

Psychological Aspects of Infertility and Fertility Treatment Family Building

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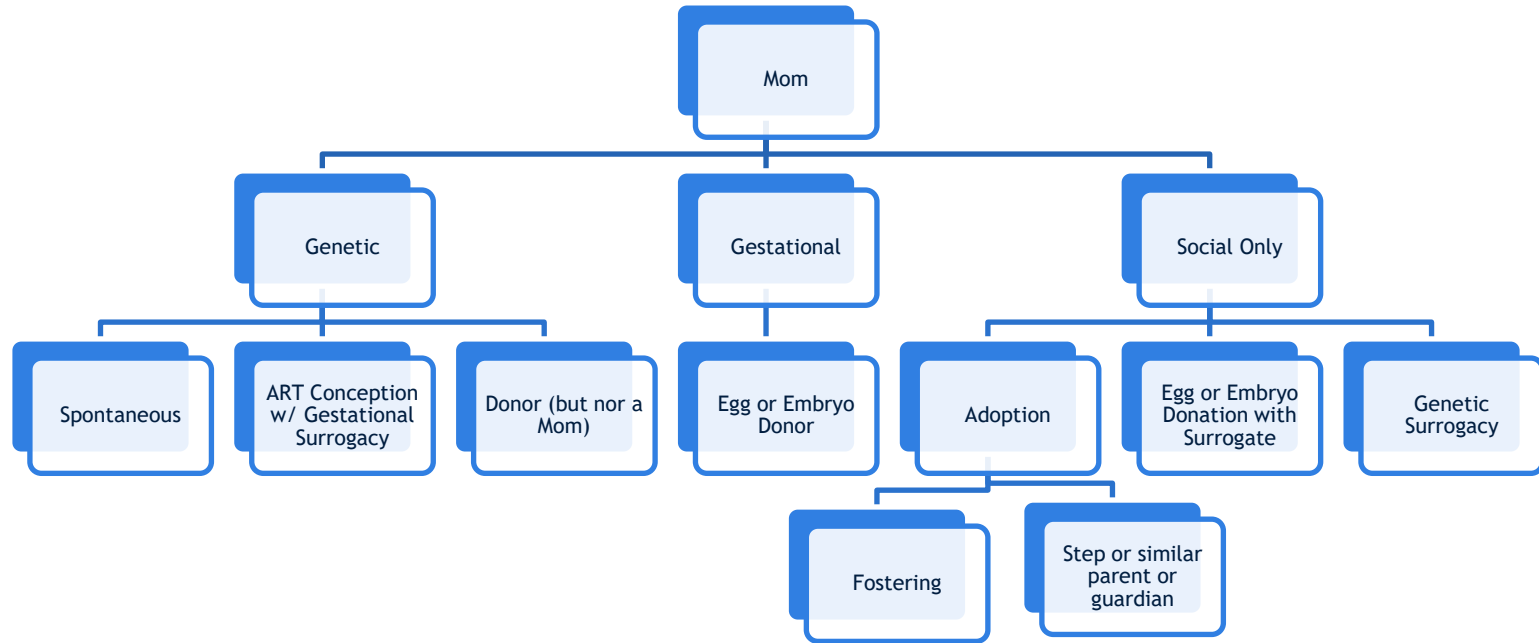
Thomas Jefferson University

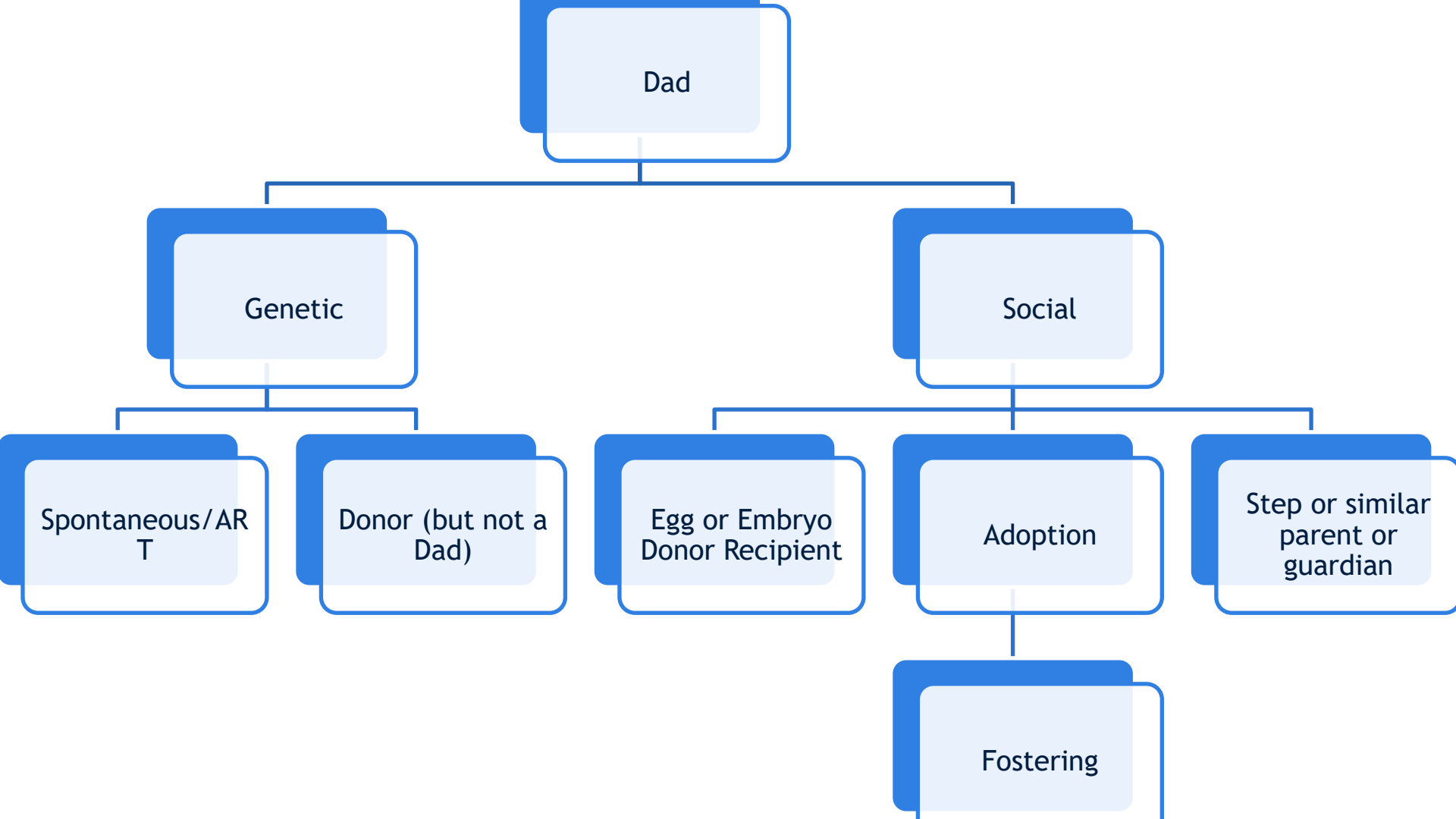
Disclosures/Conflicts of Interest

I have no conflicts of interest to disclose

Generative AI was not used for the development or content of this presentation.

Parenthood in 2025





Infertility Facts

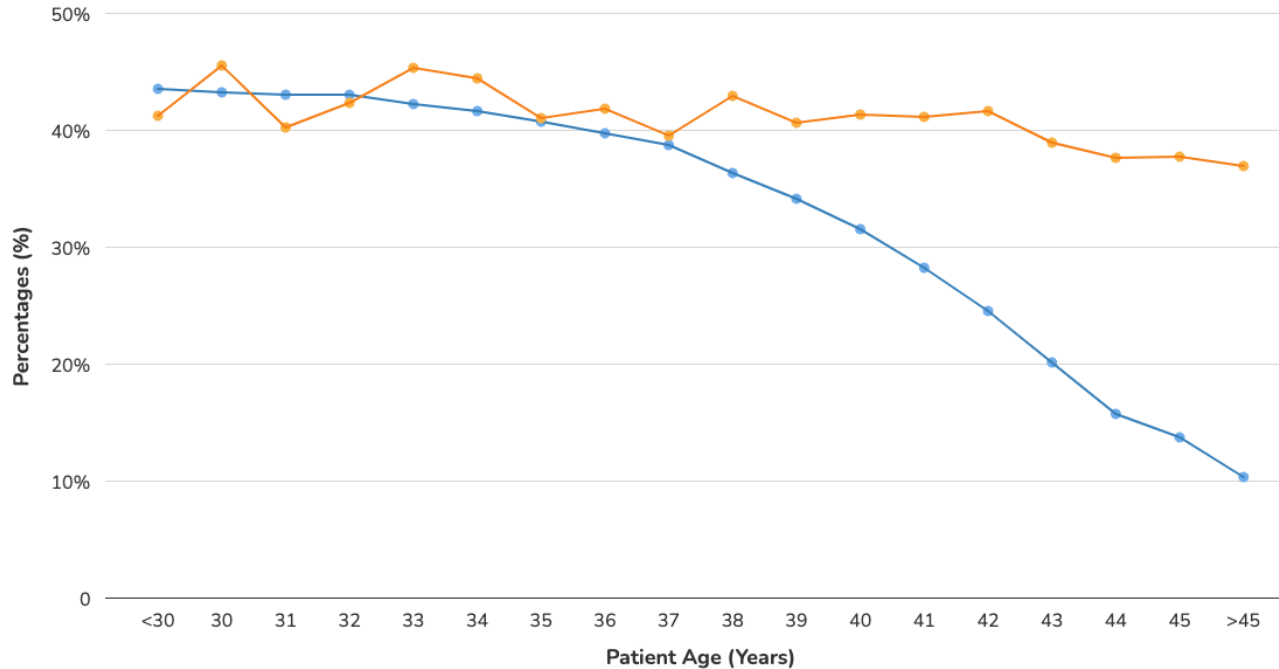
- at least 25% of infertile couples have more than one factor causing infertility
- in approximately 40% of infertile couples, the male partner is either the sole or a contributing cause of infertility
- fertility declines with age



www.asrm.org

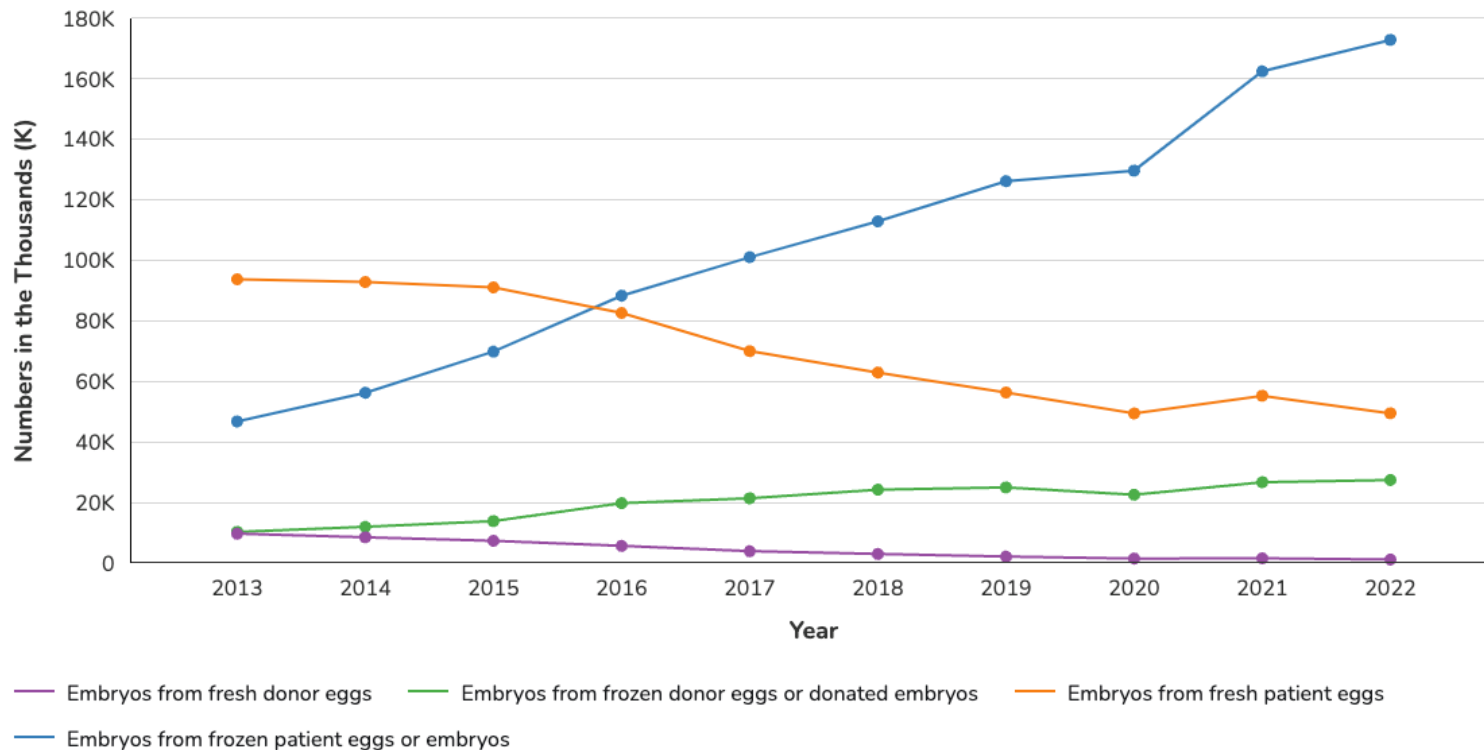
Impact of Age on Fertility

Percentage of Embryo Transfers That Resulted in Live-Birth Delivery, by Patient Age and Egg or Embryo Source, 2022



ART Statistics for 2022

Number of ART Cycles, by Egg or Embryo Source, 2013–2022



Emotional and Social Consequences

Culturally sensitive

Isolation

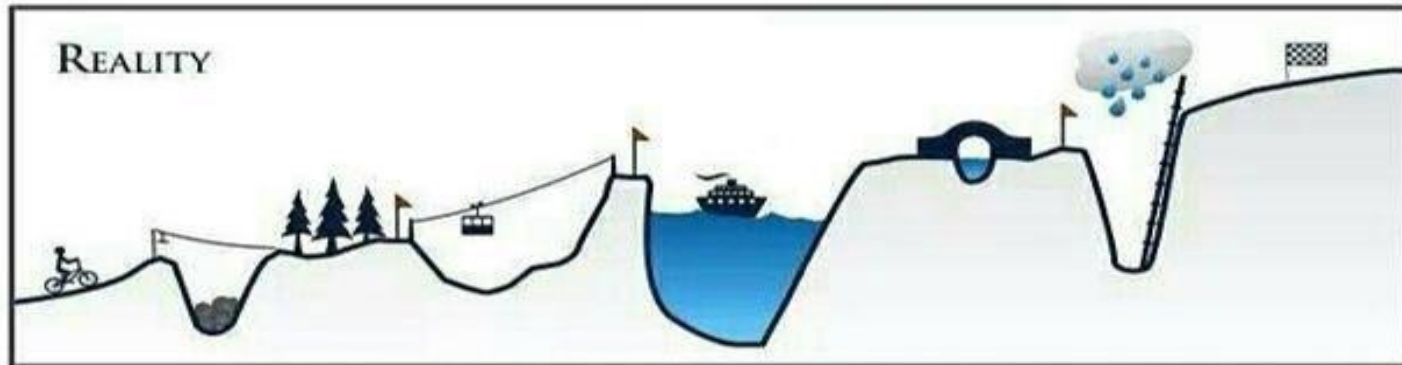
Ostracism

Perception in Western cultures that there is an increase of infertility

- Data suggest there may be a decrease but increased awareness in media and changing social norms creates that perception

Cousineau TM, Domar AD. Psychological Impact of Infertility. Best Practice & Research Clinical Obstetrics and Gynaecology 2007; 21 (2), 293-308.

The Infertility Experience



Some of the Feelings Related to Infertility



- Anger (at self, others, cost, body)
- Sadness (social isolation, lost dream)
- Loss (monthly cycle of loss of hoped for child)
- Fear (never having genetic offspring)
- Guilt (e.g. previous abortion, age delays) Confusion (so many treatment choices)
- Resolution....

Psychological issues with infertility

- Self esteem
- Body image
- Ability to plan
- Finances
- Sex life
- Career
- Faith
- Relationship with partner
- Family relationships
- Relationships with friends
- Social life
- World view

Cycle demands and stressors for men

Demands of
the cycle are
different

- Timed intercourse
- IUI or IVF

Masturbation
(and into a
cup)

- Cultural and religious background
- Embarrassment or shame

Disorders of Ejaculation Due to Infertility

- Men often express frustration and humiliation related to specimen collection and complain about the lack of privacy, problems with concentration and lack of sufficient erotic material.
- Among men undergoing infertility evaluation
- 11% failed to collect semen by masturbation for a semen analysis after repeated attempts;
- 20% were able to collect semen using vibration stimulation;
- 31% experienced problems with erection or orgasm in addition to severe anxiety during attempts to masturbate and have sexual contact with their partners.
- Saleh RA, et al. Fertil Steril 2003; 79: 909-12.



The Intrusion of a Cast of Thousands

Sexual intimacy is examined as part of the work up

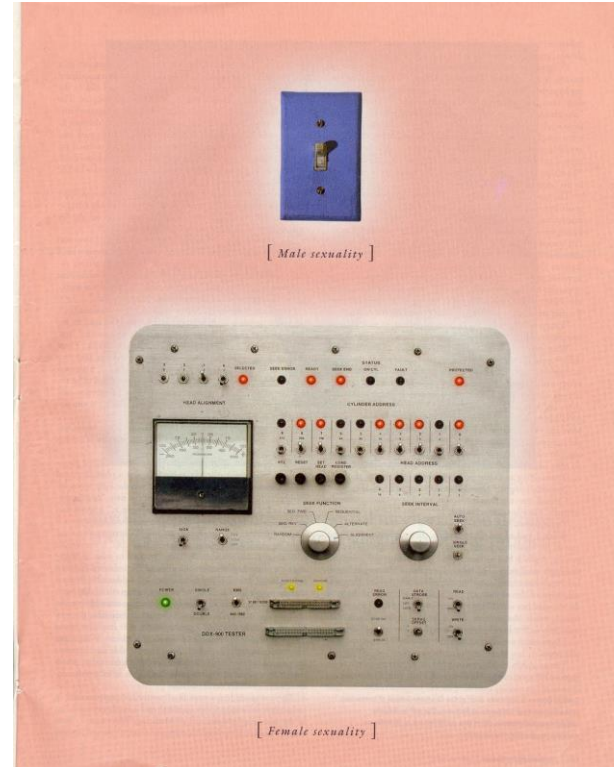
Diagnostic tests, e.g. post coital, can engender the feelings of many other people in the bedroom

Impact on Intimacy

- Sex for pleasure becomes sex for procreation
- Sex as an expression of intimacy becomes “work sex”
- Sex as an expression of love becomes sex as an expression of failure



An engineer's view of gendered differences



Just like it's portrayed in Hollywood.....





Men Can Feel Like They Need to Be the Sperminator....

- “I hate to perform at certain times of the month, like an animal, at my wife’s request. Sometimes it’s five to seven times a month. I feel loving two or three times a month, but I feel used the rest of the time. The rest of the month, we may have sex, but I’m very turned off, to the point where I don’t want to do it. I love my wife very much. She is what is important to me, not a possible child. If and when we have a child, she will still be the most important person in my life. If we don’t have any children, I still plan on leading a full life.”
-
-
- Zoldrod, AP. Men, Women, and Infertility. New York: Lexington Books; 1993. p.184.

Women report higher levels of infertility stress

- Infertile women have significantly high levels of depressive symptoms than fertile women
 - twice the prevalence of depressive symptoms^{1,2}
- When comparing women undergoing routine gyn care, 11.0% of infertile women met criteria for a current major depressive episode whereas 3.9% of fertile women³
- Domar's 1993 study compared infertile women to women with cancer, hypertension, myocardial infarction, chronic pain, or HIV-positive status, infertile women's depression & anxiety scores were indistinguishable from other patients except those with chronic pain⁴

¹Cwikel J, Gidron Y & Sheiner. Psychological interactions with infertility among women. Eur J Obstet Gynecol Reprod Biol 2004; 117.

²Downey J & McKinney M. The psychiatric status of females presenting for infertility evaluation. Am J Orthopsychiatry 1992; 62.

³Domar AD, Zuttermeister PC, Seibel M & Benson H. Psychological improvement in infertile women after behavioral treatment: a replication. Fertil Steril 1992; 58.

⁴Domar AD, Zuttermeister PC & Friedman R. The psychological impact of infertility: a comparison with patients with other medical conditions. J Psychosom Obstet Gynaecol 1993; 14.

Systematic review and meta-analysis

32 studies were included

Depression is one of the most common negative emotions

Infertile women had a 1.6 higher risk of being psychologically distressed than fertile women

The number of RCTs testing the efficacy of psychological interventions for infertility distress and pregnancy rates has more than doubled (58 versus 21) since the last meta-analysis conducted in 2015

Random effects models suggested that psychological interventions were efficacious for depression, anxiety, distress, marital satisfaction and well-being, translating into a large effect on combined psychological outcome; region of the world had impact on effect size

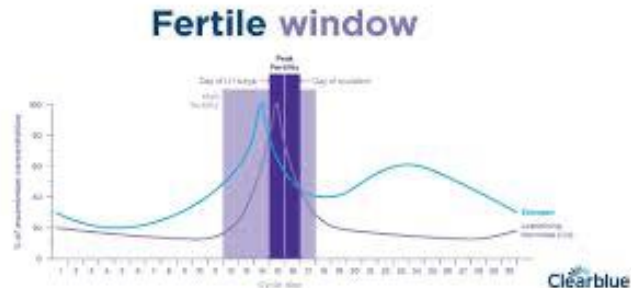
Dube, L., Bright, K., Hayden, K. A., & Gordon, J. L. (2023). Efficacy of psychological interventions for mental health and pregnancy rates among individuals with infertility: a systematic review and meta-analysis. *Human Reproduction Update*, 29(1), 71-94.

Infertility is stressful: Clinical implications

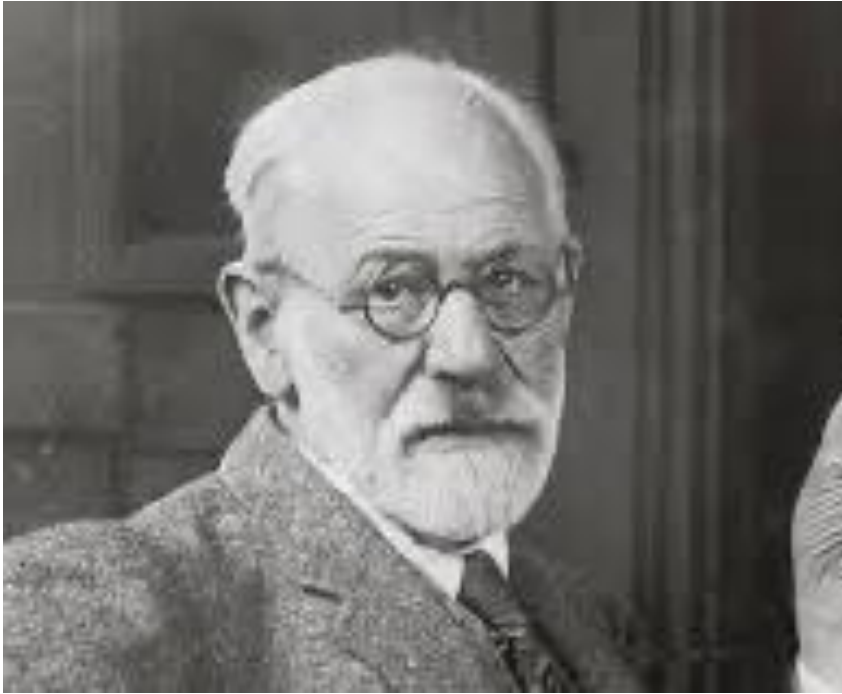
Areas for exploration

- Personal
- Professional/work
- Treatment
- Interpersonal
- Relationship

Choosing the right modality: CBT, psychodynamic, ACT, Emotion Focus Therapy.....



First Freud, then...



- Original explanations had to do with the belief that unconscious conflicts prevented pregnancy
- Then came the biophysical explanations of infertility

Stress or not?

- Is it the physiological events of stress that affect outcome?
- Are the associated behaviors the ones that affect outcome?
 - Premature treatment termination
 - Poor adherence
 - Stress associated with poorer prognosis

Stress is
generated by
many factors



Some say yes and others no

- Studies have shown higher pregnancy rates among those measuring high on measures of psychological distress
- Other studies have really failed to make the correlation
- Studies have shown that consistently that infertility is stressful but not always that stress is impacting on the ability to conceive
- Review found that cannot conclude that psychosocial interventions increased pregnancy rates among participating couples
- The impact of distress on treatment outcome is difficult to investigate for a number of factors, including inaccurate self-report measures and feelings of increased optimism at treatment onset. However, the most recent research has documented the efficacy of psychological interventions in lowering psychological distress as well as being associated with significant increases in pregnancy rates.

Klonoff-Cohen H, Chu E, Natarajan L & Sieber WA. Prospective study of stress among women undergoing in vitro fertilization or gamete intrafallopian transfer. *Fertil Steril* 2001; 76: 675e687.

Klonoff-Cohen H & Natarajan L. The concerns during assisted reproductive technologies (CART) scale and pregnancy outcomes. *Fertil Steril* 2004; 81: 982e988.

Boivin J A review of psychosocial interventions in infertility. 2003) *Soc Sci Med*. 2003 Dec;57(12):2325-41



Rooney, K. L., & Domar, A. D. (2018). The relationship between stress and infertility. *Dialogues in clinical neuroscience*, 20(1), 41-47.

And men
and women
experience
different
demands
and
stressors



"Sex brought us together, but gender drove us apart."

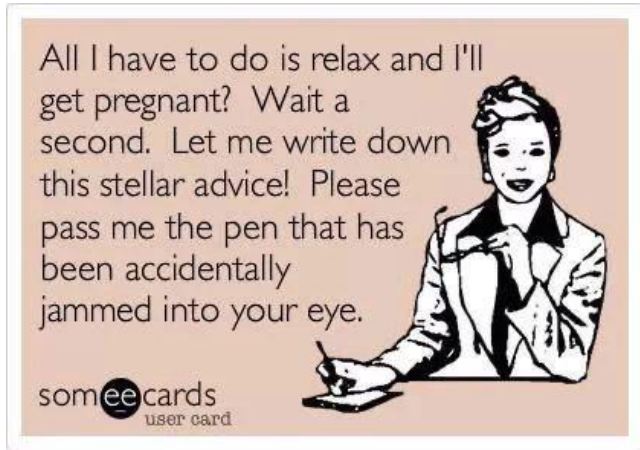
Being an Infertility Patient Can Be Uniquely Challenging



- Angry
- “Roller coastered”
- Dependent
- Scared
- Life is “on hold”



Can you just relax and get pregnant?



Factors contributing to this concept as the vectors of change

- Depression
- Anxiety
- Behaviors contributing to pregnancy
- Treatment dropout

Psychological distress influences these factors

And patients hear and see so much

“Just relax and you’ ll get pregnant...”



Don't try so hard....



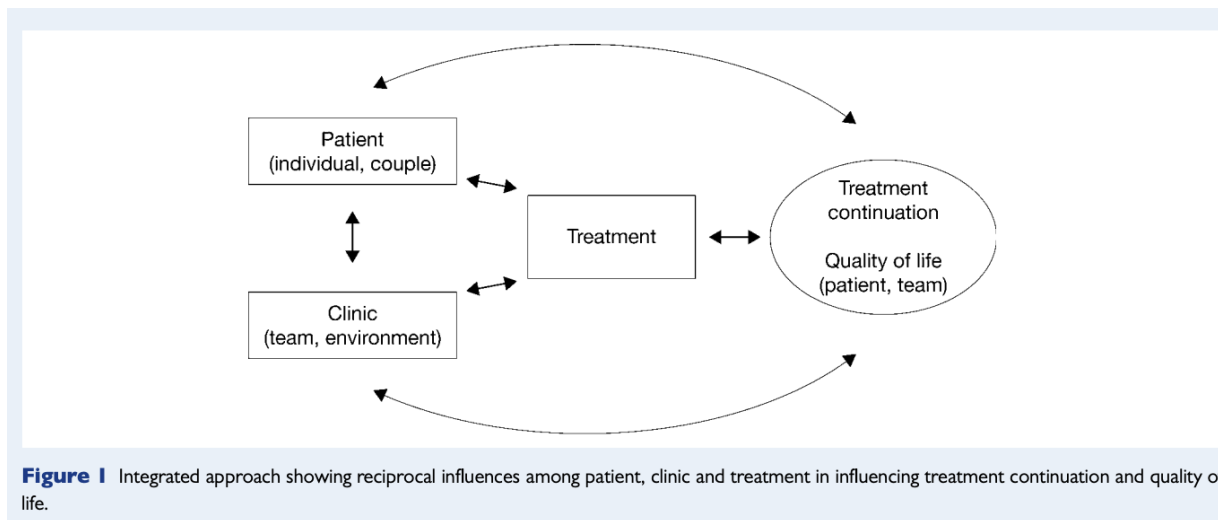
Take a vacation....



Others have suggested....



Quality of Life



Integrated approach showing reciprocal influences among patient, clinic and treatment in influencing treatment continuation and quality of life.

Boivin, J., Domar, A. D., Shapiro, D. B., Wischmann, T. H., Fauser, B. C., & Verhaak, C. (2012). Tackling burden in ART: an integrated approach for medical staff. *Human Reproduction*, 27(4), 941-950.

Table I Factors cited by patients as contributing to their decision to end treatment

Patient (individual, couple)	Clinic (team, environment)	Treatment
Fear and negative treatment attitudes <ul style="list-style-type: none">• Unfavourable attitudes to treatment (e.g. fear about health of baby, perceiving treatment to be unnatural, perceived costs)• Values (ethical, moral) and preferences incompatible with treatment• Idiosyncratic barriers	Sub-optimal organizational care <ul style="list-style-type: none">• Stressful care (disorganized, assembly-line treatment, different staff on clinic visits)• Insufficient information on alternatives, inadequate co-ordination• Depersonalization (poor coordinated follow-up, results at work and without partner present)• Lack of continuity of care and negative doctor attitudes• Overly bureaucratic procedures	Physical burden <ul style="list-style-type: none">• Worry about physical burden, physical symptoms and discomfort• Injection protocols and adherence to treatment• Cycle monitoring• Disruption of work and daily activities• Worry about cost
Psychological and emotional factors <ul style="list-style-type: none">• Pre-ART psychological profile• Difficulty in tolerating negative emotions for extended time periods• Uncertainty• Strain of repeated ART cycles	Negative staff-patient interactions <ul style="list-style-type: none">• Lack of empathy, poor listening skills, insufficient care of the man, insufficient time for questions	Handling of poor prognosis <ul style="list-style-type: none">• Loss of hope for success (cycle number dependent)
Relational strain <ul style="list-style-type: none">• Fear that ART will negatively impact relationship• Perceived and actual asymmetry in treatment focus between partners (particularly prevalent in early phases of medical involvement)		

What does research tell us?

- 352 women and 274 men were assessed in infertility clinics in northern California
 - 56% of the women and 32% of the men reported significant symptoms of depression and 76% of the women and 61% of the men scored reported significant symptoms of anxiety
 - Not surprisingly, recent research documents that infertility patients consistently report significantly more symptoms of anxiety and depression than fertile individuals.
-
- Pasch, L. A., Holley, S. R., Bleil, M. E., Shehab, D., Katz, P. P., & Adler, N. E. (2016). Addressing the needs of fertility treatment patients and their partners: are they informed of and do they receive mental health services?. *Fertility and sterility*, 106(1), 209-215.
 - Rooney, K. L., & Domar, A. D. (2018). The relationship between stress and infertility. *Dialogues in clinical neuroscience*, 20(1), 41-47.

Can you assess for infertility stress?

- FertiQoL (Fertility Quality of Life)
 - the first internationally validated instrument to measure quality of life in individuals experiencing fertility problems

English	Hebrew	Portuguese	Thai	Tamil
Arabic	Hindi	Brazil Portuguese	Turkish	
Arabic for Tunisia	Hungarian	Romanian	Ukrainian	
Bulgarian	Icelandic	Russian	Urdu	
Chinese (Simplified)	Indonesian	Serbian	Vietnamese	
Chinese (Traditional)	Italian	Sinhalese	Welsh	
Croatian	Japanese	Spanish		
Danish	Kannada	Swahili		
Dutch	Korean	Swedish		
Farsi	Lithuanian			
Filipino	Malayalam			
Finnish	Malaysian			
French	Maltese			
German	Norwegian			
Greek	Polish			


Boivin, Takefman & Braverman. (2011) The Fertility Quality of Life (FertiQoL) tool: development and general psychometric properties. *Fertility and Sterility*, 96, 409-15. DOI: <http://dx.doi.org/10.1016/j.fertnstert.2011.02.046>

Secondary Infertility

- Secondary infertility is when you're unable to conceive or carry a pregnancy to term after having given birth before.
 - More complicated after loss of the baby from the first pregnancy
- Secondary infertility is just as common as primary infertility. It affects about 11% of couples in the United States.

<https://my.clevelandclinic.org/health/diseases/21139-secondary-infertility>

What should you consider?



Mood
Functionality
Relationship
Family
Work
Culture

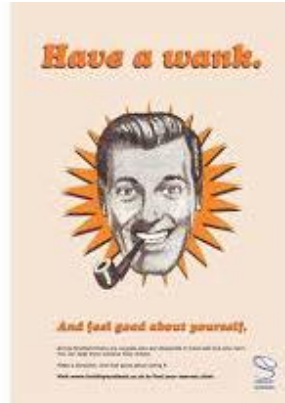
Infertility Offers Many Options

- This places the burden on the intended parent to say no



- Assisted Reproductive Technologies offers many option
 - Egg donation
 - Sperm donation
 - Embryo donation
 - Egg and sperm donation
 - Gestational carrier/gestational surrogacy
 - Genetic surrogacy

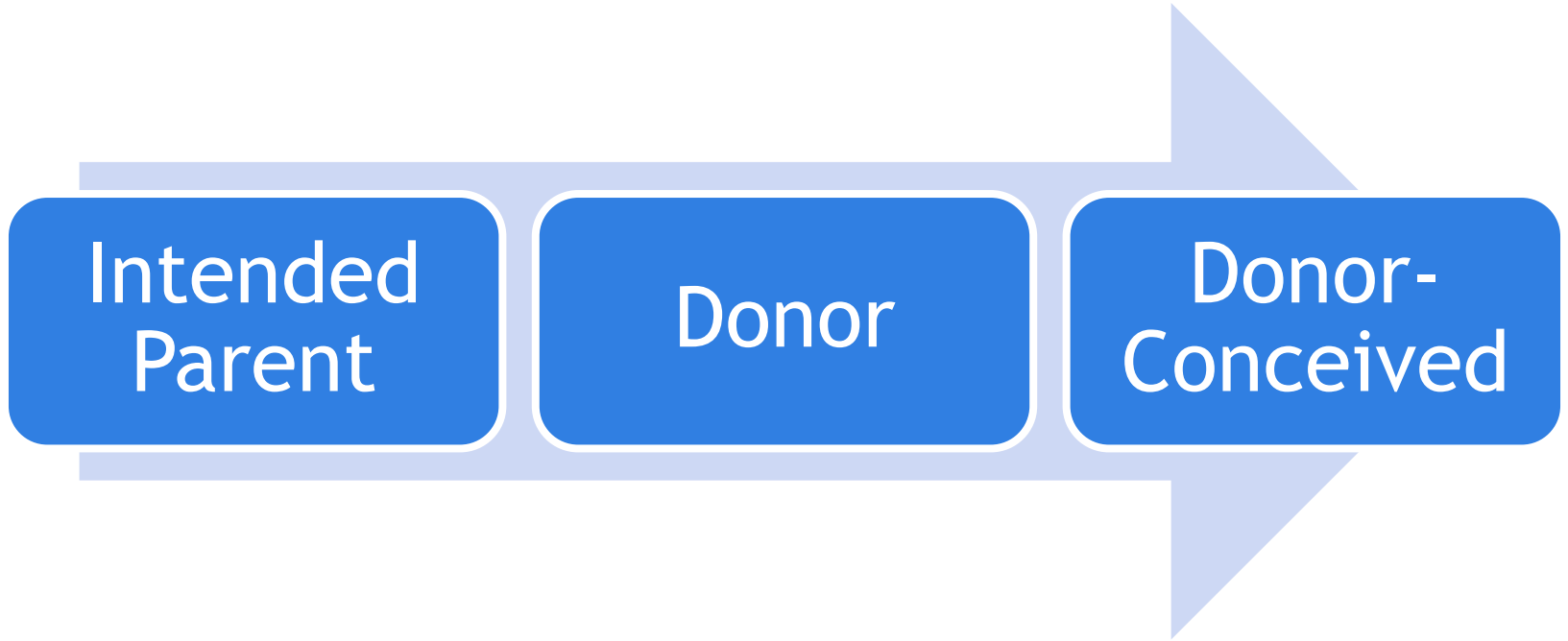
Donor Issues Raise and Create Gendered Expectations



Gamete Donation

- Most gametes (egg & sperm) are in cryo banks
- Egg donation requires in vitro fertilization (IVF)
- American Society for Reproductive Medicine
 - Practice Guidelines
 - Ethics Guidelines
 - Mental Health Profession Group (MHPG) and listserv

Our Focus of Attention/Concerns Has Evolved



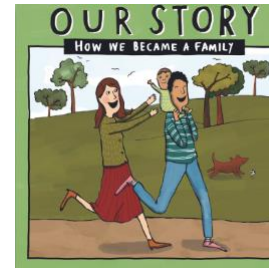
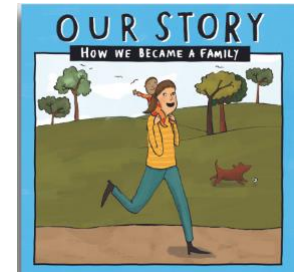
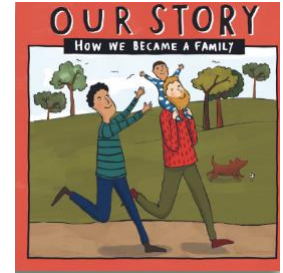
Psychoeducation for Recipients

- Genetic loss
- Different genetic contributions when counseling a couple
- How to select a donor
- Feelings about having a donor
- Implications for their child(ren)
- Resources for parents and children
- Implications for genetic half-siblings

Nature

Nurture

Individual



Donor Conceived Persons

- “Donor” or “Genetic Parent” or “BioMom/Dad” or “Mom or Dad”
- Language matters and is used differently
- Feelings are never right or wrong but always must be respected (and understood to evolve over time)



Donor's Role in the Family?



Role of donor in DCP's life

- Donor's expectations and intended parent's expectations
- Donor Conceived Person (DCP) expectations?

Donor's children & DCPs

Extended family views and influences?

different family types, different dynamics &

- single moms or dads by choice, same sex couples, older parents, transgenerational and transracial

Laws govern actions but not feelings



- Contracts may fail to regulate behavior, and they certainly do not regulate feelings and emotions
 - You cannot “unring” a bell after contact is made so the remedy may be some amount of financial damages but are likely to be inadequate or unsatisfactory under the circumstances
- The contract will inform the roles that stakeholders can anticipate for themselves or their respective families
- Psychologist must be trained to discuss these complicated issues as well as understand the industry and the laws

Braverman, A. M., & Schlaff, W. D. (2019). End of anonymity: stepping into the dawn of communication and a new paradigm in gamete donor counseling. *Fertility and Sterility*, 111(6), 1102-1104.

Gestational Carrier or Genetic Surrogacy



Conclusion

- Infertility contributes to stresses on many different levels
- Unfortunately, it's not so simple as “just relax and you'll get pregnant”
- Treatment offers tremendous hope but also contributes to many of the stresses encountered
- Individuals and couples can navigate these stresses successfully but often benefit from additional support
- Infertility counseling is a specialty and having training supports whatever modality is used

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Clinical Resources

- www.resolve.org
- www.reproductivefacts.org
- www.asrm.org
- <https://www.postpartum.net/>
- <https://dcnetwork.org/>

Thank You

