

Review

Not peer-reviewed version

---

# The Politics of Parenthood: Comparing Global Approaches to IVF Policy and Equity

---

[Gayathri Delanerolle](#) , [Mohammad Haddadi](#) , [Neha Raghuraman](#) , Elizabeth Liles , [Nimesha Wijamuni](#) , Nicola Tempest , [Nihal Al Riyami](#) , [Vindya Pathiraja](#) , [Peter Phiri](#) <sup>\*</sup> , George Eleje , [Sohier Elneil](#) , Sam Halabi

Posted Date: 10 September 2025

doi: 10.20944/preprints202509.0884.v1

Keywords: IVF; health policy; equity; systematic review; thematic analysis



Preprints.org is a free multidisciplinary platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This open access article is published under a Creative Commons CC BY 4.0 license, which permit the free download, distribution, and reuse, provided that the author and preprint are cited in any reuse.

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Review

# The Politics of Parenthood: Comparing Global Approaches to IVF Policy and Equity

Gayathri Delanerolle <sup>1,2</sup>, Mohammad Haddadi <sup>2</sup>, Neha Raghuraman <sup>1</sup>, Elizabeth Liles <sup>1</sup>, Nimesha Wijamuni <sup>3</sup>, Nicola Tempest <sup>4,5</sup>, Nihal Al Riyami <sup>6</sup>, Vindya Pathiraja <sup>7</sup>, Peter Phiri <sup>8,\*</sup>, George Eleje <sup>9</sup>, Sohler Elneil <sup>10</sup> and Sam Halabi <sup>11</sup>

<sup>1</sup> University of Birmingham, Birmingham, United Kingdom

<sup>2</sup> Hampshire and Isle of Wight Healthcare NHS Foundation Trust, Southampton, United Kingdom

<sup>3</sup> University of Colombo, Colombo, Sri Lanka

<sup>4</sup> University of Liverpool, Liverpool, United Kingdom

<sup>5</sup> Liverpool Women's NHS Foundation Trust, Liverpool, United Kingdom.

<sup>6</sup> College of Medicine & Health Sciences, Sultan Qaboos University, Muscat, Sultanate of Oman

<sup>7</sup> University of Ruhuna, Matara, Sri Lanka

<sup>8</sup> University of Southampton, Southampton, United Kingdom

<sup>9</sup> Nnamdi Azikiwe University, Awka, Nigeria

<sup>10</sup> University College London, London, United Kingdom

<sup>11</sup> Georgetown University, Washington, DC, United States of America

\* Correspondence: peter.phiri@southernhealth.nhs.uk

## Abstract

**Introduction:** In vitro fertilisation (IVF) has become an integral component of reproductive health, enabling millions of individuals, couples, and others to achieve intended, non-adoptive parenthood. However, governance of IVF remains highly variable, shaped by statutory law, religion, culture, and resource allocation. While some countries have developed robust statutory frameworks, others rely on interim codes or fragmented commissioning policies, creating inequities in access, safety, and inclusivity. **Methods:** A systematic methodology was developed in accordance with the PRISMA guidelines to examine IVF policies published across the United Kingdom (UK) and the continents of Asia, Africa, Europe, Oceania and South America. All policy documents available in a digital format from 20th of August 1990, to 2025 were included. National policies, laws, and regional commissioning frameworks explicitly addressing IVF policies were also included. Data extraction captured the statutory basis, eligibility criteria, financing models, clinical standards, and ethical provisions. A thematic, contextual and comparative analysis was conducted, complemented by descriptive statistics summarising age limits, body mass index (BMI) thresholds, inclusivity, and financing arrangements. **Results:** Analysis revealed wide heterogeneity in IVF policies. Marital restrictions in Iran, the Maldives, China, and Texas excluded single and LGBTQIA+ individuals, whereas South Africa, Wales, Montana, and Oregon guaranteed inclusivity. Public funding was comprehensive in South Korea and Wales but limited in Oman, Jersey, and several U.S. states. Clinical standards such as single embryo transfer were common, yet policies on gamete donation, storage, and consent varied substantially, undermining equity. **Conclusion:** IVF policy globally remains fragmented, reflecting divergent intersections of law, religion, and resource allocation. Statutory anchors and inclusive financing models support safety and access, yet restrictive eligibility criteria and fragmented commissioning perpetuate inequity. Regulation informed by equity and inclusivity factors, as well as integration into reproductive health strategies, is needed to ensure equitable and universal access to IVF.

**Keywords:** IVF; health policy; equity; systematic review; thematic analysis

## Research in Context

### Evidence before this study

Systematic comparative studies across multiple regions remain scarce, and most reviews have either limited scope to high-income countries or examined ethical and clinical concerns in isolation from financing and legal frameworks. Evidence on the intersection of eligibility criteria (age, BMI, marital status) with equity outcomes is fragmented, and few studies have quantified heterogeneity in governance models across international and subnational levels.

### Added value of this study

This study provides the first integrated comparative analysis of IVF policy across international, subnational (UK), and U.S. state contexts, synthesising statutory frameworks, payer policies, and draft legislation. By mapping three dominant policy logics and safety-led regulation, resource-rationing frameworks, and values-driven restrictions as it demonstrates how divergent legal, religious, and fiscal priorities shape access more than clinical capacity. The inclusion of U.S. state-level evidence (e.g., Montana's broad mandate, New Mexico's restrictive implantation rule, and South Carolina's explicit IVF protections) alongside international cases provides a novel cross-jurisdictional lens, showing that heterogeneity persists even within high-resource settings. Our descriptive statistics and thematic tables quantify and contextualise structural drivers of inequity, while our geographical comparison highlights how IVF policy functions as a proxy for broader reproductive politics.

### Implications of all the available evidence

The findings show that IVF remains a technology of global inequity: enabling reproductive choice where statutory clarity, inclusive eligibility, and public financing converge, yet entrenching exclusion where rationing, religious doctrine, or fragmented governance prevail. Policymakers should prioritise harmonisation of statutory frameworks, removal of discriminatory eligibility rules, and expansion of equitable financing to align IVF with reproductive rights and demographic

## Background

The advent of in vitro fertilisation (IVF) has transformed the landscape of reproductive medicine, creating new pathways to parenthood for millions of individuals, couples, and others facing challenges with conception [1,2]. Since the first successful birth following IVF in 1978, assisted reproductive technologies (ART) have expanded rapidly, encompassing a range of procedures including intracytoplasmic sperm injection (ICSI), cryopreservation, donor gametes, and pre-implantation genetic testing [1,2]. Globally, IVF is no longer a marginal intervention but an integral part of reproductive health services, with estimates suggesting that more than eight million babies have been born worldwide through IVF [3]. Yet, as this technology has evolved, the frameworks governing its use have struggled to keep pace. Unlike other areas of healthcare where clinical innovation is matched by universal regulatory standards, IVF sits at the intersection of medicine,

ethics, religion, and law [4]. This has produced a patchwork of governance systems, where patient access, safety, and rights are deeply shaped not only by biomedical evidence but also by cultural, political, and demographic determinants.

Globally, some countries have achieved robust, transparent regulation of IVF, balancing patient safety with equitable access. The United Kingdom (UK), for example, developed the Human Fertilisation and Embryology Acts of 1990 and 2008, creating the Human Fertilisation and Embryology Authority (HFEA) as a dedicated statutory regulator [5]. This model embeds evidence-based clinical standards such as embryo transfer limits, donor gamete registries, and welfare-of-the-child assessments, while also promoting transparency and public accountability [5]. Similarly, South Korea's Bioethics and Safety Act provides a strong statutory anchor for assisted reproductive therapy (ART), complemented by national insurance coverage that reduces financial barriers to treatment [6]. However, these examples are exceptions rather than the rule. In many low- and middle-income countries, and in jurisdictions where religion or judge-made law or judicial decisions play dominant roles, regulatory frameworks remain incomplete or fragmented [7–9]. Sri Lanka, for instance, relies on an interim Code of Practice without a bespoke statute [10], while in the Maldives, Islamic jurisprudence and lineage law strictly limit IVF to married heterosexual couples using their own gametes [11]. Elsewhere, as in Japan, statutory intervention has been partial, addressing only the parentage of donor-conceived children while leaving broader IVF practice under professional self-regulation [12]. Such diversity illustrates how IVF, unlike most other medical technologies, is profoundly shaped by values and politics as much as by science.

This variation in regulatory and policy approaches creates significant issues of equity, safety, and access. In jurisdictions where IVF is tightly regulated and publicly funded, patients benefit from both clinical safeguards and financial protection. Yet in countries where regulation is absent, interim, or value-driven, patients may face barriers such as age or body mass index (BMI) thresholds, marital status requirements, or outright exclusion if they are single, lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and more (LGBTQIA+), or seeking donor gametes [13–15]. Financing models further widen these inequities: South Korea's universal insurance contrasts sharply with the UK's fragmented commissioning system, where regional Integrated Care Boards (ICBs) impose divergent eligibility criteria, producing what has become widely known as the "postcode lottery" [16,17]. In Oman, eligibility for publicly funded IVF is restricted to women under 42 years with no living children, reflecting rationing of scarce resources [18], while in China, ART is available, but unmarried women remain excluded despite the state's pronatalist shift to a three-child policy [19]. Such disparities highlight the global contradictions of IVF: a technology designed to enable reproductive choice, but one whose availability is often determined by geography, law, and social identity. The implications extend beyond individual patients, shaping demographic trajectories, health system equity, and the potential for reproductive tourism, where people cross borders to circumvent restrictive local laws.

## Rationale

Against this backdrop, there is a pressing need to systematically analyse and compare IVF policies across jurisdictions. While individual case studies have highlighted particular national models, few studies have undertaken a comprehensive thematic and contextual analysis that brings together statutory frameworks, eligibility criteria, financing models, and ethical safeguards. Understanding these differences is vital for several reasons. First, IVF is not merely a biomedical procedure but a site of contested values, and comparative analysis helps reveal how laws and policies reflect and reinforce broader cultural and demographic priorities [4]. Second, inequities in access to IVF have profound consequences for reproductive justice, gender equality, and the rights of minority groups [20]. Third, fragmented policies create gaps in clinical safety and patient protection, particularly in countries relying on interim codes or professional self-regulation without statutory backing [21]. Finally, as cross-border reproductive care expands, the inconsistencies between legal systems increase the risk of exploitation, legal disputes, and inequitable outcomes [22]. This study

therefore, aims to synthesise and critically appraise IVF policies across diverse jurisdictions, drawing on both global and UK subnational evidence, to identify commonalities, divergences, and the legal underpinnings that either support or undermine equity in reproductive healthcare.

## Methods

This review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines [23]. The methodological approach was established in advance to ensure transparency and reproducibility. Although the review was not formally registered, the structure adhered closely to PRISMA requirements, and each stage of the process was prospectively defined.

### *Eligibility Criteria*

All policies available digitally from the 20<sup>th</sup> of August 1990-20<sup>th</sup> August 2025 were included. Searches were conducted using PubMed, Science Direct, Embase and Google. We also included studies that reported on policies developed through evidence-based approaches. The inclusion criteria comprised national and regional policies, statutes, ministerial guidelines, and commissioning frameworks that directly addressed IVF or ART. Eligible documents were required to specify eligibility thresholds, regulatory governance, financing arrangements, or ethical safeguards related to IVF. Documents were excluded if they addressed surrogacy, fertility preservation, or contraception alone without IVF provisions, or if they were advocacy statements and commentaries without formal policy or legal standing.

### *Information Sources*

A comprehensive search of multiple information sources was undertaken to identify relevant policies between January 2000 and June 2025. Primary sources included government and Ministry of Health websites, national legal gazettes, and professional society repositories such as the HFEA in the UK, the Health Professions Council of South Africa, and the Japanese Society of Obstetrics and Gynaecology. International organisations such as the World Health Organisation (WHO), the United Nations Population Fund, and the Organisation for Economic Co-operation and Development were searched to identify cross-referenced policy instruments. Grey literature searches were also performed using local commissioning repositories, with particular attention to UK ICB websites.

### *Search Strategy*

The search strategy combined controlled vocabulary and free-text terms. Boolean operators were used to link concepts relating to IVF and policy, for example: (“in vitro fertilisation” OR IVF OR “assisted reproduction”) AND (policy OR law OR regulation OR guideline OR commissioning). Country names and jurisdictional identifiers were included to refine the scope. No language restrictions were applied. Non-English documents were translated when feasible; however, if the translation of the main document was not possible or the text was too difficult to interpret without a native speaker, those documents were excluded.

### *Selection Process*

Two reviewers independently screened all records identified by the searches. Titles and abstracts were initially assessed for relevance, followed by full-text screening against the inclusion and exclusion criteria. Disagreements at either stage were resolved by discussion and consensus. A PRISMA flow diagram was used to record the number of records identified, screened, included, and excluded, with explicit reasons for exclusion provided at the full-text stage (Supplementary Figure S1).

### *Data Collection Process*

Data were extracted into a structured template developed for policy analysis. For each included policy, we extracted the jurisdiction, year of publication, statutory basis (law, decree, code, or guidance), eligibility criteria (age, BMI, marital status, parity), financing mechanisms (public insurance, subsidies, or private models), clinical standards (embryo transfer, donor gamete regulation, storage rules), and ethical or consent frameworks. One reviewer conducted the extraction and a second independently verified the entries to minimise error.

#### *Data Items*

The primary outcomes of interest were the presence or absence of statutory IVF regulation, the type and scope of eligibility thresholds, inclusivity of single people, LGBTQIA+ individuals, the form of public financing or insurance provision, and the clinical and ethical standards mandated by each policy. Secondary items included the integration of policies within wider reproductive health or demographic frameworks, and the legal or cultural determinants underpinning them.

#### *Risk of Bias in Individual Policies*

Traditional study risk-of-bias tools were not appropriate given the nature of the dataset. Instead, the risk of interpretive bias was managed by triangulating across multiple sources for each jurisdiction, including statutory texts, ministerial guidelines, professional codes, and peer-reviewed commentaries. The certainty of extracted data was strengthened through independent verification and consistency checks.

#### *Synthesis Methods*

The synthesis followed a dual approach. Thematic and contextual analysis was used to identify recurring patterns in governance, eligibility, inclusivity, financing, and ethical framing. Descriptive statistics were generated to summarise numerical variables such as age limits, BMI thresholds, inclusivity provisions, and financing arrangements across jurisdictions. Comparative matrices were constructed to contrast commonalities and differences between national and subnational contexts, and findings were mapped against underpinning legal instruments. The results were consolidated into a master thematic table that captured themes, sub-themes, indicators, exposures, determinants, intersections, and policy strengths and weaknesses.

## **Results**

IVF policies across national, subnational, and U.S. state levels demonstrate marked heterogeneity in eligibility, governance, financing, and ethical framing. Three distinct policy logics dominate. First, safety-led regulation anchors practice in statutory oversight of facilities and procedures, as seen in Sri Lanka [10], South Korea [24], Japan [12], and U.S. states like South Carolina [25]. Second, resource-rationing frameworks use age, BMI, and cycle caps to control access, evident in Oman [18], UK ICBs [26,27], and U.S. healthcare financing bodies such as Blue Cross Rhode Island, [28], OSU Health Plan [29] and actuarial reviews in New York and New Hampshire [30–32]. Third, values-driven restrictions tether eligibility to marital status, religious doctrine, or lineage law, shaping exclusionary regimes in the Maldives, China, Iran, and U.S. states such as Texas and New Mexico [11,19,33–35] (Table 1).

#### *Descriptive Analysis*

Comparison across 13 international jurisdictions and 7 U.S. states/private frameworks shows that IVF access is constrained more by law and policy than by clinical capacity. The median maximum age for treatment internationally was 42 years, but U.S. plans frequently imposed lower ceilings (e.g., OSU Health [29] Plan excludes  $\geq 43$ , BCBSRI limits post-menopause, Rhode Island law restricts to 25–42) [28]. BMI restrictions are entrenched in both UK commissioning and U.S. payers (e.g., 19–30 in parts of the UK; BMI counselling  $\geq 40$  in OSU) (Tables 1, and 2).

Marital requirements remain entrenched in the Maldives, Iran, and the U.S. Texas HB618 (spouse's sperm mandate, five-year infertility requirement) [30], while inclusive access is explicit in South Africa [36], Wales [37], Montana HB565 [38], and Oregon (surrogacy recognition) [39]. Public financing is present in fewer than half of contexts: most comprehensively in South Korea [24], and Wales; partially in Oman [18] and Jersey of Channel Islands (proposed NICE-alignment [40]) ; and variably in the U.S., where mandates differ (e.g., Montana [38] with broad coverage and a \$40,000 minimum benefit, New York with an actuarial-constrained mandate [41], and New Hampshire with a cost-limited requirement for large-group plans) [30].

While eight jurisdictions internationally and five U.S. states have statutory frameworks, others still rely on payer codes or case law (Sri Lanka pre-Act [10], Wisconsin consent-form governance [42], Rhode Island policy statements [28]), weakening enforceability. Together, these figures illustrate that although safety and quality are widely legislated, equity and universality remain the exception (Table 2).

**Table 2. Descriptive statistical summary of IVF policy features.**

Domain	Metric	Number/Result
<b>Scope of analysis</b>	Total jurisdictions/policies analysed	20 (13 international + 7 US)
<b>Legal frameworks</b>	With statutory IVF/ART law	13 (8 international, 5 US)
	With code/interim only	3 (Sri Lanka, Kenya, Wisconsin)
<b>Eligibility (Age)</b>	Median maximum age for IVF access	42 years
	Range of maximum age limits	25–45 years (RI 25–42; OSU <43; Iran 45)
<b>Eligibility (BMI)</b>	Jurisdictions/payers with explicit BMI restrictions	11 (8 international + 3 USA)
<b>Access rules</b>	Jurisdictions requiring marriage for access	3 (Maldives, Iran, Texas HB618)
	Explicitly inclusive jurisdictions (single and LGBTQIA+ )	5 (South Africa, Wales, Montana HB565, Oregon, Washington draft mandate)
<b>Financing</b>	Jurisdictions with public funding/insurance mandates	9 (6 international + 3 US)
<b>Caps/limits</b>	Jurisdictions with cycle/dollar caps	7 (UK ICBs, NY DFS, WA draft, BCBSRI, OSU, Montana, NH)

### *Thematic and Contextual Analysis*

#### Governance and Regulation

Sri Lanka's Code of Practice [10], South Korea's Bioethics and Safety Act [24], Japan's 2020 ART Act [12], and the UK's HFEA Acts anchor IVF within statutory safety regimes. U.S. states show wide variation: South Carolina SB-40 [43] protects IVF, cryopreservation, donation, and surrogacy while explicitly clarifying that embryos ex utero are not "unborn children," a deliberate counter to personhood statutes. Conversely, New Mexico's IVF law requires implantation of all embryos,

raising constitutional due process and privacy challenges [34]. Wisconsin illustrates the absence of statutory law, with reliance on clinic consent forms and case law (Davis v. Davis) [44].

### Eligibility and Access Criteria

Age and BMI thresholds are the primary criteria for rationing. In Oman [18], access is restricted to women  $\leq 42$  years (extendable to 44 with reserve) with a BMI  $< 35$ . In the UK, Integrated Care Boards (ICBs) set varying BMI limits [45], ranging from 38 in BANES to 43 in Wales [37]. U.S. insurers add further restrictions: BCBSRI excludes menopause and requires six failed donor inseminations before IVF for single women (like the UK) [28]; OSU excludes women  $\geq 43$  and restricts cryopreservation beyond 90 days [29]. Texas HB618 requires the use of a spouse's sperm and five years' infertility. By contrast [35], Montana HB565 [38] guarantees coverage across market segments, defines infertility broadly (inclusive of physician judgment), and establishes a \$40,000 minimum lifetime coverage for ART.

### Equity and Inclusivity

Equity outcomes diverge. South Africa [36] and Wales [37] explicitly include single women and LGBTQIA+ couples. U.S. inclusivity is emerging: Washington's draft mandate includes single/unpartnered individuals [46]; Oregon facilitates surrogacy and inclusive birth certificates; Montana prohibits discriminatory cost-sharing [38]. Yet, inequities persist where affordability and federal programmes (VA/TRICARE) exclude ART. In Jersey [40]), means testing excludes nearly all patients; in New Hampshire, actuarial projections show costs of including "social infertility" could reach \$524m, leading to calls for definitional narrowing (Figure 1).

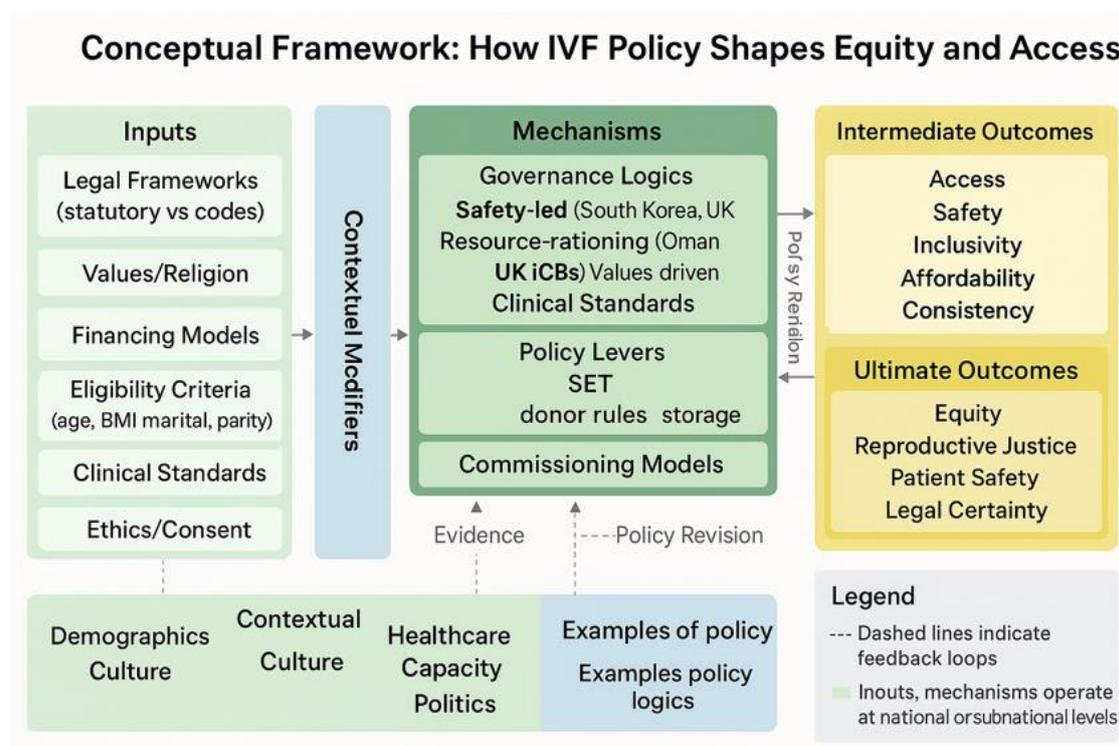


Figure 1. is a conceptual framework that shows the underpinning of the IVF policies.

### Clinical Standards and Safety

SET is embedded internationally and in U.S. state proposals (Washington's draft mandate) as a safety measure. Donor gamete regulation varies: Sri Lanka [40] imposes offspring limits, the UK

requires donor identity release, while U.S. payer policies (OSU [29], BCBSRI [28]); cover donors only under narrow medical indications. Storage varies: Sri Lanka (10 years extendable), South Africa (mandatory destruction)[36], OSU [29] (90-day limit) , BCBSRI (no storage coverage) [28].

### *Financing and Coverage*

South Korea's universal coverage [24] and Wales' funding of up to three IVF cycles [37], conditional on neither partner having a child from a previous relationship, represent progressive models. Jersey's proposition [40] seeks to align with NICE. In the U.S., coverage is deeply fragmented: New York's DFS shows IVF adds ~0.5–1.1% to premiums [41]; New Hampshire's [30] cost study estimates a large fiscal impact; Montana's HB565 [38] offers a broad public/private mandate; Texas restricts access to narrow populations [35]; and Oregon encourages cross-border reproductive travel due to inclusive surrogacy laws. Such variability reproduces inequities and fosters 'IVF tourism.' [39]

### *Ethics, Consent, and Counselling*

Consent frameworks remain uneven. The Maldives requires dual-spouse consent at every stage with Islamic counselling [11]. In the U.S., ethics debates focus on embryo disposition: New Mexico mandates implantation [34], Wisconsin relies on contract law, and Quigley & Andrews' early legal survey highlights liability risks in states that extend "child abuse" protections to embryos. Jersey [40] frames infertility as a rights issue under the Human Rights (Jersey) Law. U.S. advocacy briefs (t14c) argue IVF coverage as an ADA issue, recommending a federal mandate to harmonise standards and reduce inequity (Table 3).

**Table 3. Thematic table of IVF/ART policy features.**

Theme	Sub-theme	Example	Exposure	Determinants	Intersections	Relevant Law/Instrument	Policy Strength	Policy Weakness
<b>Governance &amp; Licensing</b>	Oversight & reporting	Sri Lanka, registration; WA cost study review; SC SB-40 IVF protections	Clinics, patient safety	Regulatory maturity	Medico-legal risk, personhood debates	Sri Lanka PHSRC; SC SB-40; NY DFS Actuarial Review	Safety clarity; legal protection	Fragmentation; patchwork coverage
<b>Facility &amp; Standards</b>	Infrastructure, counselling	Jersey off-island IVF; US payer	IVF patient safety	Accreditation; actuarial cost	Geography; affordability	Jersey P.20/2024; OSU policy	Strong clinical oversight	Travel burdens; admin delays

		PA requirements						
<b>Eligibility</b>	Age/BMI thresholds	Oman ≤42 yrs., BMI <35; OSU <43; RI 25–42	Women seeking IVF	Ageing, obesity, actuarial limits	SES, delayed childbearing	Oman guideline; OSU/BCB SRI policies	Transparent, safety-aligned	Exclusionary; autonomy limits
<b>Eligibility</b>	Marital/lineage rules	Maldives married only; TX HB618 spouse's sperm; Iran marital mandate	Unmarried, LGBT QIA+	Religion; heteronormative law	Equality; reproductive justice	Maldives ART Std; TX HB618	Cultural alignment	Excludes singles/LGBTQIA+
<b>Equity</b>	Inclusion of singles/LGBTQIA+	Wales CP38; Montana HB565; WA draft	LGBT QIA+, single, trans	Equality law, insurance parity	Cross-border care; affordability	WA draft mandate; Montana HB565	Inclusive access; anti-discrimination	Premium/fiscal constraints
<b>Financing</b>	Public funding/insurance	Korea insurance; Jersey NICE alignment; NY 0.5–1.1% premium; MT	Couples needing ART	National financing; actuarial limits	Income, geography	Korea Act; Jersey P.20/2024; NY DFS; MT HB565	Financial protection; coverage floor	OOP co-pays; fiscal pressure

		\$40k floor						
<b>Clinical Standards</b>	Embryo transfer & SET	UK ICBs; WA draft SET	IVF patients	Safety; multiples risk	Maternal health	HFEA; WA draft	Safer births	Perceived restriction
<b>Donor Games</b>	Coverage/sc reening	OSU covers donors for male factor; RI six inseminations before IVF	Donors, LGBT QIA+ couples	Clinical criteria; cost limits	Sexual orientation equity	OSU policy; RI §27-20-20	Some donor coverage	Restrictive, inequitable
<b>Embryo Storage</b>	Duration & disposal	Sri Lanka 10 yrs.; OSU 90 days; BCBSRI excludes storage	Patients with gametes	Law, payer policy	Bereavement; autonomy	HFEA; OSU; BCBSRI	Clarity in disposal	Inflexibility, inequity
<b>Consent &amp; Ethics</b>	Embryo disposition rules	NM implant-all; WI contract; Maldives spousal consent	Couples, clinics	Religion; contract law	Privacy vs jurisprudence	NM IVF statute; WI case law	Legal certainty (SC SB-40)	Chilling effects; inequity

### Comparative Analysis

Across jurisdictions, IVF regulation converges on safety, eligibility, and quality, but diverges in application. Resource-driven rationing dominates in Oman [18], UK ICBs, and U.S. insurers; religious lineage frameworks in the Maldives [11], Iran [33], and Texas [35] enforce

restrictive eligibility, while rights-based inclusion is explicit in South Africa [36], Wales [37], Oregon [39], Montana[38], and Washington’s draft law [46]. Financing mechanisms sharpen inequity: South Korea’s universal insurance [24] and Montana’s broad mandate contrast sharply with New York’s actuarial caps [41], New Hampshire’s fiscal caution, and Jersey’s restrictive means testing [40].

### *Legal Comparison*

Law simultaneously scaffolds and undermines IVF access. Statutory anchors (South Korea Bioethics Act [24]; UK HFEA [47], SC SB-40 [43]) provide durable protection. Values-driven statutes (NM implant-all embryos; TX HB618 [35]) undermine autonomy and equity. Code-based regimes (Sri Lanka [10], Wisconsin, BCBSRI) [28] leave patients exposed to inconsistent practice. Rights-based laws (Montana HB565 [38], Oregon surrogacy recognition [39]) expand access inclusively. Collectively, statutory clarity fosters safety, while restrictive statutes or reliance on codes perpetuate inequity, exclusion, or litigation [39].

### *Geographical Comparison of IVF Policy Frameworks*

#### East Asia

South Korea [24], and Japan [12] illustrate a safety-anchored model: national legislation (Bioethics and Safety Act; 2020 ART Act) emphasises clinical standards, reporting, and embryo research limits. South Korea [24] pairs this with near-universal insurance coverage, markedly reducing financial barriers, whereas Japan [12] retains partial reliance on professional society codes [24]. China simultaneously liberalises family size while prohibiting surrogacy and barring single women from ART, producing tension between demographic goals and reproductive rights [19].

#### Middle East

Oman [18] adopts rationing through strict age and BMI thresholds, publicly funding a limited number of cycles to preserve resources. By contrast, Iran and the Maldives restrict access to married heterosexual couples [11], with religious jurisprudence shaping gamete use, donor rules, and embryo disposition, embedding cultural legitimacy but entrenching exclusion.

#### Europe (Including the UK)

The UK embeds IVF within a strong statutory safety framework (HFE Acts) [26,27], but devolved commissioning to Integrated Care Boards creates a “postcode lottery” in access, with variable age cut-offs (38–42), BMI restrictions, and childlessness rules. Wales [37] is the most inclusive, funding three cycles for single women and same-sex couples, while parts of England impose tighter rationing (BANES, Surrey). Jersey [40], currently operating a restrictive means-tested model, is moving towards NICE-aligned provision, highlighting both the financial pressures of small jurisdictions and the political framing of IVF as a rights issue. However, across Europe provision varies widely from generous access in some countries to strict exclusions for single women or same-sex couples, often driving cross-border treatment—but detailed policy texts in English were not feasible.

#### Africa

South Africa stands [36]out for explicitly including single people, LGBTQIA+ couples, and people living with Human immunodeficiency virus (HIV) in its national guideline, representing one of the most rights-based approaches globally. By contrast, Kenya remains in a liminal state with draft ART legislation, leaving provision dependent on professional discretion and private markets [48].

#### United States

The U.S., a federal country under which its constituent states enjoy wide legal authority over employers, payers, healthcare professions, and standards of medical practice, demonstrates the

widest variability. Some states pursue inclusive mandates, Montana guarantees coverage across all insurance markets with a \$40,000 lifetime minimum [38]; Washington’s draft mandate recognises social infertility and embeds single-embryo transfer; Oregon [39] facilitates surrogacy and inclusive parentage. Others adopt restrictive stances: Texas HB618 [35] ties access to marital status and the use of a spouse’s sperm, while New Mexico [34] mandates implantation of all embryos. States such as New York [41], and New Hampshire focus on actuarial balance, quantifying premium impacts and narrowing scope to large-group markets [30]. Payers like Blue Cross Rhode Island[28] and OSU Health Plan [29] add age, BMI, and donor-related limits, reinforcing inequity. Wisconsin illustrates legal uncertainty where statutory guidance is absent, leaving governance to clinic contracts and courts. South Carolina SB-40 [43], conversely, provides explicit protection for IVF by clarifying that embryos ex utero are not legal “children,” insulating providers from personhood claims.

### South America

Brazil and other Latin American jurisdictions remain under partial statutory development, with patchy public provision and continued reliance on private funding, reinforcing socio-economic disparities [49].

Table 4 provides a comparative overview of IVF policies across global regions. It summarises how countries structure their approaches in five key dimensions.

**Table 4. Regional Policy Comparison in IVF.**

Region	Policy Dominant	Logic	Eligibility Rules	Financing Model	Equity & Inclusion	Governance Strength
Asia (South Korea, Japan, China, Oman, Iran, Maldives)	Safety-led (Korea, Japan), rationing (Oman, Maldives, China) driven (Iran, Maldives, China)	(Korea, rationing values- (Iran, Maldives, China)	Age cut-offs (≤42–45), BMI thresholds (Oman), marital restrictions (Iran, Maldives, China)	Korea: universal insurance; Japan: partial subsidies; Oman: rationed public; Iran/Maldives: limited, private reliance	Exclusion of singles/LGBTQ+ (Iran, Maldives, China); Korea reduces inequity	Korea/Japan strong statutory; Iran/Maldives religious statutes; Oman ministerial
Europe (UK, Jersey)	Rationing (UK ICBs); rights-based (Wales, Jersey proposal)	shift (Jersey)	UK: age 38–43; BMI 19–30; childlessness rules; Jersey: NICE-alignment pending	NHS-funded cycles (0–2); Jersey: meds-only → proposed 3 NICE cycles	Wales inclusive of singles/LGBTQIA+; England fragmented	UK strong statutory safety; commissioning fragmented

Africa (South Africa, Kenya)	Rights-based (SA); interim/discretionary (Kenya)	SA: broad inclusivity; Kenya: case-by-case	Public hospitals with inequitable reach; private markets	SA explicit rights protections; Kenya inequity	SA statutory guideline; Kenya draft only
North America (USA)	Mixed: inclusive mandates (Montana, Oregon, Washington); restrictive (Texas, NM); actuarial balance (NY, NH); patchwork payers (RI, OSU, WI)	Montana broad; WA inclusive; RI/OSU age & BMI caps; TX spouse sperm; NM implant-all	Montana \$40k floor; NY/NH premium-limited; RI/OSU benefit caps; federal VA/TRICARE exclusions	Inclusivity (MT, OR, WA); Exclusion (TX, NM, payer caps); affordability gaps persist	Statutory protections (SC SB-40, MT HB565); gaps (WI contract reliance)
South America (Brazil etc.)	Partial safety-led, uneven	Age-based, variable	Limited public funding, private reliance	Socio-economic inequities pronounced	Emerging statutory frameworks

## Discussion

Our study demonstrates that IVF policy and regulation are profoundly heterogeneous across geographies, reflecting divergent intersections of biomedical evidence, law, religion, demography, and resource allocation. While statutory regimes such as South Korea's *Bioethics and Safety Act* [24], the United Kingdom's *Human Fertilisation and Embryology Acts* [5], and U.S. state statutes such as South Carolina SB-40 [43] provide strong anchors for patient safety, clinical governance, and legal protection, many jurisdictions continue to rely on interim codes, fragmented payer policies, or values-driven statutes. This unevenness undermines universality: single women, LGBTQIA+ individuals, older patients, and those outside restrictive BMI or insurance thresholds are often excluded, while financing arrangements determine whether IVF functions as a public good or remains a private market commodity. By drawing these comparisons across regions, the analysis underscores how IVF simultaneously expands reproductive choice for some populations while reproducing entrenched inequities for others.

### Population Implications

At a population level, IVF policies mirror wider demographic, cultural, and socio-economic determinants. In countries with statutory clarity and financing such as South Korea [24], Wales [37], and increasingly Montana, IVF contributes to reproductive autonomy and broader fertility policy objectives. By contrast, restrictive eligibility criteria in Oman [18], fragmented commissioning across UK ICBs, and actuarial rationing in New York [41] and New Hampshire [30] reproduce inequities, disproportionately affecting women who delay childbirth, individuals with higher BMI more prevalent in deprived groups, and LGBTQIA+ couples who must self-fund insemination cycles before qualifying. In the Maldives [11], Iran [33,50–52], China [19], and U.S. states such as Texas [35], marital and lineage-based restrictions exclude single and same-sex couples, reinforcing heteronormative family structures. Jersey's means-tested model, which has effectively excluded all

applicants[40], and U.S. employer-payer rules that cap age or exclude storage, further illustrate how financial levers intensify stratification. For low- and middle-income contexts such as Sri Lanka [10] and Kenya [48], reliance on draft bills or professional codes leaves patients exposed to inconsistent standards, weak enforcement, and reproductive tourism. Thus, IVF policy is inseparable from debates on equity, reproductive justice, and the right to family formation across diverse socio-cultural settings.

### *Clinical Implications*

Divergent regulatory models carry tangible clinical consequences for patient safety, quality, and medico-legal certainty. Statutory systems mandating single embryo transfer, donor screening, and transparent storage rules as in the UK, South Korea [24], and Sri Lanka's Code of Practice [10], minimise risks of multiple pregnancy, infectious transmission, and disputes around gamete use. Similarly, Washington's draft mandate explicitly embeds single embryo transfer to balance access with safety. In contrast, fragmented payer-driven regimes in the US, such as BCBSRI [28], OSU Health Plan [29] and code-based systems in Sri Lanka [10] or Kenya, generate uncertainty around consent, embryo storage, and parental rights. New Mexico's "implant-all embryos" statute exemplifies how rigid legal frameworks can undermine clinical autonomy and patient safety [34], while Wisconsin's contract-based governance leaves patients vulnerable to litigation. The UK "postcode lottery" exemplifies how rationing through local commissioning disrupts continuity of care, creating inequity despite identical clinical need. Exclusions based on parity, secondary infertility, or marital status found in both UK and U.S. contexts conflate rationing with clinical indication, undermining evidence-based, patient-centred care.

### *Geographical Implications*

Geographical comparison highlights how IVF access is shaped less by biomedical need than by regional political, cultural, and fiscal priorities. Asia and the Middle East lean toward safety-led regulation such as South Korea [24], Japan or values-driven restrictions tied to marital status and religion (Iran, Maldives [11], China), with Oman [18] applying resource rationing. Europe combines strong statutory governance with rationed commissioning, producing equity in principle but postcode inequity in practice, while Jersey [40] illustrates the vulnerability of small systems to financing constraints. Africa presents both ends of the spectrum: South Africa's rights-based inclusivity contrasts sharply with Kenya's weak interim governance [36]. The United States embodies fragmentation, from inclusive mandates in Montana, Oregon [39], and Washington to restrictive frameworks in Texas [35] and New Mexico [34]., with payer-driven rationing (New York [41], Rhode Island [28], OSU [29]) reinforcing inequity. Latin America, including Brazil [49], remains underdeveloped in statutory IVF law, with access largely dictated by the ability to pay. These geographical contrasts underscore how IVF functions as a mirror of wider reproductive politics: inclusive where rights are prioritised, restrictive where religion or austerity dominate, and uneven where governance is fragmented.

### *Recommendations*

This policy synthesis highlights that while IVF is widely practised, governance remains uneven, with statutory clarity, inclusivity, and financing models varying substantially across jurisdictions. To reduce inequities and ensure safe, evidence-based, and patient-centred care, coordinated reforms are required nationally and internationally (Table 5).

**Table 5. Evidence-based recommendations for IVF policy and regulation.**

Domain	Recommendation	Evidence/Justification
--------	----------------	------------------------

<b>Legal frameworks</b>	Introduce or strengthen statutory regulation of IVF, including licensing, safety standards, donor regulation, and parentage rules.	Jurisdictions with statutory anchors (UK HFE Acts, South Korea's Bioethics Act, SC SB-40) demonstrate greater clinical safety and legal certainty compared with code- or contract-based systems (Sri Lanka, Kenya, Wisconsin).
<b>Equity of access</b>	Remove exclusionary criteria based on marital status, sexual orientation, or parity, and harmonise eligibility thresholds such as age and BMI.	Maldives, Iran, China, and Texas restrict IVF to married heterosexual couples; UK ICBs and U.S. payers impose variable age/BMI cut-offs. Wales, South Africa, Montana, and Oregon show inclusive models are feasible.
<b>Financing</b>	Expand public funding or insurance mandates to reduce reliance on private markets and self-funding prerequisites.	South Korea's insurance model improved access; Wales funds two cycles; Montana sets a \$40k floor. By contrast, Jersey's means test, Oman's rationing, and New York's actuarial caps highlight inequities.
<b>Clinical standards</b>	Mandate evidence-based practices such as single embryo transfer, clear embryo storage rules, and donor gamete registries with transparency on identity rights.	UK and Sri Lanka reduce multiple births via SET; Washington embeds SET; Maldives applies rigid cessation triggers; Japan and U.S. payers leave donor identity unresolved.
<b>Integration</b>	Align IVF policy with broader reproductive health and demographic strategies, and promote international cooperation on minimum standards.	Pronatalist aims in China conflict with IVF exclusion; U.S. patchwork fosters cross-border care; WHO/UNFPA call for harmonisation to mitigate reproductive tourism.

## Conclusions

IVF policies remain fragmented within countries, particularly between the private and public health providers globally, with statutory strength, inclusivity, and financing models varying widely across jurisdictions. While some countries provide robust, equitable frameworks, many rely on interim codes, restrictive criteria, or local commissioning, producing systemic inequities and undermining reproductive justice. Harmonising statutory regulation, expanding inclusivity, and embedding IVF within broader reproductive health strategies are essential to ensure safe, equitable, and universal access.

**Supplementary Materials:** The following supporting information can be downloaded at the website of this paper posted on Preprints.org.

**Author contributions:** GD developed the ELEMI program and conceptualised this paper as part of the KATHERINE project. GD conducted the analysis. NW wrote the first draft and furthered by GD, MH, EL and NR. All authors critically appraised, reviewed and commented on all versions of the manuscript. All authors read and approved the final manuscript.

**Funding:** Not funded

**Availability of data and material:** The data shared within this manuscript is publicly available.

**Code availability:** Not applicable

**Ethics approval:** Not applicable

**Consent to participate:** No participants were involved in this paper

**Consent for publication:** All authors consented to publish this manuscript

**Acknowledgements:** Not applicable

**Conflicts of interest:** All authors report no conflict of interest. The views expressed are those of the authors and not necessarily those of the NHS, the National Institute for Health Research, the Department of Health and Social Care or the Academic institutions.

## References

1. Henriksson P. Cardiovascular problems associated with IVF therapy. *J Intern Med.* 2021 Jan;289(1):2–11.
2. Koumparou M, Bakas P, Pantos K, Economou M, Chrousos G. Stress management and In Vitro Fertilization (IVF): A pilot randomized controlled trial. *Psychiatriki.* 2021 Dec 20;32(4):290–9.
3. Patrizio P, Albertini DF, Gleicher N, Caplan A. The changing world of IVF: the pros and cons of new business models offering assisted reproductive technologies. *Journal of Assisted Reproduction and Genetics* [Internet]. 2022 Jan 20 [cited 2025 Sept 3];39(2):305. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8769942/>
4. Londra L, Wallach E, Zhao Y. Assisted reproduction: Ethical and legal issues. *Seminars in Fetal and Neonatal Medicine* [Internet]. 2014 Oct 1 [cited 2025 Sept 3];19(5):264–71. Available from: <https://www.sciencedirect.com/science/article/pii/S1744165X14000511>
5. Participation E. Human Fertilisation and Embryology Act 2008 [Internet]. Statute Law Database; [cited 2025 Sept 3]. Available from: <https://www.legislation.gov.uk/ukpga/2008/22/contents>
6. Statutes of the Republic of Korea [Internet]. [cited 2025 Sept 3]. Available from: [https://elaw.klri.re.kr/eng\\_mobile/viewer.do?hseq=33442&type=part&key=36](https://elaw.klri.re.kr/eng_mobile/viewer.do?hseq=33442&type=part&key=36)
7. Gostin LO, Monahan JT, Kaldor J, DeBartolo M, Friedman EA, Gottschalk K, et al. The legal determinants of health: harnessing the power of law for global health and sustainable development. *The Lancet* [Internet]. 2019 May 4 [cited 2025 Sept 3];393(10183):1857–910. Available from: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(19\)30233-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30233-8/fulltext)
8. Gama E Colombo D. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. *Rev Direito Sanit* [Internet]. 2010 Feb 1 [cited 2025 Sept 3];10(3):253. Available from: <http://www.revistas.usp.br/rdisan/article/view/13190>
9. The Status of the Implementation of the UNGPs on Business and Human Rights in Europe and Central Asia | United Nations Development Programme [Internet]. [cited 2025 Sept 4]. Available from: <https://www.undp.org/eurasia/publications/implementation-un-guiding-principles-business-and-human-rights-ecis>
10. Code of Practice and Guidelines for Medically Assisted Reproductive Techniques Family Planning Unit [Internet]. [cited 2025 Sept 3]. Available from: <https://slcog.lk/wp-content/uploads/2025/03/Code-of-Practice-and-Guidelines-for-Medically-Assisted-Reproductive-Techniques-Family-Planning-Unit.pdf>
11. Esa G. National Standard for Assisted Reproductive technology in the Maldives.
12. Croydon S. Reluctant Rulers: Policy, Politics, and Assisted Reproduction Technology in Japan. *Cambridge Quarterly of Healthcare Ethics* [Internet]. 2023 Apr [cited 2025 Sept 3];32(2):289–99. Available from: <https://www.cambridge.org/core/journals/cambridge-quarterly-of-healthcare-ethics/article/reluctant-rulers-policy-politics-and-assisted-reproduction-technology-in-japan/ADA0ECC225D2FFF0D41C2A6061B01585>
13. Issanov A, Aimagambetova G, Terzic S, Bapayeva G, Ukybassova T, Baikoshkarova S, et al. Impact of governmental support to the IVF clinical pregnancy rates: differences between public and private clinical settings in Kazakhstan—a prospective cohort study. *BMJ Open* [Internet]. 2022 Feb 14 [cited 2025 Sept 3];12(2):e049388. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8845187/>

14. Assal A, Chauhan N, Shin EJ, Bowman K, Jones C. Patients' perspectives on allocation of publicly funded in vitro fertilization in Ontario: a qualitative study. *CMAJ Open* [Internet]. 2019 June 4 [cited 2025 Sept 3];7(2):E385–90. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6559882/>
15. Muir R, Hawking MKD. How do BMI-restrictive policies impact women seeking NHS-funded IVF in the United Kingdom? A qualitative analysis of online forum discussions. *Reproductive Health* [Internet]. 2024 Oct 28 [cited 2025 Sept 3];21(1):152. Available from: <https://doi.org/10.1186/s12978-024-01891-1>
16. Cha W, Yun I, Nam CM, Nam JY, Park EC. Evaluation of Assisted Reproductive Technology Health Insurance Coverage for Multiple Pregnancies and Births in Korea. *JAMA Netw Open* [Internet]. 2023 June 6 [cited 2025 Sept 3];6(6):e2316696. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10245192/>
17. Borrett A, Hughes L. More women in England opt for private IVF treatments. *Financial Times* [Internet]. 2024 July 30 [cited 2025 Sept 3]; Available from: <https://www.ft.com/content/cffe2345-a991-46ce-a1f1-a61d4e2c8333>
18. Guideline for Patient's Eligibility Criteria for In-vitro Fertilization Treatment in Fertility Center [Internet]. [cited 2025 Sept 4]. Available from: <https://moh.gov.om/en/approved-documents/khawla-hospital/guideline-for-patients-eligibility-criteria-for-in-vitro-fertilization-treatment-in-fertility-center/>
19. Chan W, Cheang C. Navigating the demographic shift: an examination of China's new fertility policy and its implications. *Front Polit Sci* [Internet]. 2023 Sept 18 [cited 2025 Sept 3];5. Available from: <https://www.frontiersin.org/journals/political-science/articles/10.3389/fpos.2023.1278072/full>
20. Disparities in access to effective treatment for infertility in the United States: an Ethics Committee opinion (2021) [Internet]. [cited 2025 Sept 3]. Available from: <https://www.asrm.org/practice-guidance/ethics-opinions/disparities-in-access-to-effective-treatment-for-infertility-in-the-united-states-an-ethics-committee-opinion-2021/>
21. Hibbert PD, Stewart S, Wiles LK, Braithwaite J, Runciman WB, Thomas MJW. Improving patient safety governance and systems through learning from successes and failures: qualitative surveys and interviews with international experts. *Int J Qual Health Care* [Internet]. 2023 Oct 17 [cited 2025 Sept 3];35(4):0. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10656601/>
22. Salama M, Isachenko V, Isachenko E, Rahimi G, Mallmann P, Westphal LM, et al. Cross border reproductive care (CBRC): a growing global phenomenon with multidimensional implications (a systematic and critical review). *J Assist Reprod Genet* [Internet]. 2018 July [cited 2025 Sept 3];35(7):1277–88. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6063838/>
23. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* [Internet]. 2021 Mar 29 [cited 2025 Sept 3];372:n71. Available from: <https://www.bmj.com/content/372/bmj.n71>
24. Kim M. National policies for infertility support and nursing strategies for patients affected by infertility in South Korea. *Korean J Women Health Nurs* [Internet]. 2021 Mar 31 [cited 2025 Sept 3];27(1):1–5. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9334166/>
25. Bill tracking in South Carolina - S 40 (2025-2026 legislative session) - FastDemocracy [Internet]. [cited 2025 Sept 3]. Available from: <https://fastdemocracy.com/bill-search/sc/2025-2026/bills/SCB00021994/?report-bill-view=1>
26. SRP 101 Tertiary Fertility Services [Internet]. Mid and South Essex Integrated Care System. 2024 [cited 2025 Sept 3]. Available from: <https://www.midandsouthessex.ics.nhs.uk/publications/101-tertiary-fertility-services/>
27. Quadmani N. Updated on assisted conception in Sussex [Internet]. Sussex Health & Care. 2025 [cited 2025 Sept 3]. Available from: <https://www.sussex.ics.nhs.uk/updated-on-assisted-conception-in-sussex/>
28. Blue Cross Blue Shield of Rhode Island [Internet]. 2023. Medical Coverage Policy | Infertility Services. Available from: <https://www.bcbsri.com/providers/sites/providers/files/policies/2024/01/2023%20Infertility%20Services.pdf>
29. OSU Infertility Health Plan. Ohio State University; 2023.

30. Bill Text: NH SB198 | 2023 | Regular Session | Introduced | LegiScan [Internet]. [cited 2025 Sept 3]. Available from: <https://legiscan.com/NH/text/SB198/id/2660211>
31. Understanding Insurance for Fertility Treatment Costs [Internet]. [cited 2025 Sept 3]. Available from: <https://fertility.womenandinfants.org/patients/insurance-fertility-treatment-costs>
32. Department of Financial Services [Internet]. [cited 2025 Sept 3]. Health Insurers FAQs: IVF and Fertility Preservation Law Q&A Guidance. Available from: [https://www.dfs.ny.gov/apps\\_and\\_licensing/health\\_insurers/ivf\\_fertility\\_preservation\\_law\\_qa\\_guidance](https://www.dfs.ny.gov/apps_and_licensing/health_insurers/ivf_fertility_preservation_law_qa_guidance)
33. Abbasi MJ, Mehryar A, Jones G, McDonald P. Revolution, war and modernization: Population policy and fertility change in Iran. *Journal of Population Research* [Internet]. 2002 Mar 1 [cited 2025 Sept 3];19(1):25–46. Available from: <https://doi.org/10.1007/BF03031967>
34. Reilly C. Constitutional Limits on New Mexico's In Vitro Fertilization Law. *New Mexico Law Review* [Internet]. 1994 Jan 1;24(1):125. Available from: <https://digitalrepository.unm.edu/nmlr/vol24/iss1/8>
35. LegiScan [Internet]. [cited 2025 Sept 3]. Texas HB618 | 2025-2026 | 89th Legislature. Available from: <https://legiscan.com/TX/text/HB618/id/3028055>
36. Gorkom F van. Infertility in South Africa: A Neglected Issue in Need of a Public Health Response. An exploration of Causes, Consequences, and Interventions. 2021 [cited 2025 Sept 4]; Available from: <https://www.bibalex.org/baifa/en/resources/document/476726>
37. [whssc.nhs.wales/commissioning/nwjcc-policies/fertility/specialist-fertility-services-commissioning-policy-cp38-april-2025/](https://whssc.nhs.wales/commissioning/nwjcc-policies/fertility/specialist-fertility-services-commissioning-policy-cp38-april-2025/) [Internet]. [cited 2025 Sept 3]. Available from: <https://whssc.nhs.wales/commissioning/nwjcc-policies/fertility/specialist-fertility-services-commissioning-policy-cp38-april-2025/>
38. LegiScan [Internet]. [cited 2025 Sept 3]. Montana HB565 | 2025 | Regular Session. Available from: <https://legiscan.com/MT/bill/HB565/2025>
39. Copy of Fairness for All: 7 Tips for Creating a Parenting Plan That Benefits You, Your Ex, and Your Children [Internet]. [cited 2025 Sept 3]. Available from: <https://www.pacificcascadegal.com/documents/Expanding-Your-Family-A-Guide-to-Surrogacy-and-IVF-Options.pdf>
40. States Assembly [Internet]. [cited 2025 Sept 4]. States Assembly - P.20/2024. Available from: <https://statesassembly.je/publications/propositions/2024/p-20-2024>
41. Lacewell LA. Report on In-Vitro Fertilization and Fertilization Preservation Coverage.
42. Informed Consent for Medications F-24277 Series: Psychotropic Medications | Wisconsin Department of Health Services [Internet]. [cited 2025 Sept 3]. Available from: <https://www.dhs.wisconsin.gov/forms/medbrandname.htm>
43. LegiScan [Internet]. [cited 2025 Sept 3]. South Carolina S0040 | 2025-2026 | 126th General Assembly. Available from: <https://legiscan.com/SC/research/S0040/2025>
44. Justia Law [Internet]. [cited 2025 Sept 3]. Davis v. Davis. Available from: <https://law.justia.com/cases/wisconsin/supreme-court/1951/259-wis-1-3.html>
45. nhs.uk [Internet]. 2017 [cited 2025 Sept 3]. IVF. Available from: <https://www.nhs.uk/tests-and-treatments/ivf/>
46. Mandated benefit review of infertility treatment [Internet]. [cited 2025 Sept 3]. Available from: <https://doh.wa.gov/sites/default/files/2025-02/120-055-MandatedBenefitReviewInfertilityTreatment.pdf>
47. Human Fertilisation & Embryology Authority (HFEA) [Internet]. [cited 2025 Sept 3]. HFEA: UK fertility regulator. Available from: <https://www.hfea.gov.uk/>
48. Guidelines, Standards & Policies Portal [Internet]. [cited 2025 Sept 3]. Available from: <http://guidelines.health.go.ke/#/category/18/347/meta>
49. Machin R, Mendosa D, Augusto MHO, Monteleone PAA. Assisted Reproductive Technologies in Brazil: characterization of centers and profiles from patients treated. *JBRA Assist Reprod* [Internet]. 2020 [cited 2025 Sept 6];24(3):235–40. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7365534/>
50. Haddadi M, Hedayati F, Hantoushzadeh S. Parallel paths: abortion access restrictions in the USA and Iran. *Contracept Reprod Med* [Internet]. 2025 July 25 [cited 2025 Sept 4];10(1):44. Available from: <https://doi.org/10.1186/s40834-025-00382-3>

51. Haddadi M, Hantoushzadeh S, Hajari P, Pouraie RR, Hadiani MY, Habibi GR, et al. Challenges and Prospects for Surrogacy in Iran as a Pioneer Islamic Country in this Field. Arch Iran Med [Internet]. 2025 Apr 1 [cited 2025 May 13];28(4):252–4. Available from: <https://journalaim.com/Article/aim-33920>
52. Haddadi M, Sahebi L, Hedayati F, Shah IH, Parsaei M, Shariat M, et al. Induced abortion in Iran, Tehran University of Medical Sciences, the law and the diverging attitude of medical and health science students. PLOS ONE [Internet]. 2025 Mar 25 [cited 2025 Apr 22];20(3):e0320302. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0320302>

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.