

Medical and Mental Health Implications of Gestational Surrogacy and Trends in State Regulations on Compensated Gestational Surrogacy

A Report Submitted to the New York State Legislature

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Executive Summary

As the New York State legislature considers legalizing compensated gestational surrogacy this legislative session, this report provides insight into (1) the impact of surrogacy on the medical and mental health of women who become surrogates and the children born through gestational surrogacy, and (2) how other state legislatures have addressed compensated gestational surrogacy in recent years.

Medical research demonstrates that there is significant growth in gestational surrogacy in the United States. The number of families working with gestational surrogates has quadrupled in the new millennium. Weill Cornell Medicine physicians and medical students reviewed the published literature on the medical and mental health impacts to women who undergo in vitro fertilization (IVF) to become gestational carriers. Although people outside the medical community have questioned the health and psychological impacts of surrogates to prohibit gestational surrogacy, the scientific literature review demonstrates that there are in fact no significant adverse medical or psychological outcomes for women who are gestational carriers nor the children they give birth to.

The Weill Cornell Medicine's literature review finds (among other things) that:

- Professional medical guidelines require rigorous screening of surrogates;
- Pregnancies of gestational carriers have higher risk of complications if they have had multiple embryo transfers, but increasingly only one embryo is transferred;
- Birth weights of children born to gestational carriers as compared to non-gestational carrier cycles is greater;
- There are no significant psychological differences between children born via surrogacy and children born through other methods;

Analysis by the researchers at the Cornell Law School of the laws of the fifty U.S. states and the District of Columbia reveals that (1) fifteen states and the District of Columbia have enacted regulations that explicitly permit compensated gestational surrogacy, (3) seven states have statutes that implicitly permit gestational surrogacy, and (4) there are no explicit or implicit statutes that permit or prohibit compensated gestational surrogacy in twenty-two states. In sum, as of the date of the report, compensated gestational surrogacy is practiced forty-four states.

Six states have some form of prohibitions on compensated gestational surrogacy with New York and Michigan as the only states in that group that impose criminal penalties. Even in states where compensated gestational surrogacy is prohibited, courts have allowed for surrogacy arrangements by, among other things, approving pre-birth orders. New York and Michigan are the only states in the country where compensated gestational surrogacy arrangements are generally avoided in practice likely because of the criminal sanctions imposed on those who facilitate such transactions.

When state legislatures have enacted statutes regulating compensated gestational surrogacy, they have moved towards legalizing it in recent years. Since 2000, fifteen states and the District of Columbia have acted to explicitly permit compensated gestational surrogacy. On the other hand, only four states have taken a prohibitive approach since 2000 and two of those states permit uncompensated gestational surrogacy.

In sum, the health and medical literature does not weigh in favor of continuing to prohibit gestational surrogacy in New York. There are generally no disparate health outcomes for gestational carriers as compared to non-gestational carriers using assisted reproductive technology (ART) nor are their disparate health impacts on children. Additionally, there are no disparate psychological impacts on gestational carriers as compared to women who have had spontaneously conceived pregnancies. States across the country are moving to legalize and regulate gestational surrogacy in the last decade.

Part 1: Health Impact Of Surrogacy For Gestational Carriers And Children

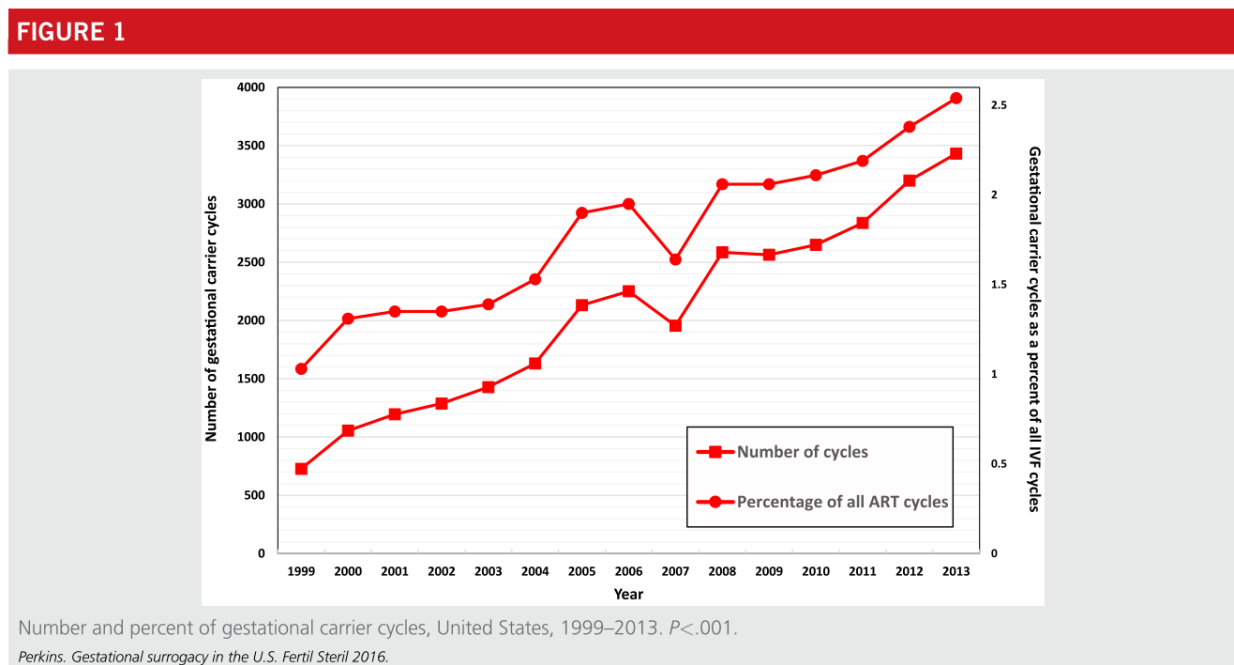
INTRODUCTION AND METHODOLOGY

This chapter provides a literature review of published literature on the health of surrogates. Searches in the medical and psychological literature using the search terms (gestational carrier OR surrogate mothers) AND (mental health OR pregnancy outcomes) in PubMed, Embase, and PsycINFO up to November 2019 was performed. The search yielded 468 articles, and screening was performed by one librarian and three researchers to identify original studies and case reports published in English on medical and psychological health outcomes of gestational carriers. The relevant findings are discussed in this section.

GESTATIONAL SURROGACY HAS BEEN STEADILY INCREASING IN THE UNITED STATES

Between 1999-2013, over 30,000 cycles of assisted reproductive technology (ART) were performed for gestational carriers (GC) in the United States, accounting for 18,400 infants born. GC use has been steadily increasing over the years and has quadrupled since 1999, with an increasing number of clinics performing GC cycles.¹ Of those who indicated a diagnosis of infertility, 10.5% of GC cycles were male same-sex couples (2009-2013). More recent data from the Society for Assisted Reproductive Technology (SART.org) reports that 5397 GC cycles in 2016 and 6921 GC cycles in 2017 were performed in the United States.²

Figure 1. Number and percent of gestational carrier cycles, United States, 1999-2013 (Perkins 2016).



DEMOGRAPHICS OF GESTATIONAL CARRIERS IN THE UNITED STATES

There are limited studies that report about the demographics of gestational carriers. Two of the larger studies are discussed here yet they are still limited in their sample size. The first study is a national online survey of 204 gestational carriers and traditional surrogates. In that study, a majority of gestational carriers identified as non-Hispanic and White and all of whom had achieved a high school diploma or higher level of education (Table 1).³

The second study was conducted in a single high volume maternal-fetal medicine practice by Kaing *et. al* in Los Angeles County. Of 104 patient records reviewed between 2012 and 2016, a majority of gestational carriers at this practice were Caucasian (52.8%).⁴

In Los Angeles County reported, the Maternal and Infant Health Survey in 2013-2014 reports that 18.5% of pregnant women identified as White, 57% as Hispanic, and 7.5% as Black, and 16.7% as Asian/Pacific Islander.⁵ On the other hand, gestational carriers in the practice studied in the Kaing *et. al* study disproportionately greater proportion of Caucasians and significantly lower proportion of Hispanics and Asians (Table 1) than the general pregnant population in Los Angeles County.⁶ In addition, the proportion of gestational carriers over the age of 35 was 21.1% which was not significantly different from that of the general Los Angeles County population (22.1%).

Table 1: Demographics of Gestational Carriers and Pregnant Women

	NATIONAL; GESTATIONAL CARRIERS <i>Fuchs (2016)</i> n=204	LOS ANGELES COUNTY: GESTATIONAL CARRIERS <i>Kaing (2017)</i> n=104	LOS ANGELES COUNTY; ALL PREGNANT WOMEN <i>Maternal and Infant Health Survey (2016)</i>
Age	33±5.3 years	30.8±4.7 years	
Race			
- White	92.6%	52.8%	18.5%
- Black	-	-	7.5%
- Other	7.4%	-	-
o Asian	-	3.4%	16.7%
Ethnicity			
- Hispanic	3.9%	38.2%	57%
- Non-Hispanic	96.1%	-	-
Education			
- Did not complete high school (or GED)	- 31.9%	- -	20.8% -
- High School Diploma	28.9%	-	-
- Associate degree	24.5%	-	-
- Bachelor's Degree	14.7%	-	-

- Graduate or Professional Degree			
Household Income (\$)	3.9%	-	
0–24,999	21.2%	-	
25,000–49,999	27.6%	-	
50,000–74,999	18.7%	-	
75,000–99,999	28.6%	-	
100,000 and up			
Employment status			
- Full time	55.7%	-	
- Part time	23.7%	-	
- Not employed, unspecified		49%	
○ Not employed, looking for work	2%	-	
○ Not employed, not looking for work	18.7%	-	
-			
Public Assistance in the Last Year			
- Yes	7.4%	-	
- No	92.6%	-	
First Time Carrier			
- Yes	65.2%	3.9%	
- No	34.8%	96.1%	

SCREENING OF GESTATIONAL CARRIERS IS RIGOROUS

Screening of gestational carriers in the United States involves detailed medical and psychological evaluations prior to initiating an arrangement. Guidelines for the screening and evaluation of gestational carrier arrangements have been developed by expert groups, including the American Society for Reproductive Medicine (ASRM), European Society of Human Reproduction and Embryology (ESHRE)⁷, and International Federation of Gynecology and Obstetrics (FIGO)⁸ to minimize negative medical and psychological outcomes. The current ASRM guidelines recommend psychosocial consultation, complete medical evaluation, legal representation, and compensation for the gestational carrier.⁹ Additionally, the guidelines recommend that the gestational carrier have at least one prior uncomplicated pregnancy, which favors improved pregnancy outcomes since these women are more likely to have a normal body mass index and favorable uterine environment.¹⁰

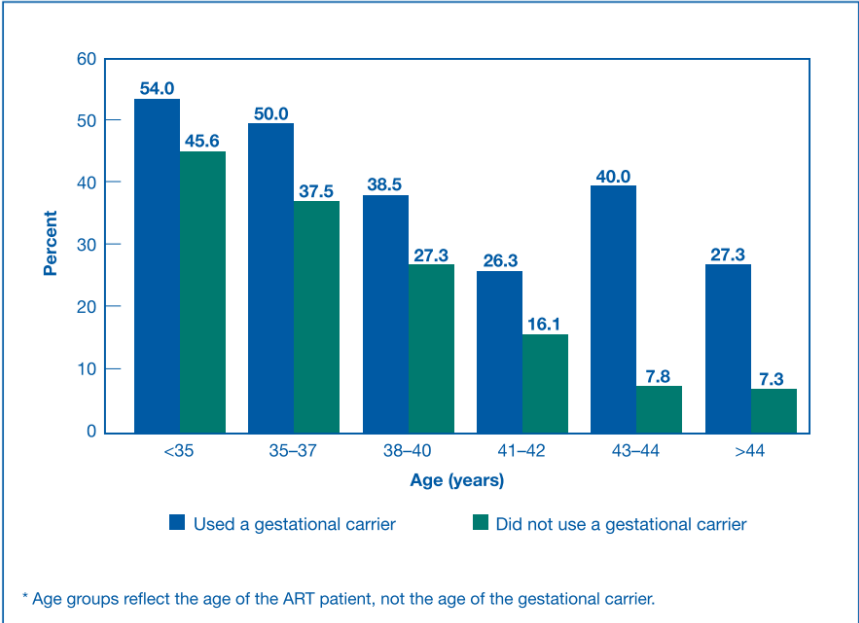
Of gestational carriers and traditional surrogates surveyed in the United States in 2015-2016, over 92% had a lawyer, 94.6% received a mental health evaluation, and 97.1% received a complete medical evaluation.¹¹ Over 90% of gestational carriers also indicated high social support, avoidance of alcohol and tobacco, and discussion with the intended parent(s) regarding prenatal testing and pregnancy termination.¹²

In one fertility center’s experience in Canada from 1998-2012, it was concluded that “a strict program, a clear and transparent process, and tight collaboration between the medical, legal and social professionals have guaranteed success in the vast majority of cases.”¹³ All but one child had successful transfer of their legal parenthood to the intended parents. In that case, the intended mother developed a psychiatric illness that rendered her unable to care for the child and the child was eventually adopted by another couple.¹⁴

PREGNANCY RATES OF GESTATIONAL SURROGACY PROGRAMS

According to the latest SART.org data from 2016, live birth rates for a gestational surrogate correlate with age of the intended parent, i.e., age of the egg, ranging from a high of 49.5% for ages under 35 to a low of 26.3% for ages 42 and older. It is reported that up to 70% of couples succeeded to become parents as a result of gestational surrogacy arrangements.¹⁵ The use of gestational carriers is associated with higher rates of pregnancy success compared to overall ART rates and may be due to a number of factors, including younger age of gestational carriers, previous history of uncomplicated pregnancy, and healthier patient characteristics.¹⁶ In 2016, national CDC data showed that percentages of live births when using a gestational carrier was 8-13% higher among ART patients aged 42 or younger, and 20-32% higher among patients older than 42 (Figure 2).¹⁷ Another recent study from 2018 also found that the use of gestational carriers was associated with higher rates of clinical pregnancy and live births compared to ART cycles that did not use a gestational carrier.¹⁸ The authors concluded that “among patients in whom carrying a pregnancy is not possible or is contraindicated, the benefit of a GC with a tested uterus is clear.”¹⁹

Figure 2: Percentages of Transfers Using Fresh Embryos from Fresh Nondonor Eggs That Resulted in Live Births Among ART Cycles That Used Gestational Carriers and Those That Did Not, by Age Group, 2016. (From 2016 CDC Assisted Reproductive Technology National Summary Report20)



OBSTETRIC OUTCOMES IN GESTATIONAL CARRIERS V. NON-GESTATIONAL CARRIERS

A gestational carrier undergoes the risks of pregnancy similar to those of any other pregnant woman but may be exposed to additional obstetric complications associated with multiple gestation pregnancies.²¹ The higher rate of twin pregnancies was attributed to GCs on average having more than two embryos transferred per cycle. Multiple gestation pregnancies, most often twin pregnancies, are well established to be higher risk pregnancies for preterm delivery and antepartum complications. Medical complications that are more common in women with multifetal gestations include gestational diabetes mellitus, hypertension, anemia, hemorrhage, cesarean delivery, and postpartum hemorrhage.²² Multiple gestation pregnancies are also associated with an increased risk of preterm birth and neonatal death primarily due to complications of prematurity. Due to these risks, it has been strongly recommended by the European Society of Human Reproduction and Embryology (ESHRE) and the American Society for Reproductive Medicine (ASRM) that only one embryo is transferred to the surrogate in each cycle.²³ Recent data from SART also show a trend towards increased practice of elective single embryo transfers from 2015-2017, from 45.1% of cycles for GCs under the age of 35 in 2015 to 62% in 2017.²⁴

Most data on obstetric outcomes of gestational carrier pregnancies are derived from case reports but suggest that rates of hypertensive disorders of pregnancy and placental complications were similar to those in non-gestational carrier ART cycles.²⁵ Reports of severe complications included three peripartum hysterectomies, two of which occurred in multiple gestation pregnancies.

The question of whether the process of ART itself poses a risk to the gestational carrier compared to natural methods of pregnancy is debatable as the literature is not clear. The increased risks compared to naturally conceived pregnancies is mostly secondary to an increased prevalence of multiple pregnancies as discussed above. Previous data from the early 2000s found increased adverse outcomes using ART for infertility treatment compared to expected rates from the general population, thought to be due to a manifestation of a prior unhealthy uterine environment, known complicated medical or obstetrical history, and techniques related to the process of ART itself.²⁶ One study sought to compare outcomes of gestational carrier pregnancies using ART against prior spontaneous pregnancies by the same woman, and found that gestational carrier pregnancies had increased adverse events including gestational diabetes, hypertension, and placenta previa.²⁷ This suggests that the process of ART itself can have adverse effects on the pregnancy. However, there is inherent bias in this study as gestational carriers are generally selected from a population who have had prior healthy pregnancies. Thus, any complications in a subsequent gestational carrier pregnancy were compared to an idealized group where maternal complications were almost entirely eliminated. Thus, this study is skewed and biased.

In fact, there has been much research into fresh versus frozen embryo transfers and whether the adverse outcomes of ART in infertility patients may be associated with an abnormal hormonal milieu secondary to hormonal stimulation or perhaps as a sequela of cryopreservation of embryos. Adverse maternal outcomes could be related to either. As one meta-analysis showed, frozen-thawed embryo transfer cycles had a lower risk of placenta previa and placental abruption but incurred a higher risk of pregnancy-induced hypertension and postpartum hemorrhage than fresh IVF-embryo transfer cycles. However, while

frozen-thawed embryos are employed in gestational carrier cycles, the aforementioned study was carried out in the infertile population which may in and of itself may have higher pregnancy risks. Overall, it appears that there is no conclusive evidence that there is a higher risk to gestational carrier pregnancies.²⁸

OUTCOMES FOR CHILDREN OF SURROGACY

Studies reporting on the gestational age of children born of gestational carrier pregnancies reveal similar rates of preterm birth (11.5%) compared to overall ART IVF singleton pregnancies (14.5%).²⁹ Birth weights of infants born of gestational carrier cycles have been reported to be similar or even higher than infants born from non-gestational carrier cycles.³⁰ Low birth weight is known to contribute to perinatal morbidity, and these findings suggest that gestational surrogacy may have a protective effect on birth weight, though this association was modest.

Data on birth defects of children born after surrogacy show similar rates of birth defects compared to fresh IVF and oocyte donation pregnancies, with a frequency of 0 to 6.5% of the surrogacy children, as compared to 1.1 to 2.9% for IVF children and 0.6 to 2.1% for children born after oocyte donation.³¹

The process of ART may also affect embryo quality. Woo, *et al.* controlled for the effect of the uterine environment by comparing outcomes of GC cycles to outcomes of spontaneously conceived pregnancies from the same carrier and found that infants born through surrogacy had increased rates of preterm birth and low birth weight.³²

CONCLUSION

The use of gestational carriers and ART has been steadily increasing since the 1990s and improving technology has led to better success rates of ART implantation and live births. In the United States, gestational carriers span a wide range of income and employment status, but generally represent a population with higher socioeconomic status, with only 2% of GCs who are unemployed and looking for work according to one study. A vast majority of gestational carriers are rigorously screened with medical and psychosocial evaluations using guidelines established by multiple international societies and report strong social support systems and healthy lifestyle habits. Pregnancy rates and obstetric outcomes are equal to or better than non-gestational carrier ART pregnancies, with the exception of an increased rate of multiple gestation pregnancy, largely attributed to the transfer of multiple embryos in each gestational carrier cycle. Because of this, there has been a trend towards single embryo transfer in recent years. Finally, there is a wide range of reported outcomes of the children of surrogacy, with earlier studies determining that there are similar or lower rates of preterm birth, low birth rate, and birth defects, but a more recent study suggesting that it may be the process of ART itself that can lead to poorer obstetric and perinatal outcomes. While there is a continued need for a longitudinal study of health outcomes of surrogacy on the mother and child, the current literature suggests that surrogacy in the United States is a safe process with improving outcomes, due to meticulous psychosocial and medical screening and improving technology in ART.

Part 2: Psychological Health Of Gestational Carriers And Their Children

INTRODUCTION AND METHODOLOGY

The articles discussed have been selected using the same process as the previous section. A review of the medical and psychological literature using the search terms (gestational carrier OR surrogate mothers) AND (mental health OR pregnancy outcomes) in PubMed, Embase, and PsycINFO up to November 2019 was performed. After screening the literature for relevance and overlapping results, 20 articles were relevant to the psychological outcomes of surrogates, the families of surrogates, and their biological children. The majority of studies had methodological limitations as they were qualitative interviews with a specific, and typically small, cohort of women. In addition, the articles were comprised of studies performed throughout the world, rather than in the United States of America alone. Discussing international literature is relevant as surrogacy can be a transnational process, between families of disparate residence. In addition, it is important to contrast the experiences of surrogacy in countries such as India to those in the United States of America, as the surrogacy processes have different legal processes and socio-cultural concepts.

PRIOR LITERATURE REVIEW

The largest and most recent systematic review of the literature published regarding the psychology of surrogacy analyzed obstetric outcomes, relationship between the surrogate mother and intended couple, surrogates' experiences after relinquishing the child, preterm birth, low birthweight, birth defects, perinatal mortality, child psychological development, parent – child relationship, and disclosure to the child.³³ The authors' systematic review included 55 articles from various countries. The authors found that the medical outcomes for children of gestational carriers were comparable to children conceived after fresh IVF and oocyte donation, and at age 10 there were no major psychological differences between children born after surrogacy and children born after other ART or natural conception. The majority of surrogate mothers studied scored within normal range on personality tests, the psychological wellbeing of children of surrogates was within normal limits, and there was no significant difference in psychological state between intended mothers and surrogate mothers. In sum, the psychological wellbeing of surrogate mothers and children are positive; this result is supported by the current review of literature.

SURROGACY FROM A GLOBAL PERSPECTIVE

Mainstream concepts of surrogacy are influenced by media and socio-cultural ideas of women. This has created skewed concepts of the surrogacy process and influenced policy decisions. Dr. Elly Teman, medical anthropologist, argues that the news-worthy construction of a surrogate, anxious to relinquish the child to the intended parents, is illustrative of cultural anxieties regarding western concepts of family and motherhood.³⁴ In fact, most recent literature concerning the psychological health of surrogates/gestational

carriers focuses on detailing the experience of the surrogacy through the perspective of the surrogate herself.

The process, experience, and concepts of surrogacy are intimately shaped by the cultural and socioeconomic context of each nation in which they exist. Policies are reflective of the diverse notions of surrogacy. Countries, and within the United States of America, states, have disparate regulations of surrogacy. In addition to informed consent and assuring bodily autonomy, these regulations are targeted at protecting the surrogate from decisions she may later regret and from financial exploitation. Yet of note, the majority of research aimed at uncovering explanations of the surrogates' coping mechanisms for emotionally handling the peripartum and relinquishment period unequivocally show she has feelings of joy, accomplishment, pride, and satisfaction.

PSYCHOLOGICAL OUTCOMES OF CHILDREN BORN BY GESTATIONAL SURROGACY

Children born by surrogacy do not have adverse psychological outcomes. The most robust of these studies on psychological outcomes of children were conducted by Professor Susan Golombok, Director of the Centre for Family Research at the University of Cambridge in the United Kingdom. This longitudinal research project followed a small sample size of families and children born by surrogacy, donor insemination, egg donation, and natural conception. Each sample size was less than 100 and the surrogate group was the smallest, averaging less than 40 surrogate families by the end of the study.³⁵ However, the authors noted a significant difference at age 7- children of surrogacy families showed higher levels of adjustment difficulties.³⁶ These differences normalized by age 10.³⁷ This is in line with data that adoptive children begin to have higher rates of adjustment difficulties at age 7, the time at which children begin to understand their biological origins. In adolescence, there were no significant differences between adjustment problems, psychological well-being, or self-esteem in children born through donor insemination, donor egg, surrogacy, or natural conception.³⁸ In fact, the families created through surrogacy reported fewer family problems as a whole when compared to donor conception.³⁹

In a similar study by the same research team, interviews were conducted with 33 families that utilized surrogacy. By age 10, children in 91% of families had been told that they were conceived through a surrogacy birth. The majority of those children showed some level of understanding, and those who were in contact with their surrogate used kind, positive words to describe them.⁴⁰ Similarly, in a cohort of 40 gay father families with children born via surrogacy, the study team found that the majority of children became aware of their biological origins by age 9. The level of understanding the child increased with age.⁴¹ Finally, the study team compared levels of adjustment of children born through surrogacy to gay father and to lesbian mother families created through donor insemination and found that children in both family structures showed high levels of adjustment.

This research is limited due to a small sample size and a lack of studies performed, but overall concludes there are no significant psychological differences between children born via surrogacy and children born through other methods.

PSYCHOLOGICAL OUTCOMES OF THE BIOLOGICAL CHILDREN OF SURROGATES

Structured interviews have also been used to analyze the psychological outcomes of biological children of surrogates, i.e. the spontaneously conceived children of surrogates prior to carrying another couple's child. As with the studies assessing surrogate mother's outcomes, children of surrogates overall had good psychological outcomes. In a small cohort of families from the UK, the majority of children viewed the surrogacy experience as positive. Additionally, the majority had a positive view of their family life, and about half had a good relationship with the child of the surrogacy. Most children viewed their mother's involvement in the surrogacy process as positive.⁴²

In a qualitative, cross-sectional study of American children of surrogates, all children scored low risk for emotional disorders, behavioral disorders, or hyperactivity/concentration problems. Moreover, these children scored average or exceedingly high on the Piers Harris 1 questionnaire, indicating a positive self-appraisal across multiple domains. Of note, a minority of children expressed negative emotions about their mother being a surrogate or giving up the child to another couple.⁴³ The study did not elucidate the reasons for these negative emotions and was the first and only study of its type.

GLOBAL DISPARITIES IN PSYCHOLOGICAL OUTCOMES OF SURROGATES/GESTATIONAL CARRIERS

This section evaluates the psychological outcomes of surrogate mothers in various countries that utilize varying degrees of western medical practices.

United Kingdom

In the United Kingdom, altruistic surrogacy is legal while commercialized surrogacy is illegal. Semi-structured interviews with surrogates took place 5-12 years after their surrogacy experience in order to assess long term psychological outcomes.⁴⁴ The study team assessed the frequency and type of contact surrogates had with the intended parents and child, as well as the surrogates' feelings about level of contact, each surrogate's relationship with each child and parent, and her experience of and motivation for each surrogacy. Psychological health questionnaires and qualitative interviews revealed that the majority of surrogates remained in contact with families and the majority of these relationships were positive. Most surrogates were happy with their level of contact with the intended parents. Those that did not feel positively were those with no contact, and 7 of 8 women with no contact expressed wanting some contact. Overwhelmingly, the women viewed their surrogacy(s) as positive experiences. There was no significant difference in psychological outcomes for gestational vs. traditional surrogacy type. Their original motivations were mostly wanting to help a childless couple, and motivations for multiple surrogacies were to "help couples have a sibling for an existing child." In summary, no psychological health problems were recorded at the time of data collection. A small minority of women reported post-partum depression, an outcome common to non-surrogate pregnancies, and one reported depression because she could not be a surrogate anymore.

Psychological states analyzed throughout pregnancy (first, second, and third trimester) exhibit similar findings. In a different group of women recruited from the UK, results showed that intended mothers were

more anxious about the well-being of the fetus than surrogates, a reflection of the subsequent attachment level of intended mothers and surrogates after the relinquishment period.⁴⁵ In fact, scores on psychological questionnaires completed longitudinally during pregnancy show surrogates scoring in the middle range, a reflection of a dissociation of meaning to the pregnancy. The other consistent difference in outcomes between intended mothers and surrogate mothers was the lack of social support received by the surrogates. It is not clear how this lack of support affects the social wellbeing of surrogate mothers, and future analysis of this support is needed to characterize how best to institute these systems.

Research demonstrates that the positive experiences of surrogates and intended parents are not exclusive to heterosexual couples. While certain legal systems prohibit surrogacy for gay couples, there are no adverse psychological outcomes for these arrangements that have been studied to date. While the data is limited, gay fathers studied exhibited feelings of being content or neutral with their relationship with their surrogate and egg donor. The only feelings of discontent that were appreciated were linked with wanting more contact with the surrogate after birth.⁴⁶ Moreover, a UK study evaluated the wellbeing of gay fathers with children born via surrogacy with lesbian mother families and heterosexual parents who utilized IVF and found no significant differences in parental wellbeing in the domains of parental stress, depression, anxiety, and relationship satisfaction.⁴⁷

Canada

In Canada, altruistic surrogacy became legal under the Assisted Human Reproduction Act 2004. A 2019 large, qualitative analysis before, during, and after the surrogacy phase found that surrogacy was viewed as a positive and meaningful experience that was impactful to others' lives.⁴⁸ The majority of surrogate mothers had a harmonious relationship with the intended parents and maintained ongoing contact with the surrogacy family post birth. Of note, and contrary to legislation outlawing commercial surrogacy, some surrogates reported feeling exploited without reimbursement.

United States

Rigorous studies of the psychological outcomes of surrogates in the United States of America have not been performed, although qualitative interviews with American and Israeli surrogates highlight similar themes found in other regions of the world. US and Israeli surrogates consider surrogacy a morally meaningful undertaking and do not have adverse psychological outcomes by participating in this arrangement.⁴⁹ While state by state legislation differs in the regulation of this practice, there are not sufficient data to support these regulations if their intention is to protect the psychological well-being of surrogate mothers.

India

The experience of gestational carrier surrogacy in India is different than that of Western medical settings. It is clear that the lack of social support, legal support, and society's lack of acceptance has direct impacts on the experience of Indian surrogates. India ranked high amongst medical tourism for surrogacy.⁵⁰ While most research pertaining to the experience of surrogates in India are anthropologic in nature, recent empirical data has elucidated the poor psychological outcomes of Indian surrogates. In a qualitative,

cross-sectional study in Anand, Gujarat, India, 15 surrogates from one fertility clinic were interviewed.⁵¹ The cohort was comprised of illiterate women aged 21-30, who had been surrogates twice on average. They were all married and had given birth to at least one biological child. Their motivations for surrogacy were financial in nature. Moreover, they reported a persistent stigma that forced many to leave the community and relocate after completing surrogacy. Compensation for the women interviewed was less than ten thousand US dollars each, and many women reported that they lived in “surrogacy hostels” during the pregnancy. Finally, while women in western cultures operate independently from their partner, husbands in India had to allow the wife to be a surrogate by signing papers. Interestingly, all women underwent cesarean sections for reasons not explained, putting women at risk for infections, operative complications, and longer recovery times.

In a similar study in Mumbai, surrogate mothers and intended mothers underwent qualitative interviews during and after pregnancy.⁵² Compared to intended mothers during pregnancy and post birth, surrogates had higher levels of depression. Predictors of postpartum depression for surrogate mothers included low social support, hiding one’s surrogacy, and criticism from others. Surrogate mothers had lower emotional attachment to the fetus than intended mothers. A strong emotional bond with the fetus was not, however, associated with higher rates of depression. These results elucidate cultural beliefs and international systems that unequivocally differ from surrogacy experiences in western countries such as the UK, Israel, and Canada. These disparities have shaped policy in India. In 2018, commercial and transnational surrogacy was made illegal under the Surrogacy Regulation Bill, but the bill to ban it domestically has not passed both houses of Parliament. Thailand has also made international surrogacy illegal.

Although India has placed some legal regulations on transnational surrogacy, there are still no regulations on domestic surrogacy. Other countries also face legal challenges to ensure ethical treatment of surrogate mothers. Notably in Nigeria, “baby factories,” or hospitals, homes, and orphanages where young women can give birth and sell their baby on the black market, are displacing western concepts of surrogacy. While the United States of America and other western nations have psychological safeguards for surrogate mothers in part due to the legality and regulation of the process, Nigerian national policies are currently absent in the baby factories. The government, however, has attempted to stop these practices when they do occur. It is suggested that legal-ethical guidelines for surrogacy practice, access to assistive reproductive technology, de-stigmatization of infertility, and prophylaxis of infertility (via treating sexually transmitted infections that precede this diagnosis) are all important in order to reduce the illegal practices of baby factories.⁵³ Examples like these highlight the need for systematic regulation of surrogacy practices.

CONCLUSION

Limited research has been performed on the psychological outcomes of surrogates. The data that has been collected in Western medical systems overwhelmingly shows that surrogate mothers and their families have good psychological outcomes and feel positively about the experience. Moreover, the biological children and children of surrogate pregnancies show comparable psychological outcomes to children born

through other means. These results are consistent between gay and heterosexual couples utilizing surrogacy. Future studies should be performed in a large, multi-centered, systematic, longitudinal fashion to corroborate these results. Surrogates and intended families should continue to have access to psychological services in order to counsel them on expectations and provide support.

PART 3: TRENDS IN SURROGACY REGULATIONS IN U.S. STATES

INTRODUCTION AND METHODOLOGY

When legislatures across the United States have passed bills on surrogacy, the trend has been to legalize compensated gestational surrogacy. In many states where legislatures have not enacted detailed regulations on surrogacy, they have acted to implicitly authorize it. In sum, compensated gestational surrogacy is practiced forty-four states either because the state legislature has permitted it or because it has been silent. Six state legislatures in the United States have taken prohibitive approaches and in four of those states surrogacy is still practiced.

Researchers at the Cornell Law School studied the statutes and case law of the fifty states in the United States and the District of Columbia. We also reviewed secondary sources to understand how the laws are applied in practice. In many states, our research reveals the absence of statutes and cases.

MANY LEGISLATURES EXPLICITLY PERMIT AND REGULATE SURROGACY

Fifteen states and the District of Columbia have enacted regulations that explicitly permit compensated gestational surrogacy and provide varying levels of regulations. For example, New Jersey enacted a statute in 2018 to explicitly permit compensated surrogacy.⁵⁴ Seven states have statutes that implicitly permit gestational surrogacy. For example, in some states, the legislature has specifically noted that the transfer of physical and legal custody of a child pursuant to a surrogacy contract do not violate the protections against selling children.⁵⁵ Yet, those statutes provide no other guidance on gestational surrogacy.

Six states have some form of prohibition on compensated gestational surrogacy and New York and Michigan are the only states in that group that impose criminal penalties. In the remaining twenty-two states, there is no explicit or implicit statute that permits or prohibits surrogacy. The attached Appendix lists states in four categories: (1) states that have not enacted any statutes addressing compensated gestational surrogacy, (2) states that have enacted a statute explicitly permitting compensated gestational surrogacy, (3) states that have enacted a statute explicitly prohibiting compensated gestational surrogacy, and (4) states that have enacted statutes that implicitly sanction compensated gestational surrogacy. In total, compensated gestational surrogacy is practiced forty-four states either because the state legislature has permitted it or because it has been silent (category 1, category 2 and category 3). In the remaining six states (category 4), compensated gestational surrogacy is prohibited in some manner by statutes, but in four of those states it still occurs in practice.

GESTATIONAL SURROGACY ARRANGEMENTS ARE ENTERED INTO IN THE VAST MAJORITY OF U.S. STATES

In the twenty-two states that have not enacted a statute that permits or prohibits surrogacy, courts support surrogacy in varying ways, including by approving pre-birth orders.⁵⁶ Moreover, in two states where only uncompensated gestational services are permitted (e.g., Louisiana and Nebraska), intended parents often pay for costs incurred by the gestational carrier. In practice, the costs and expenses can be inflated to equal to the market costs of compensated surrogacy. New York and Michigan⁵⁷ are the only states in the country where compensated gestational surrogacy is generally avoided likely because of the criminal sanctions imposed on those who facilitate such transactions.

THE TREND IS TOWARDS LEGALIZING GESTATIONAL SURROGACY BY STATUTE

When state legislatures have addressed surrogacy, they have typically acted to legalize compensated gestational surrogacy. Since 2000, fifteen states and the District of Columbia have enacted statutes that explicitly permit compensated gestational surrogacy. On the other hand, only four states have taken a prohibitive approach since 2000 and two of those states permit uncompensated gestational surrogacy. Other states are also in the process of reevaluating their laws. For example, Hawaii has convened a working group at behest of the legislature to explore the risks and benefits of altering their laws to allow gestational surrogacy.⁵⁸

THE CPSA PROVIDES COMPREHENSIVE PROTECTIONS TO GESTATIONAL SURROGATES

The Judgments of Parentage of Children Conceived Through Assisted Reproduction or Pursuant to Surrogacy Agreements Bill (also referred to as the “Child-Parent Security Act” or “CPSA”) is included in Governor Cuomo’s 2020 budget.⁵⁹

The CPSA addresses the parentage of all children born through third-party reproduction. Part Six of the CPSA contains a “surrogate bills of rights” which deals with health and welfare decisions, legal counsel, health insurance and medical costs, counseling, life insurance and termination of the surrogacy contract.⁶⁰

Many states also provide protections for surrogates, but the CPSA is more comprehensive than any other state statute we have reviewed in terms of protections for surrogates.

CONCLUSION

The trend among state legislatures in the United States is to permit rather than prohibit compensated gestational surrogacy. Since 2000, fifteen states and the District of Columbia have acted to explicitly permit compensated gestational surrogacy. On the other hand, only four states have taken a prohibitive approach since 2000 and two of those states permit uncompensated gestational surrogacy.

In forty-four states there is no prohibition on surrogacy by statute or there is explicit or implicit permission. Even in the six states that have statutes that appear to prohibit surrogacy, courts have granted pre-birth orders to intended parents and have issued other pro-surrogacy decisions. Consequently,

gestational surrogacy is practiced in almost every state in the country except for New York and Michigan where criminal penalties are imposed.

APPENDIX

LEGISLATION ON COMPENSATED GESTATIONAL SURROGACY IN THE FIFTY STATES

STATES WITH NO STATUTES (TOTAL: 22)	STATES THAT EXPLICITLY PERMIT BY STATUTE (TOTAL: 15) ⁶¹	STATES THAT IMPLICITLY PERMIT BY STATUTE (TOTAL: 7) ⁶²	STATES THAT PROHIBIT BY STATUTE (TOTAL: 6) ⁶³
Alabama	Oklahoma (2019)	Arkansas	Arizona (2011)
Alaska	New Jersey (2018)	Connecticut	Louisiana (2016)
Colorado	Vermont (2018)	Iowa	Indiana (2006)
Georgia	Washington (2018)	New Mexico	Nebraska (2007)
Hawaii	Florida (2016)	Oregon	New York (1992)
Idaho	Maine (2015)	Tennessee	Michigan (1988)
Kansas	New Hampshire (2015)	West Virginia	
Kentucky	Delaware (2013)		
Maryland	Nevada (2013)		
Massachusetts	California (2015)		
Minnesota	Utah (2008)		
Mississippi	Illinois (2005)		
Missouri	Texas (2005)		
Montana	North Dakota (2005)		
North Carolina	Virginia (2019)		
Ohio			
Pennsylvania			
Rhode Island			
South Carolina			
South Dakota			
Wisconsin			
Wyoming			

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REFERENCES

- ¹ Perkins KM, Boulet SL, Jamieson DJ, Kissin DM. Trends and outcomes of gestational surrogacy in the United States. *Fertil Steril*. 2016;106(2):435-442.e2. doi:10.1016/j.fertnstert.2016.03.050.
- ² National Summary Report. https://www.sartcorsonline.com/rptCSR_PublicMultYear.aspx?reportingYear=2016#donor-donated-embryo. Accessed December 10, 2019.
- ³ Fuchs EL, Berenson AB. Screening of gestational carriers in the United States. *Fertil Steril*. 2016;106(6):1496-1502. doi:10.1016/j.fertnstert.2016.07.1111
- ⁴ Kaing A, Scibetta EW, Gaw SL, et al. Gestational carriers: the demographics behind a frequently overlooked population. *Fertil Steril*. 2017;108(3):e119. doi:10.1016/j.fertnstert.2017.07.365
- ⁵ Rinki C, Michael Curtis MP, Song N, et al. California Statewide, County and Regional Snapshots of Maternal and Infant Health Data Acknowledgements. *Cit MIHA Rep*. 2016:2013-2014. www.cdph.ca.gov/MIHA. Accessed February 14, 2020.
- ⁶ Kaing A, Scibetta EW, Gaw SL, et al. Gestational carriers: the demographics behind a frequently overlooked population. *Fertil Steril*. 2017;108(3):e119. doi:10.1016/j.fertnstert.2017.07.365
- ⁷ Shenfield F, Pennings G, Cohen J, Devroey P, de Wert G, Tarlatzis B. ESHRE Task Force on Ethics and Law 10: Surrogacy. *Hum Reprod*. 2005;20(10):2705-2707. doi:10.1093/humrep/dei147
- ⁸ Milliez J. Surrogacy. *Int J Gynecol Obstet*. 2008;102(3):312-313. doi:10.1016/j.ijgo.2008.04.016
- ⁹ Dar S, Lazer T, Swanson S, et al. Assisted reproduction involving gestational surrogacy: An analysis of the medical, psychosocial and legal issues: Experience from a large surrogacy program. *Hum Reprod*. 2015;30(2):345-352. doi:10.1093/humrep/deu333
- ¹⁰ Perkins KM, Boulet SL, Jamieson DJ, Kissin DM. Trends and outcomes of gestational surrogacy in the United States. *Fertil Steril*. 2016;106(2):435-442.e2. doi:10.1016/j.fertnstert.2016.03.050
- ¹¹ Fuchs EL, Berenson AB. Screening of gestational carriers in the United States. *Fertil Steril*. 2016;106(6):1496-1502. doi:10.1016/j.fertnstert.2016.07.1111
- ¹² Fuchs EL, Berenson AB. Screening of gestational carriers in the United States. *Fertil Steril*. 2016;106(6):1496-1502. doi:10.1016/j.fertnstert.2016.07.1111
- ¹³ Dar S, Lazer T, Swanson S, et al. Assisted reproduction involving gestational surrogacy: An analysis of the medical, psychosocial and legal issues: Experience from a large surrogacy program. *Hum Reprod*. 2015;30(2):345-352. doi:10.1093/humrep/deu333
- ¹⁴ Pfeifer S, Butts S, Fossum G, et al. Recommendations for practices utilizing gestational carriers: a committee opinion. *Fertil Steril*. 2017;107(2):e3-e10. doi:10.1016/j.fertnstert.2016.11.007
- ¹⁵ Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update*. 2016;22(2):260-276. doi:10.1093/humupd/dmv046
- ¹⁶ Perkins KM, Boulet SL, Jamieson DJ, Kissin DM. Trends and outcomes of gestational surrogacy in the United States. *Fertil Steril*. 2016;106(2):435-442.e2. doi:10.1016/j.fertnstert.2016.03.050
- ¹⁷ Department of Health U, Services Centers for Disease Control H. *2016 Assisted Reproductive Technology National Summary Report.*; 2016. <https://www.cdc.gov/art/reports/>. Accessed February 14, 2020.
- ¹⁸ Murugappan G, Farland L V., Missmer SA, Correia KF, Anchan RM, Ginsburg ES. Gestational carrier in assisted reproductive technology. *Fertil Steril*. 2018;109(3):420-428. doi:10.1016/j.fertnstert.2017.11.011

-
- ¹⁹ Murugappan G, Farland L V., Missmer SA, Correia KF, Anchan RM, Ginsburg ES. Gestational carrier in assisted reproductive technology. *Fertil Steril*. 2018;109(3):420-428. doi:10.1016/j.fertnstert.2017.11.011
- ²⁰ Department of Health U, Services Centers for Disease Control H. *2016 Assisted Reproductive Technology National Summary Report*; 2016. <https://www.cdc.gov/art/reports/>. Accessed February 14, 2020.
- ²¹ Murugappan G, Farland L V., Missmer SA, Correia KF, Anchan RM, Ginsburg ES. Gestational carrier in assisted reproductive technology. *Fertil Steril*. 2018;109(3):420-428. doi:10.1016/j.fertnstert.2017.11.011
- ²² ACOG. PB169 - Multifetal gestations. 2015;126(5):1118-1119.
- ²³ Shenfield F, Pennings G, Cohen J, Devroey P, de Wert G, Tarlatzis B.ESHRE Task Force on Ethics and Law 10: Surrogacy. *Hum Reprod*. 2005;20(10):2705-2707. doi:10.1093/humrep/dei147 and Penzias A, Bendikson K, Butts S, Coutifaris C, Falcone T, Fossom G, Gitlin S, Gracia C, Hansen K, Mersereau J, Odem R, Rebar R, Reindollar R, Rosen M, Sandlow J, Vernon M. ASRM standard embryo transfer protocol template: a committee opinion. *Fertil Steril*. 2017 Apr;107(4):897-900. doi: 10.1016/j.fertnstert.2017.02.108. Epub 2017 Mar 11. PubMed PMID: 28292611.
- ²⁴ National Summary Report. https://www.sartcorsonline.com/rptCSR_PublicMultYear.aspx?reportingYear=2016#donor-donated-embryo. Accessed December 10, 2019.
- ²⁵ Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update*. 2016;22(2):260-276. doi:10.1093/humupd/dmv046
- ²⁶ Schieve LA, Ferre C, Peterson HB, Macaluso M, Reynolds MA, Wright VC. Perinatal outcome among singleton infants conceived through assisted reproductive technology in the United States. *Obstet Gynecol*. 2004;103(6):1144-1153. doi:10.1097/01.AOG.0000127037.12652.76 and Duffy DA, Nulsen JC, Maier DB, Engmann L, Schmidt D, Benadiva CA. Obstetrical complications in gestational carrier pregnancies. *Fertil Steril*. 2005;83(3):749-754. doi:10.1016/j.fertnstert.2004.08.023.
- ²⁷ Woo I, Hindoyan R, Landay M, et al. Perinatal outcomes after natural conception versus in vitro fertilization (IVF) in gestational surrogates: a model to evaluate IVF treatment versus maternal effects. *Fertil Steril*. 2017;108(6):993-998. doi:10.1016/j.fertnstert.2017.09.014
- ²⁸ Sha T, Yin X, Cheng W, Massey IY. Pregnancy-related complications and perinatal outcomes resulting from transfer of cryopreserved versus fresh embryos in vitro fertilization: a meta-analysis. *Fertil Steril*. 2018 Feb;109(2):330-342.e9. doi: 10.1016/j.fertnstert.2017.10.019. Epub 2018 Jan 11. Review. PubMed PMID: 29331236.
- ²⁹ Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update*. 2016;22(2):260-276. doi:10.1093/humupd/dmv046
- ³⁰ Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update*. 2016;22(2):260-276. doi:10.1093/humupd/dmv046 and Murugappan G, Farland L V., Missmer SA, Correia KF, Anchan RM, Ginsburg ES. Gestational carrier in assisted reproductive technology. *Fertil Steril*. 2018;109(3):420-428. doi:10.1016/j.fertnstert.2017.11.011.
- ³¹ Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update*. 2016;22(2):260-276. doi:10.1093/humupd/dmv04
- ³² Woo I, Hindoyan R, Landay M, et al. Perinatal outcomes after natural conception versus in vitro fertilization (IVF) in gestational surrogates: a model to evaluate IVF treatment versus maternal effects. *Fertil Steril*. 2017;108(6):993-998. doi:10.1016/j.fertnstert.2017.09.014
- ³³ Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update*. 2016;22(2):260-276. doi:10.1093/humupd/dmv046
- ³⁴ Teman E. The social construction of surrogacy research: An anthropological critique of the psychosocial scholarship on surrogate motherhood. *Soc Sci Med*. 2008;67(7):1104-1112. doi:10.1016/j.socscimed.2008.05.026

-
- ³⁵ Golombok S, Readings J, Blake L, et al. Children Conceived by Gamete Donation: Psychological Adjustment and Mother-Child Relationships at Age 7. *J Fam Psychol.* 2011;25(2):230-239. doi:10.1037/a0022769; Golombok S, MacCallum F, Murray C, Lycett E, Jadv V. Surrogacy families: Parental functioning, parent-child relationships and children's psychological development at age 2. *J Child Psychol Psychiatry Allied Discip.* 2006;47(2):213-222. doi:10.1111/j.1469-7610.2005.01453.x; Golombok S, Murray C, Jadv V, Lycett E, MacCallum F, Rust J. Non-genetic and non-gestational parenthood: Consequences for parent-child relationships and the psychological well-being of mothers, fathers and children at age 3. *Hum Reprod.* 2006;21(7):1918-1924. doi:10.1093/humrep/del039
- ³⁶ Golombok S, Readings J, Blake L, et al. Children Conceived by Gamete Donation: Psychological Adjustment and Mother-Child Relationships at Age 7. *J Fam Psychol.* 2011;25(2):230-239. doi:10.1037/a0022769
- ³⁷ Golombok S, Blake L, Casey P, Roman G, Jadv V. Children born through reproductive donation: A longitudinal study of psychological adjustment. *J Child Psychol Psychiatry Allied Discip.* 2013;54(6):653-660. doi:10.1111/jcpp.12015
- ³⁸ Golombok S, Blake L, Casey P, Roman G, Jadv V. Children born through reproductive donation: A longitudinal study of psychological adjustment. *J Child Psychol Psychiatry Allied Discip.* 2013;54(6):653-660. doi:10.1111/jcpp.12015
- ³⁹ Golombok S, Blake L, Casey P, Roman G, Jadv V. Children born through reproductive donation: A longitudinal study of psychological adjustment. *J Child Psychol Psychiatry Allied Discip.* 2013;54(6):653-660. doi:10.1111/jcpp.12015
- ⁴⁰ Jadv V, Imrie S, Golombok S. Surrogate mothers 10 years on: A longitudinal study of psychological well-being and relationships with the parents and child. *Hum Reprod.* 2015;30(2):373-379. doi:10.1093/humrep/deu339
- ⁴¹ Blake L, Carone N, Slutsky J, Raffanella E, Ehrhardt AA, Golombok S. Gay father surrogacy families: relationships with surrogates and egg donors and parental disclosure of children's origins. *Fertil Steril.* 2016;106(6):1503-1509. doi:10.1016/j.fertnstert.2016.08.013
- ⁴² Jadv V, Imrie S. Children of surrogate mothers: Psychological well-being, family relationships and experiences of surrogacy. *Hum Reprod.* 2014;29(1):90-96. doi:10.1093/humrep/det410
- ⁴³ Riddle MP. An investigation into the psychological well-being of the biological children of surrogates. *Cogent Psychol.* 2017;4(1):1-12. doi:10.1080/23311908.2017.1305035
- ⁴⁴ Imrie S, Jadv V. The long-term experiences of surrogates: Relationships and contact with surrogacy families in genetic and gestational surrogacy arrangements. *Reprod Biomed Online.* 2014;29(4):424-435. doi:10.1016/j.rbmo.2014.06.004
- ⁴⁵ Van den Akker OBA. Psychological trait and state characteristics, social support and attitudes to the surrogate pregnancy and baby. *Hum Reprod.* 2007;22(8):2287-2295. doi:10.1093/humrep/dem155
- ⁴⁶ Blake L, Carone N, Slutsky J, Raffanella E, Ehrhardt AA, Golombok S. Gay father surrogacy families: relationships with surrogates and egg donors and parental disclosure of children's origins. *Fertil Steril.* 2016;106(6):1503-1509. doi:10.1016/j.fertnstert.2016.08.013
- ⁴⁷ Gelderen LVR Van, Bos HWM, Jorgensen TD, et al. Wellbeing of gay fathers with children born through surrogacy: A comparison with lesbian-mother families and heterosexual IVF parent families. *Hum Reprod.* 2018;33(1):101-108. doi:10.1093/humrep/dex339
- ⁴⁸ Yee S, Hemalal S, Librach CL. "Not my child to give away": A qualitative analysis of gestational surrogates' experiences. *Women and Birth.* 2019. doi:10.1016/j.wombi.2019.02.003
- ⁴⁹ Teman E, Berend Z. Surrogate non-motherhood: Israeli and US surrogates speak about kinship and parenthood. *Anthropol Med.* 2018;25(3):296-310. doi:10.1080/13648470.2017.1401825
- ⁵⁰ Deonandan R. Recent trends in reproductive tourism and international surrogacy: Ethical considerations and challenges for policy. *Risk Manag Healthc Policy.* 2015;8:111-119. doi:10.2147/RMHP.S63862
- ⁵¹ Karandikar S, Gezinski LB, Carter JR, Kaloga M. Economic Necessity or Noble Cause? A Qualitative Study Exploring Motivations for Gestational Surrogacy in Gujarat, India. *Affil - J Women Soc Work.* 2014;29(2):224-236.

doi:10.1177/0886109913516455

⁵² Lamba N, Jadv V, Kadam K, Golombok S. The psychological well-being and prenatal bonding of gestational surrogates. *Hum Reprod.* 2018;33(4):646-653. doi:10.1093/humrep/dey048

⁵³ Makinde OA, Makinde OO, Olaleye O, Brown B, Odimegwu CO. Baby factories taint surrogacy in Nigeria. *Reprod Biomed Online.* 2016;32(1):6-8. doi:10.1016/j.rbmo.2015.10.001

⁵⁴ N.J. REV. STAT. ANN. § 9:17-64 (West 2019).

⁵⁵ TENN. CODE ANN. § 36-1-102(West 2019)) (case interpreting statute *In re Baby*, 447 S.W.3d 807, 814 (Tenn. 2014)).

⁵⁶ Indiana ((IND. CODE § 31-20-1-3 (2019))(court recognized intended mother as mother rather than surrogacy in *In re Paternity & Maternity of Infant R.*, 922 N.E.2d 59, 61 (Ind. Ct. App. 2010)); Nebraska (NEB. REV. STAT. § 25-21, 200 (West 2019)); Louisiana (LA. STAT. ANN. §§ 9:2718-2720)(2019) Arizona (ARIZ REV. STAT. ANN ST § 25-218) (2019) (abrogated by *Soos v. Superior Court in & for Cty. of Maricopa*, 182 Ariz. 470, 897 P.2d 1356 (Ct. App. 1994)).

⁵⁷ MICH. COMP. LAWS ANN. § 722.855.

⁵⁸ Report on Surrogacy and Gestational Carrier Agreements See <https://ag.hawaii.gov/wp-content/uploads/2017/12/2018-Report-on-Surrogacy-and-Gestational-Carrier-Agreements.pdf>.

⁵⁹ The Judgments of Parentage of Children Conceived Through Assisted Reproduction or Pursuant to Surrogacy Agreements Bill, <https://nyassembly.gov/2020budget/2020executive/A9506a.pdf>, page 67.

⁶⁰ The Judgments of Parentage of Children Conceived Through Assisted Reproduction or Pursuant to Surrogacy Agreements Bill, <https://nyassembly.gov/2020budget/2020executive/A9506a.pdf>, page 67.

⁶¹ *Compensated Gestational Surrogacy Explicitly Permitted by Statute:* California (CAL. FAM. CODE §§ 7960-7962 (West 2019)); Delaware (DEL. CODE ANN. TIT.13, §§ 8-801-813(2019)); Florida (FLA. STAT. ANN. § 742.15(2019)) Illinois (750 Ill. Comp. Stat. Ann IL ST CH 750 47/5-75(2019)); Maine (ME STAT TIT. 19-A §§ 1931-1939 (2019)); Nevada (NEV. REV. STAT § 126.710)(2019); New Hampshire (N.H. REV. STAT. § 168-B:11)(2019); New Jersey (N.J. REV. STAT. ANN. § 9:17-64(West 2019)); North Dakota (N.D. CENT. CODE ANN. § 14-18-08(2019)); Oklahoma (2019 OK H.B. 2468 (NS)); Texas (TEX. FAM. CODE §§ 160.751-763(WEST 2019)); Utah (UTAH CODE ANN. §§ 78B-15-801-809(West 2019)); Vermont (VT STAT ANN tit.15C §§ 801-809 (2019)); Virginia (VA. CODE ANN. 20-§§156-165 (2019)); Washington (WASH. REV. CODE .§§26.26A.700-785(2019)). Note: District of Columbia explicitly permits gestational surrogacy (D.C. CODE § 16-401-13 (West 2019)).

⁶² *Compensated Gestational Implicitly Permitted by Statute:* Arkansas (ARK. CODE ANN § 9-10-201(2019)); Connecticut (CONN. GEN. STAT. §7-48A (2019)) (cases interpreting statute: *Oleski v. Hynes*, No. KNLFA084008415, 2008 WL 2930518, (Conn. Super. Ct. July 10, 2008), *Griffiths v. Taylor*, No. FA084015629, 2008 WL 2745130, (Conn. Super. Ct. June 13, 2008), *Raftopol v. Ramey*, 299 Conn. 681, 684–85, 12 A.3d 783, 785 (2011)), Tennessee (TENN. CODE ANN. § 36-1-102(West 2019)) (case interpreting statute *In re Baby*, 447 S.W.3d 807, 814 (Tenn. 2014); West Virginia (W. VA. CODE § 61-2-14H)(2019)); Oregon (OR. REV. STAT. § 163.537(2019)) (case interpreting statute: *Weaver v. Guinn*, 176 Or. App. 383, 386–87, 31 P.3d 1119, 1121 (2001)); Iowa (IOWA CODE § 710.11(2019)), case interpreting statute: *P.M. v. T.B.*, 907 N.W.2d 522, 524–25 (Iowa), *cert. denied*, 139 S. Ct. 125, 202 L. Ed. 2d 33 (2018)).

⁶³ *Compensated Gestational Surrogacy Prohibited by Statute:* Arizona (ARIZ REV. STAT. ANN ST § 25-218(2019)) (abrogated by *Soos v. Superior Court in & for Cty. of Maricopa*, 182 Ariz. 470, 897 P.2d 1356 (Ct. App. 1994));Indiana ((IND. CODE § 31-20-1-3)(2019)(court recognized intended mother as mother rather than surrogacy in *In re Paternity & Maternity of Infant R.*, 922 N.E.2d 59, 61 (Ind. Ct. App. 2010)); Louisiana (LA. STAT. ANN. §§ 9:2718-2720(2019)); Michigan (MICH. COMP. LAWS §§ 722.851-863(2019)); Nebraska (NEB. REV. STAT. § 25-21, 200 (West 2019));New York (N.Y DOM. REL. LAW §§ 121-124 (McKinney 2019)).