Bioethical Inquiry (2021) 18:305–317
https://doi.org/10.1007/s11673-021-10094-3

ORIGINAL RESEARCH

Reframing the Australian Medico-Legal Model of Infertility

Anita Stuhmcke

Received: 1 October 2019 / Accepted: 11 February 2021 / Published online: 26 February 2021

Abstract Australian law affirms a binary construction of fertility/infertility. This model is based upon the medical categorization of infertility as a disease. Law supports medicine in prioritizing technology, such as in vitro fertilization, as treatment for infertility. This prioritization of a medico-legal model of infertility in turn marginalizes alternative means of family creation such as adoption, fostering, traditional surrogacy, and childlessness. This paper argues that this binary model masks the impact of medicalization upon reproductive choice and limits opportunity for infertile individuals to create families. While medical technology should be available to enhance reproductive opportunity, infertile individuals will benefit from regulatory change which disentangles the medico-legal construct of infertility as a disease from the desire to create a family. This paper suggests that the medico-legal model of infertility should be reframed to support all opportunities for family creation equally, including non-medical opportunities such as adoption, fostering, and childlessness.

Keywords Infertility · Assisted reproductive technology · Bioethics · Law · Medicalization · Family

A. Stuhmcke (✉)
Faculty of Law, University of Technology Sydney, Broadway, Sydney, NSW 2007, Australia
e-mail: Anita.Stuhmcke@uts.edu.au

Introduction

Law and medicine are independent disciplines. Law is positioned as a neutral regulator. As such the law is comprised of rules and concepts and is an autonomous, internally valid science (Dagan 2015). Medical law protects patient rights and regulates the responsibilities of health professionals (Brazier, Devaney, and Mullock 2018). However, scholars also identify failure of law to protect patients and regulate the health professions (Freeman and Lewis 2000; Kennedy 1988; McLean 2009; Brazier 1987). Particularly feminist legal scholars argue that far from being neutral, law and medicine are “intertwined and mutually reinforcing” (Reagan 1997; Smart 1989). Here law entrenches the power and value of medical perspectives, reaffirms medical understandings of phenomena, and legitimates medical professionals’ decisions and control of individuals.

Legal legitimation and buttressing of medicine is particularly evident in human reproduction. In this field feminist legal scholarship has long questioned the use of bioethical concepts which underlie healthcare law, such as autonomy (Mackenzie and Stoljar 2000; Fox and Murphy 2013; Fletcher, Fox, and McCandless 2008). Women’s reproductive choice in the domain of reproductive technologies is a site of particularly close attention (Farrell et al. 2017; Morgan 1998). Using the multidisciplinary nature of bioethics this paper draws upon feminist legal scholarship, scholarship from anthropologists in the social sciences (Franklin 2001), and medical sociologists (Sandelowski, Holditch-Davis, and Harris 1990; Sandelowski 1991) to interrogate the medico-legal regulation of infertility. Amongst the many feminist perspectives on medicalization (Richie 2019), this paper applies a liberal legal feminist approach which identifies the implicit restrictions healthcare law imposes upon the exercise of choice.

Given the ubiquity of infertility today, it is surprising that the role of the law in supporting medicine to drive individual choice with respect to family creation draws so little attention from legal scholars. While there are exceptions, where scholars question the "continuing usefulness of infertility treatment as the dominant metaphor guiding assisted reproduction law and policy" (Dempsey 2008, 276) most critique emanates from disciplines other than law. Yet, since the inception of assisted reproductive technology (ART) through in vitro fertilization (IVF) technology in the late 1970s, the law has supported medicine to transform infertility from a social issue into a medical disease. The result is that Australian state and territory legislation supports the medical categorization of infertility as an individual health problem which can be cured through technology. In this paper I argue that the law reproduces forms of oppression and exclusion in supporting firstly, the medicalization of infertility and secondly, its treatment through technology. This results from a binary treatment of fertility and infertility in a similar fashion to the binary treatment of ability and disability (Steel et al. 2016). While medical technology should be available to enhance reproductive opportunity, this paper suggests infertile individuals may benefit from regulatory change which disentangles the medico-legal construct of infertility as a disease from the desire to create a family.

The original contribution of this paper is to identify infertility as a medical category imposed upon individuals by the law, shaping their expectations of pathways to family creation. Infertility is defined and treated as medical problem. This categorization is both created by and reinforced through law. The outcome is that infertility is viewed as both an illness and a disorder despite it being a nonmedical problem (Conrad 1992). In identifying this medico-legal binary model of infertility I adopt a similar approach to theorists who identify a disability binary (Areheart 2010; Steele et al. 2016) and those that confirm the heterosexual binary model (Rich 1980; Rich 2004). The legal entrenchment of the medicalization of infertility results in a regulatory environment which limits how we think about pathways of family creation and directs government funds and public policy to curing infertility as a disease. Using this finding I suggest that the medico-legal model of infertility should be reframed to emphasize opportunities for family creation.

It is this operation of the macro structures of law and medicine combining to limit choice of family creation which demands that the role of law must be reframed. In prioritizing medical treatment as the cure for infertility, the individual is channeled into a medical pathway of family creation. This pathway has disparate economic and social impact upon vulnerable populations. Economically, a growing proportion of infertile individuals are not able to afford any, or are able to afford only limited, treatment, and a significant number of Australians pursue risky and even harmful travel overseas to pursue ART treatments, often illegally, for the purpose of family creation. Socially, there is oppression and exclusion around non-heterosexual procreation and non-traditional family forms. For example, the High Court decision *Masson v Parsons* [2019], which concerned parentage in non-traditional gay and lesbian families confirms the compulsory heterosexuality of infertility and the harm it causes.

The suggestion of this paper is that emphasis upon alternative and non-medical opportunities for family creation will reduce such social and economic harm. Opportunities include improving opportunity to access options such as adoption, fostering, non-medical surrogacy, accepting childlessness, extended family, sperm donation, and any other family forms desired by individuals (Millbank 2015; Skene 2012). The hegemonic power of medical treatment as the solution for infertility is seen in the stigma and even the social undesirability attached to these alternative means of family creation. For example, adoption, once the natural solution to infertility, is now considered a type of insurance policy, a "second" choice. By disentangling infertility from family creation, I believe that more non-medical opportunities will be available and choices made by individuals will better suit their life stage and plans.

The structure of the paper is as follows. Firstly, the paper briefly identifies and explains the deference of Australian law to medicine. Secondly, it confirms the legal incorporation of a medicalized model of fertility. Thirdly, it outlines the hegemonic power of this model and its unintended consequences, particularly that of harm to infertile individuals. Fourthly, it suggests that medicalization acts to grow the Australian and international infertility industry and to commercialize services and the range of treatments offered. This reduces opportunity for non-medical alternatives by prioritizing technology. Finally, it concludes that the legal approach to infertility regulation be reframed to reduce focus on medical technology as a cure for infertility and to instead prioritize opportunities for family creation.

In summary the aim of this paper is to suggest a reframing of law so as to optimize alternate and non-medical paths to family creation. This is as a complement to, rather than a replacement of, the treatment of infertility as a disease. In essence the hope is that the provision of a spectrum of opportunity for family creation will address the "underlying causes for complex social problems and human suffering" (Conrad and Barker 2010). While this paper is focused upon Australia, synergies may be found with other jurisdictions, particularly those with shared legal traditions in the provision of ART such as the United Kingdom, Canada, New Zealand, and many parts of Europe and the Americas.

Connecting Law and Medicine: Legal Deference

In Australia the law is a regulatory agent in healthcare. It protects patients and sets standards for health professionals. The law thus offers patient redress for significant accidents, failures and cases of poor medical practice. For example, the Australian doctrine of negligence has resulted in compensation for IVF patients. In *G & M v Armellin* [2009] ACTCA 6 the respondent fertility clinic was held to be negligent where the patient stated that she only wanted one embryo transferred during her IVF procedure. Two embryos were transferred, resulting in the birth of twins, as a result of the instruction not being communicated to the embryologist. Similarly, legal thresholds facilitate out of court settlements, such as when sub-optimal semen was used to treat four women in a recent incident concerning Genea, a large Australian clinic (Abusson 2019). Apart from patient redress and standard setting, legal prohibition occurs when medical practices fall outside accepted constructs of bodies, kinship, family, and concepts of self, health and disease (Karpin and Mykitiuk 2008). For example, human cloning remains illegal in Australia as does commercial surrogacy and sex selection.

However legal scholars have long questioned the success of the law in the regulation of medicine (Freeman and Lewis 2000; McLean 2009; Brazier 1987). Kennedy has argued that this is due to the late development of medical law (Kennedy 1988). This has meant that medical case law borrows from non-related areas of law, such as tort, contract, criminal law which are not necessarily suited to the complexities of medical cases. More critically, Davies has suggested that the law's role is less one of regulation than one of interfering with the medical profession "… as little as possible" (Davies 1998). Doctors are treated by the law as professionals, leaving the medical profession largely undisturbed to develop and enforce its own standards of practice. Courts frequently reaffirm the construction of the doctor as "upstanding, respectable and altruistic" (Thomson 1998, 183). Similarly, Chadwick and Wilson have described the relationship between the law and medicine as "hands off" (Chadwick and Wilson 2018).

More critically still, feminist legal scholars, such as Thomson, argue that the relationship between law and medicine is not "hands off," rather it is one where law reinforces the authority of medicine (Thomson 1998, 183). This also works in reverse so that the relationship between law and medicine is mutually supportive. Smart suggests law draws on medical concepts to validate law and courts may enforce medical solutions in legal cases (Smart 1989; Roberts 1993; Steen 2001; Kramar and Watson 2006). Sheldon takes this reasoning a step further, characterizing the relationship as one of law deferring to medicine (Sheldon and Thomson 1998, 3; Montgomery 1989), positioning law as working to entrench the power and value of medical perspectives, to reaffirm medical understandings of phenomena, and to legitimate medical professionals' decisions and control of individuals. Sheldon makes this point of deference of law to medicine by using medical standards in negligence law which allows the medical profession to regulate itself through the application of the peer-standard-of-care-based *Bolam* test for negligence (Brazier and Miola 2000). As a consequence, the medical profession determines its own legal standard of care in Australia. In this way the law not only acts to buttress the authority of medicine, it is also subordinate to the medical profession (Carter 2017).

This encroachment of medicine upon law has gained much ground. In 1972 Zola observed medicine to be "nudging aside, if not incorporating, the more traditional institutions of religion and law" (Zola 1972). Today the law transforms issues of abstract, academic concern to bioethics scholars into social policy through legislation, regulation, and litigation (Rothstein 2009) and is itself influenced by and has its essential values formed by bioethics (Spielman 2007). It is this understanding of the relationship between law and medicine, where law buttresses medicine, which is used in this paper to critique the medico-legal construction of fertility.

Legal Adoption of a Medicalized Construction of Infertility

Despite the depth and range of feminist scholarship on the often symbiotic relationship between law and medicine little attention has been paid to the role of law in the construction of infertility. Yet the role of law in the creation and maintenance of infertility is overwhelming. Legal deference to medicine supports the paradigm of infertility as a medical construct. In the regulation of ART and surrogacy the focal point at which the law acts to (re)enforce medical power rests on the fundamental requirement: that there be infertility. If there is no medically accepted condition of infertility the law will not be triggered. An absence of treatment or of diagnosis will mean that the law is stilled, it will not operate. It is this centrality of medical infertility and the connecting role that law has in constructing, enforcing and policing access that is of interest here.

The construct of infertility as a disease is a direct result of the legal adoption of medical standards in the regulation of fertility treatment. Legal endorsement of medical understandings of infertility occurred following the birth of Louise Brown, the first child born through IVF in 1978 (Biggers 2012). In 1984 the United Kingdom undertook the first global governmental inquiry into the social impact of infertility treatment and embryological research. The resulting "Report of the Committee of Inquiry into Human Fertilisation and Embryology," is commonly known as the Warnock Report. The Committee understood its role, as stated in the report, to "firstly" be that of creating "… processes designed to benefit the individual within society who faced a particular ***problem, namely* infertility**" (emphasis added, Warnock 1978, [1.6]). It resulted in the passing of the *Human Fertilisation and Embryology Act 1990* (UK) which established the legal framework of infertility regulation. In doing so, the law accepted the premise of the report, which is that infertility is a disease and as such is a medical problem requiring medical treatment.

This U.K. framework was adopted into Australian law. In Australia the National Health and Medical Research Council "Ethical guidelines on the use of assisted reproductive technology in clinical practice and research (ART Guidelines)" govern the delivery of fertility services. There is no Australia-wide government body or legislation regulating the provision of fertility services. However, all fertility clinics are required to comply with state-based legislation which exists in New South Wales, Western Australia, Victoria, and South Australia, as well as having to satisfy the ART Guidelines and Code of Practice for Reproductive Technology Units developed by the Fertility Society of Australia's Reproductive Technology Accreditation Committee (RTAC). RTAC, an industry body, provides a quality assurance scheme for the industry, under the Fertility Society of Australia. State ART and surrogacy legislation adopt the NHMRC Guidelines, borrowing and reflecting the practices and standards of the fertility profession and the use of technology in that field. In this way the law both adopts and supports infertility as a universal medical phenomenon (Areheart 2010), having only medical causes and solutions.

The issue then is not that infertility is a disease, rather it is that curing infertility through medical treatment has become the preferred pathway to family creation. This prioritization of medicine in creating families is due to the symbiotic relationship between law and medicine. Here the law circumscribes behaviour which falls outside expected medical standards, rather than applying external legal standards to infertility. Law applies across the continuum of the provision of technology. Negligence law, criminal law, and anti-discrimination law apply to the medical profession as does the Australian Consumer Law in setting industry standards as to the advertising of all goods or services offered to Australian consumers, including complex ART medical procedures (Australian Competition and Consumer Commission 2016). However, and importantly, this regulatory framework is based upon a medicalized understanding of infertility, placing medical technology at the heart of family creation and deprioritizing non-medical alternatives.

Further, this medico-legal model of infertility reinforces compulsory heterosexuality. The legal adoption of the medicalized concept that infertility is a disease which should be cured reflects acceptance of a dominant heterosexual family form. This is evident in the legal disapproval, or at best perplexity, of non-traditional family forms. For example, in the Family Court of Australia decision *Green-Wilson & Bishop* [2014]

FamCA 1031, Justice Johns observed that "[t]he status of persons in the position of the applicants (as well as other non-traditional families) has long vexed this Court." Further, in 2002 Justice Giles, when considering the status of a known sperm donor seeking orders to spend time with the child conceived with his sperm in *Re Patrick: an application concerning contact* [2002] FamCA 193, noted "as these proceedings illustrate, not all families using artificial insemination procedures fall into the traditional heterosexual model that the legislation intended to protect."

This legal adoption of infertility as a heterosexual problem to be treated medically is not inevitable. It is defensible perhaps, given that deference to medical opinion runs throughout healthcare law (Sheldon and Thomson 1998; Montgomery 1989), and a world view that reproductive capacity is so divided, with the overwhelming majority, approximately 90 per cent, of the world's population being fertile. Nevertheless, it is not inevitable. Prior to the increased use of ARTs in the 1970s (Bell 2010), infertility was largely a natural or social condition (Becker and Nachtigall 1992). From the problem being one of "involuntary childlessness" in the 1960s and 1970s, infertility transitioned to being a disease, no longer a "personal problem" it became a "medical problem" to be treated (Greil 1991). Today, medical specialists are perceived to have authoritative knowledge of infertility and hold the exclusive right to treatment while the infertile person accepts the role of being sick and being a patient (Erikson 2017).

This transition of infertility from a social to a medical condition is described by socio-medical scholars as "medicalization." The medicalization critique is central for sociological engagement with health and illness (Broom and Woodward 1996). As Becker and Nachtigall observe, this means that "[A]lthough infertility is not a disease, it is treated like one in the health care system" (Becker 1992, 458). Conrad, a medical sociologist, explains this process as medicalization which "… consists of defining a problem in medical terms, using medical language to describe a problem, adopting a medical framework to understand a problem, or using a medical intervention to 'treat' it" (Conrad 1992, 211; Conrad, Mackie, and Mehrotra 2010). In this sense the symptom of infertility is the continued absence of a desired child and its treatment is technology (Sandelowski, Holdicth-David, and Harris 1990).

The fact that infertility is a social rather than a medical construct is clear from its contested definition. Globally the definition of fertility varies (Zegers-Hochschild et al. 2017), resulting in differential health and medical treatment (Jacobson et al. 2017). Even though the common medical definition as accepted by the World Health Organization is "a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse," this definition is in flux (Zegers-Hochschild et al. 2009; Montgomery 2016). Medicine traditionally describes infertility as primary and secondary (Borght and Wyns 2018), yet the 2017 glossary of terminology suggests change as

> … the **definition** of "infertility" has been expanded in order to cover a wider spectrum of conditions affecting the capacity of individuals and couples to reproduce. The **definition** of infertility remains as a disease characterized by the failure to establish a clinical pregnancy; however, it also acknowledges that the failure to become pregnant does not always result from a disease, and therefore introduces the concept of an impairment of function which can lead to a disability. Additionally, subfertility is now redundant, being replaced by the term infertility so as to standardize the **definition** and avoid confusion. (Zegers-Hochschild et al. 2017, pp)

As this change in definition highlights, as a disease infertility is both elusive and paradoxical. Elusive, as for many people infertility will never require treatment. The desire to parent or have a child is a social role which is acted upon for anyone to present to a clinic and be classified as infertile (Greil, McQuillan, and Slauson-Blevins 2011, 742). Paradoxical, as a common misperception is that all infertile individuals are childless whereas many individuals classified as infertile using the twelve months standard medical definition actually have children (Shreffler, Greil, and McQuillan 2017). Indeed, data from preindustrial populations characterized by natural fertility as well as from contemporary populations which have discontinued contraception to generate pregnancies both indicate that significant numbers of women continue to become pregnant after more than one year without contraception, thereby casting doubt on the validity of the one-year criterion for diagnosing infertility (Rochon 1986).

Hegemonic Power of the Medico-Legal Model of Infertility and Harm

If infertility is accepted to be a contested construct, the power of the medico-legal model of infertility becomes clearer. The subsummation of definitional difference under a universal category of infertility, as discussed above, is one indicator of hegemonic power. Another is the acceptance of medicine as the cure for childlessness. As anthropologists from the social sciences such as Franklin observe, it is now normal to begin ART treatment (Franklin, 2001). Moreover, once on the ART "treadmill" it is difficult to get off (Harwood 2007; Greil, McQuillan, and Slauson-Blevins 2011).

The treadmill of technology use created by the medico-legal binary model means that an individual's infertility is a personal, medical problem that requires an individualized, medical solution. The binary also applies normatively to create a category of patient who is neither healthy nor normal. In a Foucauldian understanding of medicalized power, in creating two categories of fertility, a binary model, we cannot understand infertility without considering its conceptual opposite, fertility (Foucault 1986). The use of infertility as a category of disease, to distinguish between "disease" and "normality, thus also creates bodily difference and social stigma (Leyser-Whalen et al. 2018).

The hegemonic power of the binary is readily apparent in legal scholarship. Legal scholars traditionally centre the need for individuals—gay men, lesbians, and single women—to be placed within the category of infertility rather than questioning the category itself. Anti-discrimination law buttresses the medicalization of infertility, so that today, individuals classified as socially infertile, such as lesbians, single heterosexuals, and gay men are, across most Australian jurisdictions, able to access ARTs (Bell 2010). In a medicalization of the social, the hegemonic power of the binary model transforms these individuals to be classified as infertile, even though most are medically fertile. This result also mirrors the reality of a heterosexual couple where when one partner is infertile, both are classified as infertile. Such regulatory "double think," where the medically fertile become legally infertile, preserves the internal consistency and confirms the hegemonic power of the medico-legal binary model of infertility and fertility.

This binary rests upon compulsory heterosexuality (Rich 1980). Inclusion of lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and other vulnerable communities within the medical model of infertility rests on the assumption that fertility is normal. In its normality fertility is rendered invisible as it is assumed to be natural and socially desirable. Infertility is a deviance from the norm of fertility and as such is the focus which requires explanation as to how it differs from the "normal." Through the prism of compulsory heterosexuality, fertility is unquestioned as the starting and the end point of family creation as it is proven by heterosexual intercourse. In turn this means that infertility and non-heterosexual reproduction is characterized as unnatural. The outcome is a power inequality where compulsory heterosexuality is applied as the basis of ART legislation.

The law thus drives harm to non-traditional family forms. The High Court decision *Masson v Parsons* [2019] HCA 21 is an example of how law, based upon a model of compulsory heterosexuality, causes harm to non-traditional families (i.e., gay and lesbian couples). In that case the finding of parentage—or absence of parentage by the non-biological lesbian mother—was time related, as she was not the de facto partner of the biological mother at the time of the sperm donation. The judgement in *Masson v Parsons* reflects a legislative regime heavily weighted towards "normal" heterosexual procreation. While the timing of the creation of a de facto relationship may be important to determining the issue of parentage in heterosexual reproduction, such timing arguably has nothing to do with agreements to parent between lesbians and gay men. *Masson v Parsons* highlights the legislative assumptions as to a heterosexual normative order of family creation which disadvantages gays and lesbians and other minority groups such as single men and women, transgender, bisexual, transgender, queer or questioning, intersex, asexual, and other vulnerable communities. Reframing the law along a paradigm that separates fertility and heterosexual sex from family creation will offer more opportunities for people to work outside of compulsory heterosexuality supported by the medico-legal binary of infertility.

Further, medicine is supported by law as paramount in curing infertility. Medical professionals define and interpret the condition, take an expanded role in treatment, control access to treatment, and monitor compliance with treatment regimens (Conrad and Shneider 2010). In the language of Kaczmarek, this gatekeeping role of the medical profession is over-medicalization (Kaczmarek 2019). This is evident in legislative restrictions upon matters that have nothing to do with the disease of infertility including the number of children or families donors may donate gametes to, the minimum age of surrogates, and prohibitions upon monetary payment for gametes and surrogacy. Moreover, IVF may be used to treat non-infertile patients for future problems, IVF may be undertaken as an elective procedure for the purposes of genetic diagnosis, or egg freezing may be used by those who anticipate a future diagnosis of infertility.

Of course none of this militates against the reality that many ART patients are very satisfied with their care. IVF and related services offer infertile individuals the chance to create a family. Importantly, as Purdy notes, a critique of medicalization does not necessarily need to reject medicine (Purdy 2001). Indeed, the medicalized framework for infertility treatment offers minimum legal standards to patients, such as the principle of consent and autonomy to protect from abuse. For example, Indian surrogates are not treated as clinical subjects and therefore informed consent is not sought (Vora and Iyengar 2016).

However, medicalization of infertility is also harmful. A recent study by Hodson and Bewley found that the medical abuse that can occur through ART includes unnecessary procedures and leading couples to use ART without first trying conservative measures (Hodsona and Bewley 2019). Infertility has adverse emotional, psychological. and physical consequences. Researchers have identified this harm in constructing concepts of self, health, and disease. Becker and Nachtigall observe "[e]fforts to eradicate feelings of abnormality for childlessness by lending medical legitimacy to the failure to conceive are undermined by entering a medical system in which concepts of disease and abnormality are implicit" (Becker and Nachtigall 1992). Greil neatly summarizes the experience of treatment of patients with infertility in terms of three paradoxes: 1) their sense of loss of control leads them to treatment where they lose even more control; 2) their feelings of loss of bodily integrity leads them to treatment where the body is invaded; and 3) their sense of loss of identity leads to treatment where they feel they are not treated as whole people (Greil 2002).

The hegemonic power of medical infertility also masks harmful social impact. Prioritizing access to technology as medical treatment acts to restrict and control capacity to reproduce rather than treating disease. For example, legal restrictions are imposed upon infertile individuals that have nothing to do with their medical infertility and everything to do with their social desirability. In the Australian state of Victoria, access to ART is based upon potential parenting capacity. Individuals have been refused access to treatment based upon their criminal records or history of child neglect.[1] Here the medical label of infertility triggers an external regime of legal, social, and economic policy. Deference of law to medicine thus masks the extent to which infertility is a social construct.

Finally, and importantly, the power of medical treatment as the solution for infertility is also seen in the stigma and social undesirability attached to alternative means of family creation. Adoption, once the natural solution to infertility, is now considered a type of insurance policy, with IVF now being the first choice and "natural" cure (Bell 2019). Ironically, as there is little control over the success of infertility treatment in clinics, adoption is viewed as a second choice. While adoption may be part of a medical procedure such as surrogacy using IVF, it differs in that it is a service for the child rather than a right of an adult hoping to adopt them. Childlessness and fostering are also non-medical alternatives, which are viewed as even having failed, in terms of preferred means of medical and biological means of family formation (Bell 2019).

The Fertility Industry (and Exclusion)

The most obvious result of the medico-legal binary of infertility is healthcare consumption. ART, subsidized by public health funding through the Australian Medicare system, is overwhelmingly private and commercial. More than 70,000 IVF treatment cycles are performed in Australia and New Zealand each year (Chambers 2017). In Australia the infertility industry is worth an estimated AUD$560 million (Leeton 2004; Harrison 2018). Two of the largest industry providers, Virtus Health and Monash IVF, are publicly listed companies. The Australian industry is also international in operation. Virtus Health, the largest Australian company, which controls 41 per cent of the IVF for the Australian market in 2017, controls approximately 15 per cent of the Danish ART market, along with an increasing proportion of the Singaporean, English, and Irish markets (Sier 2017;

---

[1] For example, *OMU & RGJ v Patient Review Panel & Secretary to the Department of Health and Human Services* [2018] VCAT 1235.

Harrison 2018, 24; Witcomb 2018). Globalization has also occurred in reverse. In 2018 CHA Medical Group, a Korean company, and Singapore Medical Group, purchased a controlling stake in City Fertility, a clinic with 5 per cent of the Australian ART market, for an estimated AUD$47 million (Chan-ok and Eun-joo 2018).

This breadth and scope of the infertility industry impacts individual opportunity for family creation. Choice is created as infertility is curable through technology. Even though IVF is not a treatment for the cause of infertility or the underlying condition, it is a way of getting a person pregnant (Price 1993, 27). However, choice is also restricted as technology now dominates as the solution to a diagnosis of infertility. Women participating in IVF are more likely to be diagnosed as having a chronic illness and the role of the medical personnel is more akin to management of the symptoms rather than treating any underlying issue of infertility (Anleu 1993). Moreover, alternative options for non-medical family creation are not explored nor perceived to be within the remit of the medical practitioners and fertility clinics who offer services.

The commercial treatment of the disease diverts focus from existing inequalities which are reinforced by technology. One of the more obvious consequences of the fertility industry is that only those who can afford it may access treatment (Sussman 2018). A stratification based on wealth is supported by the regulatory framework, demonstrated by new market entrants such as SuperCare which assists patients to access their superannuation to afford treatment and clinics partnering with financing companies such as Zip which offers unsecured finance. Technology acts to amplify pre-existing differences in wealth and achievement such as race, class, and geographical location all having impact upon access to ART (Chin et al. 2015). The labelling of an individual as infertile thus may act to (re)produce forms of oppression and exclusion (Steele, Iribarne, and Carr 2016).

Exclusion or "reproductive exile" (Inhorn and Patrizio 2009) is also apparent in Australians travelling to other jurisdictions to engage in the global fertility industry worth upwards of U.S. 22.3 billion (Schurr 2018). While the extent of cross-border reproductive travel is not known in Australia, it is described as "a common practice" (Gorton 2018). Individuals who travel across borders are often assumed to be motivated by proactive reasons which benefit the traveller, hence the terms "reproductive travel" and "fertility tourism" (Speier 2016). This notion of freedom of choice as an international consumer and citizen activist travelling to avoid restrictive legal regime and creating a market which distributes goods and services and at risk of exploiting the fertile such as surrogate mothers in the Global South (Krawiec, Mahoney, and Satel 2018, 4).

However, the reality is more complex. Situational constraints undermine emphasis upon the agency of the traveller (Fox and Murphy 2013; Fletcher, Fox, and McCandless 2008; McHale et al. 2006). In a recently completed study, we confirm that individual patients cross borders, often illegally, for reproductive care due to "push pull" factors (Jackson et al. 2017)—the push factor of the absence of care in the home jurisdiction and the pull factor of the desirability of care in another jurisdiction. Our research confirms that of international scholars (Crooks and Snyder 2015) who have found three themes central to an individual's original decision to seek medical treatment abroad. The first is failure of the domestic health system, by virtue of individual frustrations with the domestic healthcare providers who misdiagnosed or over-treated and policymakers who do not support options (such as commercial surrogacy) which are available internationally. The second theme is that access to fertility treatments abroad could be effective, as the alternative to travel is to accept childlessness, making travel a rational choice. Finally, there is the persistent belief in the alchemy of fertility technology, that by just taking one more step—cross border travel— a miracle will triumph.

It is thereby possible that the miracle promised by the medicalization of infertility motivates travel. Not as a choice but as an inevitable step in the pursuit of technology as treatment which will work. As Becker and Nachtigal observe, "[o]nce a condition is medicalised, individuals' ability to leave the health care system in order to seek social solutions for their problems may be difficult. For some conditions, exiting from the status of patient may be impossible" (Becker and Nachtigall 1992, 469). This requires further research. To address oppression and exclusion, structural regulatory issues, rather than framing infertility as an individual choice, requires attention. As Laufer-Ukeles observes, "[w]hile individuals who travel illegally are responsible for their actions, the legal, medical, social and contextual pressure involved in their decision making requires further analysis" (Laufer-Ukeles 2011, 611).

Reframing the Law to Emphasize Opportunity for Family Creation

To address the hegemonic power of the medico-legal binary of infertility and the harm it causes, the law must be reframed. Ideally the law must provide *both* medical solutions *and* non-medical solutions. It must support the opportunity to form a family outside of the medical community. This is necessary as the current regulatory intention of family creation in Australia is focused upon technology, its access, and use, whereas for the infertile individual the objective is to have a child. This is a mismatch. The needs and desires of the infertile individual do not necessarily require use of the technology offered by the medicalized infertility industry (Franklin 1993; Strathern 1992). The law must shift so as to recognize and address this contradiction. To successfully cater to infertile individuals, and to prevent oppression and exclusion, the law must disentangle the construct of infertility from the desire to create a family.

This reframing of the law must centre opportunity for family creation. The result being that the medical treatment of infertility becomes one option amongst many for family formation. The shift in thought is that medical treatment is neither prioritized as a first resort nor glamorized as the best solution to creating a family. Instead, it is to be offered as one of a range of options for family creation. This range of options is not a sliding scale of desirability with medical treatment being prioritized—rather the opportunity for family creation should be crafted to suit individual need. It follows that “infertility treatment” should be called “reproductive services” recognizing that “emotional rather than the physical or medical needs are paramount” in ART (Dempsey 2008, 276). This step means that medical options are not the only “treatment,” and indeed, as has been discussed above, medical technology may not offer a treatment at all. This suggestion reframes the emphasis away from treatment of a disease which is seen as usual and almost mandatory to offering a service which is optional. The term “reproductive services” is a more accurate term, which may include non-medical services and thus result in better support being offered to family formation which occurs outside of the medical community. Here adoption, fostering, surrogacy, and sperm donation are all examples of means to create a family which may be utilized without medical help.

On the legal, public policy side, there are many ways to better support opportunities for family creation. As discussed above, the Australian Medicare system currently subsidizes infertility treatment. For example, the medicalization of infertility has led to financial support from the Commonwealth Government for these treatments and the New South Wales state Government recently invested $42 million to lower IVF costs (NSW Health 2020). At the same time, those who would prefer to adopt do not receive financial support to anywhere near the same degree. For example, adoption, not being a medical treatment, is not covered under health insurance. This lack of state financial support—even with respect to the funding of fostering—is similarly the case for other non-medicalized means of forming families.

This reframing must be done through legislative reform. The most comprehensive response would be to differentiate legal regulation from medical treatment in legislation and the ART guidelines. This will require legislative amendment in three of the four Australian jurisdictions, with legislation governing ART, such as amending section 4 of the NSW *Assisted Reproductive Technology Act 2007*,[2] which defines ART treatment as:

> … assisted reproductive technology treatment, being any medical treatment or procedure that procures or attempts to procure pregnancy in a woman by means other than sexual intercourse, and includes artificial insemination, in-vitro fertilisation, gamete intrafallopian transfer and any related treatment or procedure that is prescribed by the regulations.

Changing this definition to reflect fertility treatment as a service will engage with the intention of family creation rather than the medical treatment of infertility as a disease. It will require deletion of such definitions and reframing the language of statute around opportunity for both medical and non-medical family creation.

One compelling reason for statutory reform is to safeguard the health of all individuals. Safeguarding health entails the identification and amendment of regulatory provisions that cause harm to individuals undertaking ART. For example, the use of IVF in surrogacy to avoid a genetic connection between the surrogate and

---

[2] See also *Assisted Reproductive Treatment Act 1988* (SA) (term “reproductive technology used, defined as the branch of medical science which is concerned with artificial fertilisation”); *Assisted Reproductive Treatment Act 2008* (VIC) (no definition); *Human Reproductive Technology Act 1991* (WA) (term “reproductive technology used”).

the child she is carrying has been favoured by regulators over more traditional surrogacy where the surrogate's own egg is used to create the child she agrees to bear for others. This can be seen in Victoria, where traditional surrogacy is not able to be supported by clinics under section 40 of the *Assisted Reproductive Treatment Act 2008* (Vic). This is despite gestational-surrogacy pregnancies having significantly worse outcomes in terms of maternal morbidity. Golombok's research shows that the minimally invasive, traditional surrogacy where the surrogate uses her own oocyte, which much more closely mirrors the kinds of pregnancies surrogates would have had for themselves, is safer for all concerned. But it is also much less profitable for the commercial surrogacy industry which, supported by law, encourages gestational surrogacy (Golombok 2015). Amendment to such policy positions to ensure legal support for more appropriate and proportionate family creation options will result in improved health benefits. A second compelling reason is to legally protect any children born of non-traditional arrangements. Here recognition of all parents on birth certificates is one option which has been consistently promoted in order to include gay and lesbian parents (Millbank 2006).

Legal support for social solutions to infertility must also be emphasized. Initiatives such as widening access to rural and vulnerable individuals and parallel initiatives involving education and public media outreach have already proven valuable. In the United Kingdom a group of stakeholders have set up the Fertility Education Initiative (FEI), with the "aim of increasing fertility awareness and ensuring all women and men are able to make well informed choices about their reproductive lives" (Harper et al. 2017). In Australia "Your Fertility," a fertility health promotion programme funded by the Australian Government, was established in 2011. Data collected over five years indicate that the programme meets a need for targeted, evidence-based, accessible fertility-related information (Hammarberg et al. 2017). Such initiatives show the importance of legal support for independent accessible materials on the conditions and options for infertility.

Further, in keeping with feminist relational understandings of health law (Fox and Murphy 2013; Fletcher, Fox, and McCandless 2008; McHale et al. 2006), alternatives to technology must be developed around the individual as being inherently social and constituted by the web of relationships in which she is embedded. Thus approaches such as supporting personal coping strategies should not be sidelined in thinking through more creative policy responses to infertility. Without recognizing the impact of the social and economic context and personal preferences of individuals, it will be impossible to adequately, effectively, and safely address specific problems (Kaczmarek 2019).

Finally, government health initiatives should be framed around issues which address the causes of infertility, such as changing public policy and social mores, ensuring public health is funded appropriately, and removing poor diet or adding more exercise (Barry et al. 2009). Thus, the medicalization of infertility diverts focus from other causes of infertility which may well be linked to environment change, poor nutrition, and excessive plastics and pesticides and poisons in food (Fidler and Bernstein 1999). Causes may also be social, religious, and cultural, creating pressure for individuals to create families of their own.

Conclusion

The medicalization of infertility in Australia provides insight into how a disease can be constructed by medicine and law—and then treated through technology and science—when key interests align between business, government, medical practitioners, and scientists, as well as patients and society at large. The binary model of infertility is beneficial for a number of stakeholders. Patients find relief in the hope that their childlessness may be cured, medical scientists receive credit for the ability to cure infertility, and additional revenue is created for businesses including legal practitioners, medical researchers, nurses, counsellors, pharmaceutical companies and infertility clinics—and now managers and also company shareholders. From this perspective, a binary model of infertility is a confluence of key social factors and economic interests, supported by a medico-legal regulatory framework.

Yet this binary also causes much harm. It subjects vulnerable communities to compulsory heterosexuality, meaning that individuals are forced into a medical model that may bear no correlation with their medical fertility. It also overlooks the individual needs of members of heterosexual couples—deeming them both to be infertile when only one may be medically infertile. Further, it has created an expensive and government-subsidized industry, exclusion from which may encourage illegal and dangerous travel overseas for Australians to locate and use international medical services. It also limits opportunity by promoting ART as the cure for childlessness and thus decreasing the choice of non-medical means of family creation.

This paper suggests the interaction between law and medicine in Australia with respect to infertility must be reframed. It uses the interdisciplinary approach offered by bioethics, social sciences, and law to expose the medico-legal binary model of infertility and the harm produced by it. Medicalized infertility prioritizes the use of the technology rather than the needs of infertile individuals. In this way the macro structure of law and medicine support each other to reduce, rather than expand, options for family creation. It excludes non-medical options such as traditional surrogacy, childlessness, sperm donation, adoption, and fostering, revealing social and economic bias. It limits treatment options, prevents the normalization of infertility, and creates a reproductive hierarchy with medicalized treatment at the apex.

Infertility is a medico-legal construct which operates with hegemonic power. The ideologies behind medical treatment for infertility blind us to the reality that individuals are excluded from treatment by cost and failure and vulnerabilities such as sexuality, asexuality, and other factors which do not conform to heterosexual reproductive norms. Law reform through changed regulatory intention is required to shift the dominant regulatory paradigm away from "curing" the medicalized state of infertility to emphasizing opportunities for family creation. In this way ART treatment will become one of many reproductive services supported by law which will aid in family creation.

Funding This research was funded by Australian Research Council Grant DP 1510157. Thanks to Jenni Millbank, Isabel Karpin, and Norman O'Dowd for comments on earlier versions of this paper and to Miranda Kaye, Norman O'Dowd, Michaela Stockey-Bridge, and Susan Chandler for research assistance on the project and to our interview participants for sharing their views and thoughts. A special acknowledgment to Rachel Carr for her research and writing assistance on this paper.

References

Abusson, K. 2019. Dud sperm: "They told me that I could never have fallen pregnant." *Sydney Morning Herald*, July 26. https://www.smh.com.au/healthcare/dud-sperm-they-told-me-that-i-could-never-have-fallen-pregnant-20190724-p52afh.html. Accessed September 26, 2019.

Anleu, S.R. 1993. Reproductive autonomy: Infertility, deviance and conceptive technology. *Law & Medicine: Law in Context* 11(2): 17–40.

Areheart, B.A. 2010. Disability Trouble. *Yale Law & Policy Review* 29(2): 347–388.

Australian Competition & Consumer Commission. 2016. IVF "success rate" claims under the microscope. *Australian Competition & Consumer Commission*, November 14. https://www.accc.gov.au/media-release/ivf-success-rate-claims-under-the-microscope. Accessed September 26, 2019.

Barry, C.L., V.L. Brescoll, K.D. Brownell, and M. Schlesinger. 2009. Obesity metaphors: How beliefs about the causes of obesity affect support for public policy. *Milbank Quarterly* 87(1): 7–47.

Becker, G., and R.D. Nachtigall. 1992. Eager for medicalisation: The social production of infertility as a disease. *Sociology of Health & Illness* 14(4): 456–471.

Bell, A.V. 2010. Beyond (financial) accessibility: Inequalities within the medicalisation of infertility. *Sociology of Health & Illness* 32(4): 631–646.

———. 2019. "Trying to have your own first; It's what you do": The relationship between adoption and medicalized infertility. *Qualitative Sociology* 42(3): 479–498.

Biggers, J.D. 2012. IVF and embryo transfer: Historical origin and development. *Reproductive BioMedicine Online* 25: 118–127.

Brazier, M. 1987. Patient autonomy and consent to treatment: The role of the law? *Legal Studies* 7(2): 169–193.

Brazier, M., S. Devaney, and A. Mullock. 2018. Editorial: Reflections on bioethics and law: Yesterday, today and tomorrow. *Medical Law Review* 26(2): 179–182.

Brazier, M., and J. Miola. 2000. Bye-bye Bolam: A medical litigation revolution? *Medical Law Review* 8(1): 85–114.

Broom, D., and R. Woodward. 1996. Medicalisation reconsidered: Toward a collaborative approach to care. *Sociology of Health & Illness* 18(3): 357–378.

Carter, D. 2017. *Responsibility for iatrogenic death in Australian criminal law*. Thesis submitted to UTS, Sydney.

Chadwick, R., and D. Wilson. 2018. The emergence and development of bioethics in the UK. *Medical Law Review* 26(2): 183–201.

Chambers, G. 2017. Women now have clearer statistics on whether IVF is likely to work. *The Conversation*, July 24. https://theconversation.com/women-now-have-clearer-statistics-on-whether-ivf-is-likely-to-work-81256. Accessed September 26, 2019.

Chin, H.B., P.P. Howards, M.R. Kramer, A.C. Mertens, and J.B. Spencer. 2015. Racial disparities in seeking care for help getting pregnant. *Paediatric and Perinatal Epidemiology* 29(5): 416–425.

Conrad, P. 1992. Medicalization and social control. *Annual Review of Sociology* 18: 209–232.

Conrad, P., and K.K. Barker. 2010. The social construction of illness: Key insights and policy implications. *Journal of Health and Social Behavior* 51(Suppl): S67–79.

Conrad, P., and J.W. Shneider. 2010. *Deviance and medicalisation: From badness to sickness*. Philadelphia: Temple University Press.

Conrad, P., T. Mackie, and A. Mehrotra. 2010. Estimating the cost of medicalization. *Social Science & Medicine* 70(2): 1943–1947.

Crooks, V., and J. Snyder. 2015. Faith, hope and trust in medical tourism. *SFU Medical Tourism Research Group*, September 29. http://www.sfu.ca/medicaltourism/One%20page%20summaries%20June%202015/Faith,%20Hope,%20and%20Trust%20in%20Medical%20Tourism.pdf. Accessed September 26, 2019.

Dagan, H. 2015. Law as an academic discipline. In *Stateless law: Evolving boundaries of a discipline*, edited by H. Dedech and S. Van Praagh, 43–60. London: Routledge.

Davies, M. 1998. *Textbook on medical law*, 2nd ed. Oxford: Blackstone Press.

Dempsey, D. 2008. ART eligibility for lesbians and single heterosexual women in Victoria: How medicalisation influenced a political, legal and policy debate, *Health Sociology Review* 17(3): 267–276.

Erikson, L. 2017. Finland as a late regulator of assisted reproduction. In *Assisted reproduction across borders: Feminist perspectives on normalizations, disruptions and transmissions*, edited by M. Lie and N. Lykke, 127–136. New York: Routledge.

Farrell, A.M., J. Devereux, I. Karpin, and P. Weller. 2017. *Health law: Frameworks and context*. Cambridge: Cambridge University Press.

Fidler, A., and J. Bernstein. 1999. Infertility: From a personal public health. *Public Health Reports* 114: 494–500.

Fletcher, R., M. Fox, and J. McCandless. 2008. Legal embodiment: Analysing the body of healthcare law. *Medical Law Review* 16(3): 321–345.

Foucault, M. 1986. *The care and the self: The history of sexuality,* Vol. 3. New York: Pantheon.

Franklin, S. 1993. Essentialism, which essentialism? Some implications of reproductive and genetic techno-science. *Journal of Homosexuality* 24(3-4): 27–39.

———. 2001. Biologization revisited: Kinship theory in the context of the new biologies. In *Relative values: Reconfiguring kinship studies*, edited by S. Franklin and S. McKinnon, 302-325. Durham, North Carolina: Duke University Press.

Freeman, M., and A.D.E. Lewis. 2000. *Law and medicine: Current legal issues 2000*, vol 3, 1st ed. Oxford; New York: Oxford University Press.

Fox, M., and T. Murphy. 2013. The body, bodies, embodiment: Feminist legal engagement with health. In *The Ashgate research companion to feminist legal theory*, edited by M. Davies and V. E. Munro, 249-267. New York: Routledge.

Golombok, S. 2015. *Modern families: Parents and children in new family forms*. Cambridge: Cambridge University Press.

Gorton, M. 2018. *Helping Victorians create families with assisted reproductive treatment*: *Interim Report of the Independent Review of Assisted Reproductive Treatment*. Melbourne: Victorian Government.

Greil, A.L. 1991. *Not yet pregnant. Infertile couples in contemporary America*. Piscataway: Rutgers University Press.

———. 2002. Infertile bodies: Medicalization, metaphor, and agency. In *Infertility around the globe: New thinking on childlessness, gender, and reproductive technologies: A view from the social sciences*, edited by M.C. Inhorn and F. van Balen, 101–118. Berkeley, CA: University of California Press.

Greil, A., J. McQuillan, and K. Slauson-Blevins. 2011. The social construction of infertility. *Sociology Compass* 5(8): 736–746.

Hammarberg, K., R.J. Norman, S. Robertson, R. McLachlan, J. Michelmore, and L. Johnson. 2017. Development of a health promotion programme to improve awareness of factors that affect fertility, and evaluation of its reach in the first 5 years. *Reproductive BioMedicine and Society Online* 4: 33–40.

Harper, J., J. Boivin, H.C. O'Neill, et al. 2017. The need to improve fertility awareness. *Reproductive BioMedicine and Society Online* 4: 18–20.

Harrison, L. 2018. *Fertility clinics in Australia*. Melbourne: IBISWorld.

Hodsona, N., and S. Bewley. 2019. Abuse in assisted reproductive technology: A systematic qualitative review and typology. *European Journal of Obstetrics & Gynecology and Reproductive Biology* 238: 170–217.

Harwood, K. 2007. *The infertility treadmill: Feminist ethics, personal choice, and the use of reproductive technologies*. Chapel Hill, NC: University of North Carolina Press.

Inhorn, M.C, and P. Patrizio. 2009. Rethinking reproductive "tourism" as reproductive "exile". *Fertility and Sterility* 92(3): 904–906.

Jackson, E., J. Millbank, I. Karpin, and A. Stuhmcke. 2017. Learning from cross-border reproduction. *Medical Law Review* 25(1): 23–46.

Jacobson, M.H., H.B. Chin, A.C. Mertens, J.B. Spencer, A. Fothergill, and P.P. Howards. 2017. Research on infertility: Definition makes a difference. *American Journal of Epidemiology* 187(2): 337–346.

Kaczmarek, E. 2019. How to distinguish medicalization from over-medicalization? *Medicine Health Care and Philosophy* 22(1): 119–128.

Karpin, I., and R. Mykitiuk. 2008. Going out on a limb: Prosthetics, normalcy and disputing the therapy/enhancement distinction. *Medical Law Review* 16(3): 413–436.

Kennedy, I. 1988. *Treat me right: Essays in medical law and ethics*. Oxford: Clarendon Press.

Kramar, K.J., and W.D. Watson. 2006. The insanities of reproduction: Medico-legal knowledge and the development of infanticide law. *Social & Legal Studies* 15(2): 237–255.

Krawiec, K.D., J.D. Mahoney, and S.L. Satel. 2018. Foreward: Altruism, community and markets. *Law and Contemporary Problems* 81(1): 1–8.

Laufer-Ukeles, P. 2011. Reproductive choices and informed consent: Fetal interests, women's identity, and relational autonomy. *American Journal of Law & Medicine* 37(4): 567–623.

Leeton, J. 2004. The early history of IVF in Australia and its contribution to the world (1970–1990). *Australian New Zealand Journal of Obstetrics and Gynaecology* 44(6): 495–501.

Leyser-Whalen, O., A.L. Greil, J. McQuillan, K.M. Johnson, and K.M. Shreffler. 2018. Just because a doctor says something, doesn't mean that [it] will happen: Self-perception as having a fertility problem among infertility patients. *Sociology of Health & Illness* 40(3): 445–462.

McLean, S. A. M. 2009. *Autonomy, consent and the law*. London: Routledge.

McHale, J., M. Fox, M. Gunn, and S. Wilkinson. 2006. *Health care law*: *Text and materials*. London: Sweet & Maxwell.

Mackenzie, C., and N. Stoljar. 2000. *Relational autonomy: Feminist perspectives on autonomy, agency, and the social self.* Oxford: Oxford University Press.

Millbank, J. 2006. Lesbian and gay families in Australian law. *Federal Law Review* 34: 205–259.

———. 2015. Rethinking "commercial" surrogacy in Australia. *Journal of Bioethical Inquiry* 12(3): 477–490.

Montgomery, J. 1989. Medicine, accountability, and professionalism. *Journal of Law and Society* 16(3): 319–339.

Montgomery, R. 2016. WHO considers new definition of infertility that includes being single. *BIO News*, October 24. https://www.bionews.org.uk/page_95744. Accessed September 26, 2019.

Morgan, D. 1998. Frameworks of analysis for feminisms' accounts of reproductive technology. In *Feminist perspectives on health care law*, 1st ed., edited by S. Sheldon, 189–209. London: Routledge.

NSW Health. 2020. NSW government invests $42 million to lower IVF costs. 19 January 2020. https://www.health.nsw.gov.au/news/Pages/20200119_00.aspx. Accessed 21 May, 2020.

Price, F. 1993. Beyond expectation: Clinical practices and clinical concerns. In *Technologies of procreation: Kinship in the age of assisted conception*, edited by J. Edwards, S. Franklin, E. Hirsch, F. Price, and M. Strathern, 29-52. London: Routledge.

Purdy, L. 2001. Medicalization, medical necessity and feminist medicine. *Bioethics* 15(3): 248–261.

Reagan, L. J. 1997. *When abortion was a crime: Women, medicine, and law in the United States, 1867–1973*. Berkley, CA: University of California Press.

Rich, A.C. 1980. Compulsory heterosexuality and lesbian existence. *Signs* 5(4): 631–660.

———. 2004. Reflections on "Compulsory heterosexuality". *Journal of Women's History* 16(1): 9–11.

Richie, C.S. 2019. Not sick: Liberal, trans, and crip feminist critiques of medicalization. *Journal of Bioethical Inquiry* 16(3): 375-387.

Roberts, D. 1993. Crime, race and reproduction. *Tulane Law Review* 67: 1945–1977.

Rochon, M. 1986. Sterility and infertility: Two concepts. *Cahiers Quebecois de Demographie* 15(1): 27–56.

Rothstein, M.A. 2009. The role of law in the development of American bioethics. *Journal International Bioethique* 20(4): 73–111.

Sandelowski, M. 1991. Compelled to try: The never enough quality of conceptive technology. *Medical Anthropology Quarterly* 5(1): 29–47.

Sandelowski, M., D. Holditch-Davis, and B.G. Harris. 1990. Living the life: Explanations of infertility. *Sociology of Health & Illness* 12(2): 195–215.

Schurr, C. 2018. The baby business booms: Economic geographies of assisted reproduction. *Geography Compass* 12(8): 1–15.

Sheldon, S., and M. Thomson. 1998. *Feminist perspectives on health care law*. New York: Cavendish Publishing.

Shreffler, K., A.L. Greil, and J. McQuillan. 2017. Responding to infertility: Lessons from a growing body of research and suggested guidelines for practice. *Family Relations* 66(4): 644–658.

Sier, J. 2017. Monash IVF, Virtus Health shares flounder. *Financial Review*, October 9. https://www.afr.com/companies/monash-ivf-virtus-health-shares-flounder-20171004-gytzsx. Accessed September 26, 2019.

Skene, L. 2012. Why legalising commercial surrogacy is a good idea. *The Conversation*, December 10. http://theconversation.com/why-legalising-commercial-surrogacy-is-a-good-idea-11251. Accessed October 25, 2013.

Smart, C. 1989. *Feminism and the power of law*. New York: Routledge.

Speier, A. 2016. *Fertility holidays: IVF tourism and the reproduction of whiteness.* Toronto: York University Press.

Spielman, B. J. 2007. *Bioethics in law*. Totawa, NJ: Humana Press.

Steele, L., M. Iribarne, and R. Carr. 2016. Medical bodies: Gender, justice and medicine, *Australian Feminist Studies* 31(88): 117–124.

Steen, S. 2001. Contested portrayals: Medical and legal social control of juvenile sex offenders. *The Sociological Quarterly* 42(3): 325–350.

Strathern, M. 1992. *Reproducing the future*. New York: Routledge.

Sussman, A. K. 2018. Who can afford to get pregnant? IVF "baby scholarships" raise a class issue. *The Guardian*, November 28. https://www.theguardian.com/lifeandstyle/2018/nov/28/who-can-afford-ivf-treatments-fertility-class. Accessed September 26, 2019.

Thomson, M. 1998. Rewriting the doctor: Medical law, literature and feminist strategy. In *Feminist Perspectives on Health Care Law*, edited by S. Sheldon and M. Thomson, 173-188. New York: Cavendish Publishing.

Vora, K., and M. Iyengar. 2016. Citizen, subject, property: Indian surrogacy and the global fertility market. In *Assisted reproduction across borders: Feminist perspectives on normalizations, disruptions and transmissions,* edited by M. Lie and N. Lykke, 14–27. New York: Routledge.

Warnock, M. 1978. *The Report of the Committee of Inquiry into the Education of Handicapped Children and Young People.* London: Her Majesty's Stationery Office.

Witcomb, G. 2018. Virtus Health buys large Denmark clinic. *Intelligent Investor*, June 29. https://www.intelligentinvestor.com.au/recommendations/virtus-health-buys-large-denmark-clinic/142834. Accessed September 26, 2019.

Zegers-Hochschild, F., G.D. Adamson, J. de Mouzon, et al. 2009. International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology, 2009. *Fertility and Sterility* 92(5): 1520–1524.

Zegers-Hochschild, F., G.D. Adamson, S. Dyer, et al. 2017. The international glossary on infertility and fertility care, 2017. *Fertility and Sterility* 108(3): 393–406.

Zola, I. K. 1972. Medicine as an institution of social control. *The Sociological Review* 20(4): 487–504.