

Medication and Facilitation of Transgender Women's Lactation

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Keywords

Breastfeeding support, galactogogues, hormones, mother-to-child transmission, social support

Background

Early in 2018, Reisman and Goldstein published a landmark case report of induced lactation in a transgender woman which received international attention by news media (The Guardian, 2018; Yenginsu, 2018). The baby breastfed exclusively for six weeks and was still breastfeeding at six months, when the article was submitted (Reisman & Goldstein, 2018). The patient was prescribed domperidone for lactation induction, spironolactone to block androgens, and estradiol and progesterone as feminizing hormone therapy. One person interviewed by the *New York Times* said with regards to the milk produced by the transgender woman patient, “we need to make sure it is pure and hormone free” (Yenginsu, 2018), which may have been an indication of their bias and/or their questioning of the effects these drugs have on the milk produced. Clearly, Reisman and Goldstein’s case patient’s milk was not “pure” or “hormone free”: human milk is never “pure” or “hormone free”. Reactions to the case demonstrate the need both for the clarification of misunderstandings surrounding the safety and ubiquity of medication use while breastfeeding, and for critical reflection about the social impulse to restrict transgender individuals’ behaviors and bodies.

The World Health Organization (2003) recommends exclusive breastfeeding for the first six months of life. Yet 25% and 26% of infants are exclusively breastfed for the first six months of life in Canada and the United States, respectively (Gionet, 2015; CDC, 2018). Deconstructing aversion to impurities in human milk may facilitate health-care providers, peer supporters and friends and family networks to be more inclusive of transgender parents in our breastfeeding and chestfeeding support practices, and may make a small contribution to improving breastfeeding rates.

Transgender women and men seeking breastfeeding and chestfeeding support are a growing population. In the months following the publication of Reisman and Goldstein’s case, the Conde Nast online publication *them* collated three more reports of transgender women’s lactation (Burns, 2018). This

Insights into Practice critically examines the use of medication to facilitate transgender individuals’ lactation and considers other approaches lactation professionals can adopt to support breastfeeding and chestfeeding for transgender people.

Human Milk, Medication, and Purity

Hormones

Hormones are essential to human milk production within the ducts and ejection from the breast/chest. Prolactin and oxytocin, both produced by the pituitary gland, make milk and prompt the “let down” reflex, respectively. Human milk contains many endogenous hormones including epidermal and tissue growth factors, erythropoietin, and regulators of metabolism such as adiponectin (Ballard & Morrow, 2013). It is inherently bioactive and that bioactivity is largely hormonal.

Hormonal contraception (progestin with or without estrogen) is commonly used for pregnancy prevention postpartum and is generally considered safe. Progestin is similar but not identical to the progesterone prescribed to Reisman and Goldstein’s patient; and estradiol, also prescribed to Reisman and Goldstein’s patient, is a type of estrogen. One concern with progestin-estrogen hormonal contraception is the risk of venous thromboembolism (VTE) early in the postpartum period. The United States’ Centers for Disease Control (CDC, 2011) recommend against using combined oral contraceptives in the first 21 days of the postpartum period due to a risk of VTE; from 21–42 days postpartum

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use is only recommended in patients without VTE risk factors; and after 42 days postpartum they are recommended without restrictions. These recommendations do not account for risks to breastfeeding/chestfeeding outcomes, or risks to the infant.

The Academy of Breastfeeding Medicine's 2015 *Clinical Protocol on Contraception and Breastfeeding* warned against use of combined oral contraceptives due to the potential negative impact on milk supply (Berens & Labbok, 2015). However, both Tepper et al. (2016) and Phillips et al. (2016) conducted systematic reviews of impacts of use of combined oral contraceptives and of progestin-only contraceptive options by lactating people, respectively. The authors found no negative effects on infant health, growth, or development, or on breastfeeding outcomes, including milk supply. The authors noted that studies on this topic are of poor to fair quality, making it difficult to determine the effects. Within the heteronormative framework of birth, an estimated 85% of women use a postpartum contraceptive method, of which oral hormonal contraceptives are the most commonly reported choice (Zapata et al., 2015). Hormonal contraceptives are used extensively by breastfeeding parents. The use of hormonal contraceptives by transgender breastfeeding/chestfeeding parents should not be stigmatized.

Pharmaceuticals

In general, most pharmaceutical medications are compatible with breastfeeding (Hotham & Hotham, 2015). Saha, Ryan, and Amir (2015) systematically reviewed the evidence of postpartum medication use and found rates varied from 34-100% among included study participants. Noting the limitations of their review due to study heterogeneity and lack of standard medication reporting systems, they concluded that few studies demonstrated any impact of medication use on lactation initiation or duration (Saha, Ryan & Amir, 2015). Lack of understanding of the low risk presented by most medication use while breastfeeding may contribute to low rates of breastfeeding (Hotham & Hotham, 2015).

Breastfeeding/chestfeeding parents of all genders may erroneously receive clinical guidance to stop breastfeeding/chestfeeding while taking common medications used for surgical procedures, viral and bacterial infections, pain, and chronic illness, because of a lack of appreciation of the harm of breastfeeding interruption or cessation. Most medications do transfer into milk; however, they appear in trace amounts and are unlikely to cause adverse effects in children. There are only a small number of highly toxic medications that are harmful to the infant even in small doses (e.g. antineoplastics). The adverse effects of consumption of trace transferred medication must be assessed against the

Key Messages

- Responding to a recently published case study, in this *Insights into Practice* the author examines evidence for the use of medications including estrogen, domperidone and spironolactone as part of breastfeeding support for transgender women.
- Marginalized populations including transgender people should receive priority access to lactation consultants, peer support groups, equipment, and medical support for lactation.
- Health care providers must bring open-mindedness, curiosity, compassion, and creativity to practice lactation support for transgendered people.

risks of formula-feeding (INFACT Canada, 2006), short-term risks of abrupt breastfeeding interruption/cessation (e.g. engorgement, mastitis, further medication and/or surgery) and long-term risks of not breastfeeding (e.g. elevated risk of chronic disease and cancer). For example, it is now widely accepted that breastfeeding is recommended among parents in pharmacological opioid replacement treatment programs, as trace opioid medication transfer is less harmful to infants than the alternative of formula (Reece-Stremtan & Marinelli, 2015). The potential risks to a child of pharmaceutical transmission through human milk provided by a transgender woman using pharmacological support for gender confirmation, and to induce lactation, must be weighed against the harms of formula feeding.

Domperidone

Reisman and Goldstein's (2018) case patient used domperidone to induce lactation. In Canada, oral domperidone is commonly used off-label by cisgender women to induce lactation. In fact, Reisman and Goldstein's patient procured domperidone from Canada (Reisman & Goldstein, 2018). In several countries in Europe, domperidone is available over the counter (Newman & Pitman, 2014). However, it is unavailable in the US due to Food and Drug Administration (FDA) concerns about cardiac side effects observed in a few older and sick patients who were receiving much higher doses intravenously for other indications (Newman, 2017). Unlike metoclopramide, a treatment for gastroesophageal reflux that also induces lactation and is available in the US (FDA, 2017), domperidone does not cross the blood-brain barrier (Newman & Pitman, 2014). Noting the limitations in the sample sizes of included studies, Paul et al. (2015) and Zuppa et al. (2010) both reviewed the literature on the harms and benefits of domperidone, and found it to be effective in increasing milk supply with no adverse effects for infants.

Spironolactone

Reisman and Goldstein's (2018) case patient was prescribed spironolactone as an aldosterone blocker to reduce masculine characteristics. A Cochrane review found spironolactone to be an effective treatment for cisgender women to treat hirsutism (Brown et al., 2009). The Drugs and Lactation Database (2017) reports spironolactone is acceptable for use while breastfeeding (<https://www.ncbi.nlm.nih.gov/books/NBK501922/>). Hale and Rowe (2014) categorize spironolactone as "probably compatible" with breastfeeding and determined infant doses as too low to be clinically relevant. Future research must evaluate medications that are currently being used off-label for and in lactation to clearly demonstrate their usefulness and safety in supporting transgender individuals' lactation goals.

Breastfeeding/Chestfeeding Support for Transgender Families

Stigma

Essentializing language about breastfeeding/chestfeeding, for example describing it as "natural" or "pure", results in the stigmatization of people who experience challenges with lactation, regardless of gender identity. There is ample evidence that breastfeeding/chestfeeding success involves overcoming common challenges. These challenges are amplified for groups of people facing systemic barriers to accessing lactation. People of color (Jones et al., 2015), parents with disabilities (Powell, Mitra & Smeltzer, 2018) and chronic illnesses (Schaefer, 2004), LGBTQAI+ families (Farrow, 2014), and adoptive families (Gribble, 2006) face significant hurdles to breastfeeding success. These families may experience particularly significant benefits from the breastfeeding/chestfeeding relationship and its health-promoting effects. Marginalized populations should receive priority access to lactation consultants, peer support groups, equipment, and medical support for lactation.

One news media critique of Reisman and Goldstein's (2018) suggested that because the human milk the case patient produced had not been "assessed", we cannot conclude it is of adequate quality to recommend transgender women breastfeed/chestfeed (Hamzelou, 2018). An author for a bioethics think tank, Steinbock (2018), argued it is unethical to "experiment" on the infants of transgender women by supporting their breastfeeding/chestfeeding without knowing the impact of their drug regimens on the milk. While human milk scientists make extraordinary discoveries every year, there is a need to resist over-medicalization and scrutiny of the human milk produced by an individual transgender person or cisgender woman whose infant shows all signs of health. Human milk varies widely in its composition throughout the day, between different

lactating people, and depending on children's needs as they grow. Reisman and Goldstein's (2018) case patient's milk would have been similarly variable. She was unable to produce adequate volumes for long-term exclusive lactation and she supplemented with formula (Reisman & Goldstein, 2018). Many lactating mothers follow this same path. While it is important to be sensitive and responsive to a transgender woman's unique needs, it is also important not to pathologize unnecessarily or misuse clinical interest in milk quality to justify transphobia.

A recent study found a quarter of transgender people in Ontario, Canada, identified as parents (Pyne, Bauer & Bradley, 2015, p.112). Transgender people face stigma and barriers in parenting services, schools, recreation facilities, adoption services, reproductive health and fertility services, and bias in family court proceedings (Pyne, Bauer & Bradley, 2015). Rather than stress skepticism about the quality of a transgender mother's milk, healthcare providers must be concerned about how stigma and exclusion of transgender parents from social and health services for families, such as breastfeeding/chestfeeding resources, may negatively impact children. Research about the attitudes and behaviours of healthcare professionals caring for children of LGBTQ+ parents suggests that homophobia, transphobia and ignorance remain considerable barriers to care (Bennett et al., 2017; Chapman et al., 2012).

Support

The need for breastfeeding/chestfeeding support for transgender parents is not small or minor; approximately one in every 200 people identify as transgender (Scheim & Bauer, 2015). It is important to understand transgender identity may not be binary, pharmaceutically supported, or involve surgery. Transgender identification is expansive and inclusive.

All families deserve support to meet their breastfeeding/chestfeeding goals. Breastfeeding and human milk promote infant immune, gastrointestinal, and metabolic health, and cognitive and emotional development. It is known that breastfeeding can improve cisgender maternal health by decreasing risks of cancer, diabetes, and excess weight (Dieterich et al., 2013; Stuebe, 2009) and can also decrease the risk of peripartum depression. It is imperative for public health that healthcare providers address barriers to breastfeeding/chestfeeding. Expanding knowledge and abilities to support lactation for transgender people demonstrates clinical progress towards equity.

Healthcare providers must be aware that lactation is possible after chest masculinization (Macdonald et al., 2016). However, surgery will influence breastfeeding/chestfeeding experience by altering physical capacity for milk production. The amount of functional tissue that remains after chest masculinization and the success of free nipple grafting will vary between patients and are likely to

affect milk production and transfer. As understanding of techniques and outcomes of chest masculinization continues to improve (Wilson et al., 2018), influences on lactation will be an important outcome to consider and to include in patient education and consent. Wolfe-Roubatis and Spatz (2015) wrote that nurses need to expand their knowledge and cultivate openness to provide optimal support to transgender men for breastfeeding/chestfeeding; this extends to all healthcare providers, peer support, and family and friend networks.

Conclusion

Lee (2018) wrote, “Although lactation operates as a cultural signifier of both sexual difference and maternity, then, strictly speaking it is not necessarily tied to either” (p. 78). Indeed, as she described, grandmothers, adoptive parents, transgender people, and men can all be supported to lactate (Lee, 2018). Human milk is a smart and forgiving food, the mammary glands are exceptional filters, and breastfeeding/chestfeeding promotes emotional connection in a way consuming no other nutrient can. While more research should be welcomed, remaining questions about the use of domperidone, spironolactone, estrogen, and progesterone in lactation should not be presented as impediments to extending breastfeeding/chestfeeding support to transgender and non-binary people. Medication is one clinical tool that can be used to advance breastfeeding/chestfeeding among transgender people, to increase infant access to human milk, and to improve infant and parent health through participation in breastfeeding/chestfeeding. More broadly, healthcare providers must bring open-mindedness, curiosity, compassion, and creativity to their practice to enrich lactation support for transgendered people.

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