science & Medicine*, 99, 110-115.
- Smietana, M., Thompson, C., & Twine, F. W. (2018). Making and breaking families—reading queer reproductions, stratified reproduction and reproductive justice together. *Reproductive Biomedicine & Society Online*, 7, 112-130.
- Smith, L. (2017). Tangling the web of legal parenthood: Legal responses to the use of known donors in lesbian parenting arrangements. In *Parental Rights and Responsibilities* (pp. 259-286): Taylor and Francis.
- Somers, S., Van Parys, H., Provoost, V., Buysse, A., Pennings, G., & De Sutter, P. (2017). How to create a family? Decision making in lesbian couples using donor sperm. *Sexual & Reproductive Healthcare*, 11, 13-18.
doi:<https://doi.org/10.1016/j.srhc.2016.08.005>
- Spidsberg, B. D. (2007). Vulnerable and strong - Lesbian women encountering maternity care. *Journal of advanced nursing*, 60(5), 478-486. doi:10.1111/j.1365-2648.2007.04439.x
- Spidsberg, B. D. (2007). Vulnerable and strong—lesbian women encountering maternity care. *Journal of advanced nursing*, 60(5), 478-486.
- Stein, P., Willen, S., & Pavetic, M. (2014). Couples' fertility decision-making. *Demographic Research*, 30, 1697-1732.
- Touroni, E., & Coyle, A. (2002). Decision-making in planned lesbian parenting: an interpretative phenomenological analysis. *Journal of Community & Applied Social Psychology*, 12(3), 194-209.
- Traa, M. J., De Vries, J., Bodenmann, G., & Den Oudsten, B. L. (2015). Dyadic coping and relationship functioning in couples coping with cancer: a systematic review. *British Journal of Health Psychology*, 20(1), 85-114.
- Umberson, D., Thomeer, M. B., Kroeger, R. A., Lodge, A. C., & Xu, M. (2015). Challenges and opportunities for research on same-sex relationships. *Journal of Marriage and Family*, 77(1), 96-111.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- Van Parys, H., Provoost, V., Wyverkens, E., De Sutter, P., Pennings, G., & Buysse, A. (2016). Family Communication about the Donor Conception: A Multi-erspective Qualitative Study with Lesbian Parents and Their Children. *Qualitative health research*, 26(14), 1998-2008. doi:10.1177/1049732315606684
- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical education*, 51(1), 40-50.
- Voelker, R. (2008). Decades of work to reduce disparities in health care produce limited success. *JAMA*, 299(12), 1411-1413.
- Walschaerts, M., Bujan, L., Parinaud, J., Mieusset, R., & Thonneau, P. (2013). Treatment discontinuation in couples consulting for male infertility after failing to conceive. *Fertility and sterility*, 99(5), 1319-1323.
- Watson, L. B., Grotewiel, M., Farrell, M., Marshik, J., & Schneider, M. (2015). Experiences of sexual objectification, minority stress, and disordered eating among sexual minority women. *Psychology of Women Quarterly*, 39(4), 458-470.
- Wendland, C. L., Burn, F., & Hill, C. (1996). Donor insemination: a comparison of

- lesbian couples, heterosexual couples and single women. *Fertility and sterility*, 65(4), 764-770. doi:S0015-0282(16)58211-9 [pii]
- Werner, C., & Westerstahl, A. (2008). Donor insemination and parenting: concerns and strategies of lesbian couples. A review of international studies. *Acta Obstetrica et Gynecologica Scandinavica*, 87(7), 697-701. doi:10.1080/00016340802011603 [doi]
- West, T. V., Popp, D., & Kenny, D. A. (2008). A guide for the estimation of gender and sexual orientation effects in dyadic data: An actor-partner interdependence model approach. *Personality and Social Psychology Bulletin*, 34(3), 321-336.
- Wilson, T. D. (2000). Human information behavior. *Informing science*, 3(2), 49-56.
- Wingert, S., Harvey, C. D., Duncan, K. A., & Berry, R. E. (2005). Assessing the needs of assisted reproductive technology users of an online bulletin board. *International Journal of Consumer Studies*, 29(5), 468-478.
- Wingo, E., Ingraham, N., & Roberts, S. C. M. (2018). Reproductive Health Care Priorities and Barriers to Effective Care for LGBTQ People Assigned Female at Birth: A Qualitative Study. *Womens Health Issues*, 28(4), 350-357. doi:10.1016/j.whi.2018.03.002
- Wismont, J. M., & Reame, N. E. (1989). The lesbian childbearing experience: assessing developmental tasks. *Image--the journal of nursing scholarship*, 21(3), 137-141.
- Wojnar, D. (2007). Miscarriage Experiences of Lesbian Couples. *Journal of Midwifery and Women's Health*, 52(5), 479-485. doi:10.1016/j.jmwh.2007.03.015
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of preconception, pregnancy, and new motherhood for lesbian nonbiological mothers. *Journal of Obstetric, Gynecologic, Neonatal Nursing*, 43(1), 50-60.
- Wojnar, D. M., & Katzenmeyer, A. (2014). Experiences of Preconception, Pregnancy, and New Motherhood for Lesbian Nonbiological Mothers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 43(1), 50-60. doi:10.1111/1552-6909.12270
- Wu, A. K., Elliott, P., Katz, P. P., & Smith, J. F. (2013). Time costs of fertility care: the hidden hardship of building a family. *Fertility and sterility*, 99(7), 2025-2030.
- Wu, A. K., Odisho, A. Y., Washington III, S. L., Katz, P. P., & Smith, J. F. (2014). Out-of-pocket fertility patient expense: data from a multicenter prospective infertility cohort. *The Journal of urology*, 191(2), 427-432.
- Wu, H. Y., Yin, O., Monseur, B., Selter, J., Collins, L. J., Lau, B. D., & Christianson, M. S. (2017). Lesbian, gay, bisexual, transgender content on reproductive endocrinology and infertility clinic websites. *Fertility and sterility*, 108(1), 183. doi:https://doi.org/10.1016/j.fertnstert.2017.05.011
- Yager, C., Brennan, D., Steele, L. S., Epstein, R., & Ross, L. E. (2010). Challenges and mental health experiences of lesbian and bisexual women who are trying to conceive. *Health and Social Work*, 35(3), 191-200. doi:10.1093/hsw/35.3.191
- Zhu, H., Colgan, J., Reddy, M., & Choe, E. K. (2016). *Sharing patient-generated data in clinical practices: an interview study*. Paper presented at the AMIA Annual Symposium Proceedings.

Appendix A

QPyD Participant Interest Form

Q1.1 Interested in participating in a research study about **same-sex female couples** who are trying to conceive?

Q1.2 If you would like us to contact you about this University of Pennsylvania School of

Nursing and PSTAR study that you may be eligible for, please tell us a little bit about yourself on the next page.

All personal information is kept confidential and will not be shared with third parties.

Q2.1 First name



Q2.2 Email address

Q2.3 What is the month and year of your birth?

Month (1)

Year (2)

▼ January (1) ... December ~ 1936 (864)



Q2.4 What is the zip code where you live?

Q2.5 What is your sexual orientation?

- ☐ Straight/heterosexual (1)
- ☐ Gay (2)
- ☐ Bisexual (3)
- ☐ Same gender loving (4)
- ☐ Queer (5)
- ☐ Another orientation (6)

Q2.6 What sex were you assigned at birth?

- ☐ Male (1)
- ☐ Female (2)

Q2.7 What gender do you currently identify as? (Check all that apply)

☐ Man/male (1)

☐ Woman/female (2)

☐ Transwoman/male-to-female (3)

☐ Transman/female-to-male (4)

☐ Genderqueer (5)

☐ Another identity (6)

Q2.8 What is your race? (Check all that apply)

☐ White (1)

☐ Black or African American (2)

☐ American Indian or Alaska Native (3)

☐ Asian (4)

☐ Native Hawaiian or Pacific Islander (5)

☐ Another race (6)

Q2.9 Are you Hispanic or Latino?

☐ Yes (28)

☐ No (29)

QPyD Eligibility Checklist

Q1 Welcome to the **Q**ueer Couples **P**regnancy **D**ecision-making (QPyD) Research Study! QPyD is a Penn Nursing and PSTAR research study about cisfemale, same-sex couples who are trying to have a baby. We are focusing on couples who are working with a healthcare provider (doctor, nurse practitioner, midwife, etc.) in this project, and would like your help. Please fill out the questionnaire to see if you and your significant other are eligible to participate!

First, please take a moment to create your username by entering your personal and private e-mail address below. Help us to protect your privacy by using an email address that only you have access to. This email address will be used to send your Amazon gift card *if you and your partner are both* eligible for and participate in the study.

Q2 Please share your personal, private email address for contact purposes.

Q3 Do you currently live in the greater Philadelphia metro area?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

Q4 What is the 5-digit zip code for the location where you primarily live?

Q5 How old are you?

Q6 Are you in a committed relationship?

- ☐ Yes (1)
- ☐ No (2)



Q7 How old is your significant other?

Q8 Do you identify as:

☐ Straight/Heterosexual (1)

☐ Lesbian/Homosexual (2)

☐ Bisexual (3)

☐ Queer (4)

☐ Same gender loving (5)

☐ Pansexual (6)

☐ Other (Please specify) (7) _____

Q9 Have you or your partner (or both) tried for pregnancy using donor sperm with assistance from a health care provider in the past 6 months?

☐ Yes (1)

☐ No (2)

☐ No, but plan to. When do you anticipate trying? (3)

Q10 Do you identify as Hispanic, Latina, or Spanish origin?

☐ Yes (1)

☐ No (2)

Q11 What races do you identify with? (Check all that apply)

☐ Asian (1)

☐ American Indian/Alaska Native (2)

☐ Black/African American (3)

☐ Native Hawaiian/ Samoan/Other Pacific Islander (4)

☐ White/Caucasian (5)

☐ Some other race (6) _____

End of Block: Default Question Block

