MSI Journal of
Arts, Law and Justice (MSIJALJ)

ARTIFICIAL WOMB TECHNOLOGY IN NIGERIA: RETHINKING SURROGACY, PARENTHOOD AND REPRODUCTIVE RIGHTS IN 21st CENTURY.

WODO, Chika Ph. D

Faculty of law, Rivers State University.

***Correspondence:** WODO, Chika Ph. D

The authors declare that no funding was received for this work.

OPEN ACCESS

Received: 19-July-2025
Accepted: 29-July-2025
Published: 23-August-2025

This article is published by **MSI Publishers** in **MSI Journal of Arts, Law and Justice (MSIJALJ)**
ISSN 3049-0839 (Online)

Volume: 2, Issue: 8 (August-2025)

ABSTRACT: Artificial womb technology represents one of the most revolutionary frontiers in reproductive medicine, with the potential to redefine gestation, parenthood, and reproductive rights as traditionally understood. As biomedical research advances toward the possibility of sustaining fetal development entirely outside the human body, legal and ethical questions emerge, particularly in jurisdictions like Nigeria where assisted reproductive technologies (ART) remain underregulated. This article explores the multifaceted implications of Artificial Womb Technology within the Nigerian legal landscape, examining how this disruptive innovation challenges conventional assumptions about motherhood, the legal status of the fetus, surrogacy, and child rights. The analysis reveals that current Nigerian laws rooted in traditional, gestational understandings of reproduction are ill-equipped to address the unique challenges posed by artificial gestation.

The article further examines the potential of Artificial Womb Technology to serve as an alternative to commercial surrogacy, a practice that remains controversial and largely unregulated in Nigeria. It evaluates the risks and

opportunities of integrating artificial wombs into the Nigerian healthcare and legal system, including ethical concerns about commodification, reproductive justice, and social equity. Comparative insights are drawn from the United Kingdom, India, and South Africa, providing models of anticipatory governance and rights-based regulation. Based on these findings, the article proposes a comprehensive legal framework tailored to the Nigerian context one that redefines legal parenthood, ensures the rights of children born through Artificial Womb Technology, and establishes regulatory oversight. The article concludes that Nigeria has a rare opportunity to shape reproductive law in a way that anticipates scientific innovation while safeguarding human dignity, equality, and justice.

Keywords: *Artificial Womb Technology, Reproductive Right, surrogacy and parenthood.*

1. Introduction

Technological innovation has never been a stranger to controversy, especially when it confronts the most intimate and contested terrain of human life reproduction. In recent years, artificial womb technology, also known as ectogenesis, has emerged as one of the most provocative frontiers in reproductive science. By enabling the gestation of a fetus outside the human body, artificial womb technology presents a radical reconfiguration of parenthood, gestational roles, and reproductive rights. Though still under experimental development, the implications of this technology for family law, bioethics, and child welfare are far-reaching and immediate especially for legal systems like Nigeria's, where frameworks for surrogacy and assisted reproductive technology remain fragmented or non-existent.

Artificial wombs are designed to mimic the human uterus, creating an extracorporeal environment that can support the development of a fetus from an early stage of gestation. Research has already shown promising results in animal models: in 2017, scientists successfully sustained extremely premature lamb fetuses in a device that closely resembles a natural womb environment. The goal is to support human preterm infants or even gestate embryos entirely outside a female body, thereby eliminating many of the risks associated with traditional pregnancy and childbirth.

In countries like Nigeria where maternal mortality remains high and access to fertility treatments is limited, Artificial Womb Technology could provide a medically valuable, socially transformative tool. However, this new frontier of reproduction raises more legal and ethical questions than it currently answers. Who is considered a parent when no gestation occurs in a human body? Does a fetus in an artificial womb possess legal status or rights under Nigerian law? What happens when disputes arise over the custody or care of a child born through artificial gestation? These questions are compounded by the reality that Nigeria, like many African nations, has no comprehensive legal framework governing surrogacy or ART, let alone laws anticipating technologies like artificial wombs. Consequently, artificial womb technology poses a significant challenge to the doctrinal and statutory assumptions underpinning Nigerian family and child law.

Moreover, the technology compels a re-evaluation of reproductive rights and justice, especially for women. Feminist legal theorists have long debated theory as to whether technological substitution for female reproductive labour represents emancipation or exploitation. While some argue that artificial womb technology could liberate women from the physical and social burdens of pregnancy, others caution that it may reinforce patriarchal attempts to control reproduction by further externalising and commodifying the female body. These debates are not abstract in Nigeria, where socio-cultural expectations around motherhood remain rigid, and surrogacy is often viewed with suspicion. The issue also raises complex questions about the rights of children born through artificial womb technology, especially in jurisdictions that lack statutory clarity on legal parenthood, custody, and inheritance in the context of ART. In the Nigerian legal context, children's rights are generally guaranteed under the Child's Rights Act 2003, but its applicability to children born via novel technologies is uncertain. Given that Nigeria is increasingly participating in global medical market both as a site of ART clinics and as a source of cross-border reproductive arrangements, this lacuna however exposes a significant regulatory and human rights gap.

This article therefore seeks to explore the legal, ethical, and social challenges posed by artificial womb technology in the Nigerian context. It argues that Nigeria's current

legal framework is ill-equipped to address the disruptive potential of artificial womb technology and the need for a proactive regulatory reform. Through a doctrinal and comparative methodology, the article draws insights from countries like India, the United Kingdom, and South Africa, where legal approaches to reproductive technology vary significantly. These comparisons will provide a basis for identifying principles that could inform the development of a Nigerian legal framework for artificial womb technology.

By focusing on Nigeria in this evolving discourse, this article will not only address a local legal vacuum but also contributes to the broader global conversation on how law should respond to the profound shifts that artificial wombs may usher in. As science moves closer to decoupling reproduction from the human body, law must not remain in the past.

2. Scientific and Medical Basis of Artificial Womb Technology

Artificial womb technology, also referred to as ectogenesis, refers to the complete or partial gestation of a human embryo or fetus outside the human body, in an environment that replicates the natural conditions of the uterus. The concept, once confined to speculative science fiction, has become a legitimate subject of medical and bioethical research. The development of artificial wombs promises to alter not only medical practice in neonatology but also the legal and ethical assumptions underlying human reproduction. The most notable scientific breakthrough in the field occurred in 2017, when researchers at the Children's Hospital of Philadelphia successfully sustained premature lamb fetuses in a biobag, a fluid-filled plastic device that maintained temperature, oxygenation, and nutrient supply, closely mimicking a natural environment. The lambs continued to grow and develop for several weeks, showing improved lung function and neurological development compared to those receiving traditional neonatal intensive care. This experiment has served as proof of concept that external gestation is medically feasible, at least in animals. While full ectogenesis in humans gestating an embryo entirely outside the body from fertilisation to birth remains a future goal, partial ectogenesis (supporting preterm infants ex utero) is closer to clinical application. Currently, neonatal intensive care units can support fetuses born at around 22–24 weeks, but with high

risks of mortality and long-term disability. Artificial wombs could extend this boundary, improving survival rates for extremely premature infants and reducing the burden on healthcare systems.

Beyond neonatal care, the potential uses of artificial womb technology are extensive. It could serve as an alternative to surrogacy, especially in contexts where surrogacy is legally restricted or socially stigmatised. It may also be useful for individuals who are unable to carry pregnancies due to health conditions, anatomical limitations, or gender identity. For instance, transgender women or individuals without a uterus could potentially become biological parents without relying on a surrogate. In Nigeria, where infertility affects approximately 10–30% of couples and surrogacy remains legally ambiguous, the appeal of artificial womb technology is particularly pronounced. Moreover, artificial womb technology could contribute to maternal health equity by reducing pregnancy-related morbidity and mortality. Nigeria's maternal mortality ratio remains among the highest globally. If artificial womb technology could provide a safer alternative to traditional gestation for high-risk pregnancies, it would significantly benefit maternal health outcomes. This would also align with Nigeria's obligations under international human rights instruments to protect the right to health and the right to life, particularly for women.

Nevertheless, technology remains limited by several scientific, ethical, and logistical challenges. First, long-term studies on the effects of external gestation on human neurodevelopment, immune response, and psychological outcomes are lacking. Second, the ethical status of a fetus in an artificial womb is unclear, particularly in terms of viability, sentience, and medical decision-making. Third, the infrastructure required to support artificial womb technology is complex and expensive, raising concerns about equitable access and technological disparity between the Global North and South.

For Nigeria and similar jurisdictions, the critical concern lies in legal preparedness. Although technology has not yet been implemented clinically in humans, the pace of medical advancement suggests that technology may soon be available. As was seen with IVF and surrogacy, the law often lags scientific innovation, resulting in grey areas that lead to exploitation, rights violations, and litigation. Artificial womb

technology presents an opportunity to anticipate rather than react, to frame laws that are both technologically aware and ethically grounded. As the next sections of this paper will show, Nigeria's legal system is yet to reckon with even first-generation ARTs. The prospect of artificial wombs calls for urgent and thoughtful engagement with how law, medicine, and ethics intersect in shaping the future of reproduction.

3. Legal Status of Artificial Gestation in Nigeria

The introduction of artificial womb technology into the Nigerian medical or reproductive landscape would present a significant legal challenge. At present, Nigeria does not possess a comprehensive legal or policy framework that addresses artificial gestation or even the broader category of assisted reproductive technologies (ART). This statutory silence poses a risk not only to the enforceability of parental rights but also to the protection of children born through such technologies and the regulation of emerging biomedical practices. In the absence of clear legal definitions, judicial precedents, or regulatory bodies with oversight, artificial wombs are likely to exist in a normative vacuum, vulnerable to ethical abuse, contractual disputes, and human rights violations.

3.1 Absence of Specific Legislative Framework on ART and Surrogacy

The starting point in understanding the legal status of artificial womb technology in Nigeria is the recognition that assisted reproduction as a whole is underregulated. While IVF, intrauterine insemination (IUI), and gestational surrogacy are offered by private fertility clinics across Nigeria, there is no national legislation codifying their practice, regulating eligibility, or clarifying legal parenthood. Surrogacy in Nigeria is governed only by a patchwork of informal contracts, customary norms, and limited judicial interpretations. The Child's Rights Act 2003 guarantees the rights of every Nigerian child regardless of the circumstances of birth but does not define or address children born through ART or surrogacy.

This legislative vacuum would apply equally if not more severely to artificial womb technology. Unlike traditional ART procedures that require the involvement of a gestational carrier (e.g., IVF or surrogacy), artificial womb technology removes the

human body entirely from the gestational process. The Nigerian law, which assumes gestation occurs within a woman's body, is wholly unprepared for this reality.

3.2 Parenthood and Legal Maternity: Who Is the Mother?

The introduction of artificial wombs compels a re-examination of legal definitions of maternity and parenthood under Nigerian law. Currently, Nigerian legal doctrine aligns with the gestational principle that is, the woman who carries and gives birth to a child is presumed to be the legal mother. This is consistent with global norms in jurisdictions lacking ART specific legislation. However, in artificial womb technology, no such woman exists. The fetus is gestated in a machine, and this renders traditional assumptions about parenthood inapplicable. A critical question then arises If motherhood is determined by genetics, intention, or legal declaration in such cases? If the ovum is donated by one woman, the sperm by a man, and the artificial womb completes the gestation, who bears legal maternity? Would it be the egg donor, the intended parent, or would Nigerian courts be forced to define a new statutory category altogether? These uncertainties have the potential to generate custodial, inheritance, nationality disputes unless proactively addressed.

In the United Kingdom, the Human Fertilisation and Embryology Act 2008 provides that the woman who carries the child is the legal mother, but this law too becomes problematic in the context of ectogenesis. Nigeria has no such statutory buffer and thus stands in a more precarious position.

3.3 Status and Rights of the Fetus in an Artificial Womb

Another critical legal uncertainty involves the legal status of the fetus undergoing development within an artificial womb. Under Nigerian law, the fetus does not enjoy legal identity until birth; however, criminal law and tort law do recognise fetal life in specific contexts, such as homicide of a pregnant woman or harm to an unborn child. In artificial womb technology, the fetus is not within a natural womb. This raises profound doctrinal questions whether legal protection applies to fetuses gestated outside the body? Can medical malpractice laws cover artificial gestation facilities? Moreover, questions regarding fetal viability and termination become even more contentious. Who holds the right to terminate or continue gestation in the artificial

womb? In the absence of a gestational mother, the legal decision-maker whether it be the commissioning parent, hospital, or state remains undefined. These gaps reveal that artificial womb and introduces a new legal subject, the extracorporeally gestated fetus, which Nigerian law has yet to conceptualise or protect.

3.4 Contractual and Custodial Disputes

Where artificial wombs are used under private contractual arrangements, for example, between commissioning parents and hospitals or clinics, questions of contract enforcement and dispute resolution may inevitably arise. In current surrogacy arrangements in Nigeria, contracts are often not enforceable due to their contravention of public policy or lack of formal recognition. If disputes emerge concerning embryos, fetuses, or custody of children born through artificial womb technology, there is no legal doctrine to resolve them. Nigerian courts have not yet addressed such issues in ART related litigation, and given the sensitivity of reproduction, judicial discretion without legislative guidance can result in inconsistent or harmful outcomes.

In the absence of any regulatory body akin to the UK's Human Fertilisation and Embryology Authority, the risk of exploitation, black-market services, or international "repro-tourism" becomes significant. Nigeria may also face challenges in cross-border surrogacy or artificial womb technology related cases, such as where foreign intended parents use Nigerian medical services or Nigerian children are born through technologies are not recognised abroad.

4. Ethical and Human Rights Considerations

Artificial womb technology does more than introduce scientific novelty; it challenges deeply held ethical norms and human rights principles related to reproduction, parenthood, bodily integrity, and gender roles. In Nigeria, where social values, religious beliefs, and legal conservatism shape much of the public discourse on reproduction, the ethical implications of artificial womb technology are especially significant.

4.1 Reproductive Autonomy and Bodily Integrity

A foundational argument in favour of artificial womb technology is its potential to enhance reproductive autonomy. Traditionally, the ability to have biological children has been dependent on either gestational capacity or access to a surrogate. Artificial wombs would allow individuals and couples including those medically unable to conceive, transgender persons, and single parents to pursue parenthood on their own terms. For women, in particular, artificial womb technology could represent freedom from the physical risks of pregnancy, especially in a country like Nigeria, where maternal mortality remains among the highest in the world. From a rights-based perspective, this intersects with the right to health and the right to found a family, both of which are protected under the Universal Declaration of Human Rights and CEDAW, which Nigeria has ratified[3]. By reducing pregnancy-related health burdens, artificial womb technology may enhance the realisation of bodily integrity as a core principle under international human rights law. However, in the absence of legal safeguards, the availability of artificial womb technology may also open the door to coercion or forced gestation choices. For example, insurers or employers might pressure women to use artificial wombs to avoid maternity leave or workplace disruptions. Without adequate legal protections, reproductive autonomy could be reconfigured from a right into an obligation a phenomenon that feminist bioethicists warn against.

4.2 Feminist and Gender-Justice Perspectives

Artificial Womb Technology has generated significant debate within feminist legal and ethical scholarship. Some scholars believe it as a technology that liberates women from the biological inequality of reproduction, potentially creating a level playing field between men and women in terms of reproductive labour. It could also redistribute the burden of childcare and reproduction in ways that dismantle patriarchal gender roles. Others, however, express concern that the detachment of reproduction from women's bodies may render women increasingly invisible in legal and social discourse around childbirth and parenting. In patriarchal societies like Nigeria, where motherhood is closely linked to female identity and social value, artificial wombs may disrupt traditional norms and provoke social resistance. There

is also a risk that reproductive technologies could reinforce gender hierarchies if they remain accessible only to wealthy elites, or if women's reproductive roles are further commodified through profit-driven medical practices.

Furthermore, if state or religious actors in Nigeria interpret artificial womb technology as undermining "natural" family structures, there is a risk of regressive policies or moral backlash. This highlights the need for inclusive ethical frameworks that protect women's rights without reinforcing technocratic or patriarchal control over reproductive choices.

4.3 The Best Interests and Legal Status of the Child

Any legal or ethical discussion of artificial womb technology must centre on the best interests of the child a foundational principle of both Nigerian child law and international conventions. Children born from artificial bombs may face legal uncertainties regarding their parentage, citizenship, and inheritance, particularly in jurisdictions where traditional birth mechanisms determine these legal relationships. From a child rights perspective, there is also the question of identity, psychological development, and social acceptance. How will children born through artificial wombs perceive their origins? Will society treat them as equal to children born through traditional or surrogate methods? In the absence of legal guarantees and protections, such children may face discrimination or legal limbo. It is therefore essential that any future Nigerian legal framework for artificial womb technology includes statutory recognition of children born via artificial gestation, ensuring they enjoy equal rights and legal status from birth. Legal parentage must be clearly defined by statute to avoid litigation and safeguard the welfare of the child.

4.4 Risks of Commodification, Eugenics and Reproductive Inequality

Another critical ethical concern involves the commodification of human reproduction. In countries without regulations, ART markets have led to exploitative practices, including the trafficking of ova, embryos, and surrogate services. Artificial womb technology, if unregulated, may exacerbate these concerns, especially if clinics commercialise artificial womb services without ethical oversight. Moreover, the use of artificial womb technology may fuel eugenic practices, as prospective

parents or medical professionals could begin selecting embryos with desired traits, leading to concerns about the moral direction of reproductive technology. This raises profound questions about human dignity, equity, and the value of disability and diversity in Nigerian society.

Finally, the accessibility gap must be addressed. If artificial wombs remain available only to the wealthy or to foreigners seeking fertility services in Nigeria, the technology may deepen reproductive inequality. This would contradict the constitutional values of equality and social justice under Nigerian law and undermine the ethical legitimacy of artificial womb technology as a public health solution.

5. Comparative Analysis

To understand how Nigeria might prepare for the legal and ethical challenges posed by artificial womb technology, it is necessary to examine how other jurisdictions with various legal systems and socio-cultural backgrounds are addressing (or anticipating) the regulatory implications of emerging reproductive technologies. This section reviews the approaches of India, the United Kingdom, and South Africa, three jurisdictions that offer instructive contrasts in their legal responses to assisted reproduction, surrogacy, and parenthood. Their experiences illustrate both the possibilities and limits of existing legal frameworks in responding to a technology that disrupts conventional assumptions about gestation, motherhood, and child rights.

5.1 India

Cautious Regulation Through Prohibition and Control

India has long been a global hub for reproductive tourism, particularly in the area of commercial surrogacy. However, after widespread concerns about exploitation, commodification, and cross-border custody disputes, the Indian government enacted the Surrogacy (Regulation) Act 2021, which bans commercial surrogacy and permits only altruistic surrogacy under strict conditions. Similarly, the Assisted Reproductive Technology (Regulation) Act 2021 governs ART clinics and procedures, imposing ethical standards and requiring registration with national regulatory authorities. Despite these advances, India laws are biologically anchored

in that legal motherhood is tied to either genetic contribution or gestation, and neither statute addresses artificial gestation. Artificial womb technology would fall into a legal void, as it involves neither a surrogate nor traditional ART procedures. The Indian framework, while robust in regulating human surrogacy markets, lacks the forward-looking legislative imagination necessary to accommodate radical technologies such as artificial wombs.

Nevertheless, Nigeria can learn from India's cautionary regulatory approach particularly the need for national oversight bodies, licencing standards for clinics, and protections for children born via non-traditional methods. At the same time, Nigeria must avoid India's overreliance on prohibitive legislation, which may stifle innovation without adequately protecting reproductive rights.

5.2 United Kingdom

Legal Adaptation through Existing Artificial Reproductive Technology Law

The United Kingdom is often cited as a model for ART regulation. The Human Fertilisation and Embryology Act 1990, revised in 2008, establishes a comprehensive legal framework for assisted reproduction, covering licensing, embryo storage, donor anonymity, and parentage. The Human Fertilisation and Embryology Authority acts as the regulatory body that oversees compliance, ethics, and research standards. By virtue of Section 33 of the HFEA 2008 defines the mother as "the woman who is carrying or has carried a child as a result of the placing in her of an embryo or of sperm and eggs." This definition reflects a gestational model of motherhood, which becomes problematic in the context of artificial womb technology, where no such woman exists. Some UK legal scholars have already identified this statutory gap, arguing that ectogenesis necessitates a rethinking of legal parenthood that moves beyond gestation as the defining criterion. The UK's approach is instructive for Nigeria in three keyways. First, it demonstrates the importance of having flexible legislation that can accommodate scientific innovation through interpretation or amendment. Second, it shows the value of establishing an independent regulatory authority. Third, it reinforces the importance of public consultation and ethical review before introducing disruptive technologies into clinical settings.

5.3 South Africa

Rights-Based ART Regulation

South Africa has adopted a rights-based approach to reproductive technologies. Under the Children's Act 2005, surrogacy is permitted under strict judicial supervision. Intended parents must apply to a court before conception, and all parties must comply with conditions designed to protect the best interests of the child and the dignity of the surrogate. Parenthood in ART and surrogacy arrangements is determined by court-approved agreements that specify who will be legally recognised as the child's parents upon birth. Importantly, South Africa's law does not base legal motherhood solely on gestation, allowing for the recognition of intended parents from the moment of birth. While South Africa has not yet addressed artificial wombs directly, its legal flexibility and grounding in constitutional rights offer a strong model for Nigeria. By allowing courts to determine parenthood based on pre-conception intentions, South Africa avoids the doctrinal rigidity that hinders artificial womb technology acceptance in more traditional systems. Nigeria could adopt a similar approach by reforming its family law and ART jurisprudence to accommodate both gestational and non-gestational forms of parenthood, under judicial guidance.

5.4 Lessons for Nigeria

From these jurisdictions, several lessons emerge as the legal certainty is essential to safeguard the rights of all parties, children, parents, clinics, and the state. Artificial womb Technology cannot operate in a regulatory vacuum. Also, the gestational definitions of motherhood are inadequate for regulating artificial gestation. Nigeria must consider recognising intended parenthood, especially where gestation is outsourced to a machine. The Human rights principles such as dignity, equality, and reproductive autonomy must guide all regulations. The establishment of a national bioethics commission or ART authority is necessary to oversee emerging technologies, ensure ethical compliance, and engage with religious and cultural concerns. Furthermore, comparative law demonstrates that prohibition without

alternatives (India) can cause harm, while adaptation (UK, South Africa) ensures both innovation and rights protection.

The Comparative legal analysis reveals that most jurisdictions are only beginning to grapple with the legal implications of artificial wombs. While no country has yet developed a comprehensive artificial womb law, some like the UK and South Africa provide flexible and ethically grounded frameworks that Nigeria can learn from. For Nigeria, this is a crucial moment to craft laws that are not merely reactive but visionary, ensuring that as reproductive science advances, the law does not remain tethered to outdated biological assumptions.

6. Conclusion

Artificial womb technology holds immense potential for transforming reproductive healthcare, its realisation in Nigeria remains highly unlikely in the near future. The absence of a legal and regulatory framework, coupled with strong cultural and religious resistance to non-traditional forms of reproduction, presents significant barriers to acceptance and implementation. Moreover, the country's weak medical infrastructure and limited scientific capacity further constrain the feasibility of adopting such advanced biomedical innovation. For artificial womb technology to become a practical reality in Nigeria, foundational reforms in law, public education, and healthcare investment are necessary. Until then, the legal and social environment remains ill-prepared to embrace this emerging frontier in reproductive science.

6. Recommendations

1. Absence of a Regulatory Framework for Assisted Reproduction

Nigeria currently lacks a comprehensive legal framework regulating assisted reproductive technologies, including IVF and surrogacy. The legal system has not evolved to anticipate or accommodate disruptive innovations like artificial womb technology. In the absence of laws defining legal parenthood, embryo status, and custody in cases of artificial gestation, artificial womb technology would exist in a legal vacuum exposing all parties to uncertainty and potential rights violations.

Without urgent legislative reform, the technology is unlikely to gain legal or institutional support.

2. Deep-Rooted Cultural and Religious Resistance

Motherhood in Nigerian society is culturally and religiously tied to the physical experience of pregnancy and childbirth. The idea of gestating a child outside a woman's body may be viewed as unnatural, un-African, or even morally reprehensible by many communities. Given the influence of religious institutions and traditional norms on public opinion and policy, widespread acceptance of artificial bombs is improbable in the near future. This resistance may hinder both policy adoption and uptake of the technology.

3. Lack of Scientific and Medical Infrastructure

Artificial womb technology requires advanced biomedical infrastructure, specialised neonatal equipment, and highly trained personnel all of which are limited or unevenly distributed in Nigeria. Many tertiary hospitals still struggle with basic neonatal care and maternal health services. In such a setting, the introduction of experimental and capital-intensive technology like artificial womb technology is unlikely to be prioritised, funded, or successfully implemented especially in the face of more pressing public health challenges.

REFERENCES

1. Partridge, E. A., Davey, M. G., Hornick, M. A., McGovern, P. E., Mejaddam, A. Y., Vrecenak, J. D., ... & Flake, A. W. (2017). An extra-uterine system to physiologically support the extreme premature lamb. *Nature communications*, *8*(1), 15112.

2. Kendal, E. (2015). *Equal opportunity and the case for state sponsored ectogenesis*. Springer.

3. World Health Organization. (2023). *Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division*. World Health Organization.

4. Ogunwale, Akintayo Olamide, Frederick Olore Oshiname, and Folakemi O. Ajagunna. "A review of the conceptual issues, social epidemiology,

prevention and control efforts relating to rape in Nigeria." *African journal of reproductive health* 23.4 (2019): 108-123.

5. Firestone, S. (2015). *The dialectic of sex: The case for feminist revolution*. Verso Books.

6. Karpin, I. (2006). The uncanny embryos: Legal limits to the human and reproduction without women. *Sydney L. Rev.*, *28*, 599.

7. Fawole, O. A., & Blair, S. L. (Eds.). (2022). *Families in Nigeria: Understanding Their Diversity, Adaptability, and Strengths*. Emerald Publishing Limited.

8. Act, C. C., & Cap, P. (2012). Laws of the Federation of Nigeria (2004). *Official Gazette of the Federal Republic of Nigeria, Lagos: The Federal Government Printer*.

9. Kendal, E. (2018). Utopian literature and bioethics: exploring reproductive difference and gender equality. *Literature and medicine*, *36*(1), 56-84.

10. Partridge, E. A., Davey, M. G., Hornick, M. A., McGovern, P. E., Mejaddam, A. Y., Vrecenak, J. D., ... & Flake, A. W. (2017). An extra-uterine system to physiologically support the extreme premature lamb. *Nature communications*, *8*(1), 15112.

11. Partridge, E. A., Davey, M. G., Hornick, M. A., McGovern, P. E., Mejaddam, A. Y., Vrecenak, J. D., ... & Flake, A. W. (2017). An extra-uterine system to physiologically support the extreme premature lamb. *Nature communications*, *8*(1), 15112.

12. Romanis, E. C. (2018). Artificial womb technology and the frontiers of human reproduction: conceptual differences and potential implications. *Journal of Medical Ethics*, *44*(11), 751-755.

13. I. G Cohen, 'Artificial wombs and legal parenthood' [2020] 47(1) Journal of Law, Medicine & Ethics,51–59.

14. Araoye, M. O. (2003). Epidemiology of infertility: social problems of the infertile couples. *West African journal of medicine*, *22*(2), 190-196.

15. World Health Organization. (2023). *Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division*. World Health Organization.

16. Assembly, U. G. (1979). Convention on the elimination of all forms of discrimination against women. *Retrieved April*, *20*, 2006.

17. E.C Romanis, 'The Juridification of Pregnancy: A Comparative Perspective on the Artificial Womb' [2021] 11(3) Oxford Journal of Legal Studies, 335.

18. Adeniyi, F. A., The Evolution of Child Adoption Laws in Nigeria: A Comparative Analysis, [2020] 12(3) Nigerian Journal

19. Act, C. C., & Cap, P. (2012). Laws of the Federation of Nigeria (2004). *Official Gazette of the Federal Republic of Nigeria, Lagos: The Federal Government Printer*.

20. J.N Ezeilo, 'Women, Law and Human Rights' in A. I. Badejo (ed), Family Law in Nigeria: Modern Trends and Issues, (Ibadan: Heinemann 2006) 139.

21. Human Fertilisation and Embryology Act 2008, s. 33(1).

22. Abimbola, O. (2014). Law and Medicine: a meeting point. *Research Journal of Health Sciences*, *2*(4), 184-202.

23. C.S Okoli, 'Legal and Ethical Challenges of Surrogacy in Nigeria: A Review of Regulatory Gaps' [2021] 2(1) African Journal of Medical and Legal Ethics, 79.

24. Romanis, E. C. (2018). Artificial womb technology and the frontiers of human reproduction: conceptual differences and potential implications. *Journal of Medical Ethics*, *44*(11), 751-755.

25. Kendal, E. (2015). *Equal opportunity and the case for state sponsored ectogenesis*. Springer.

26. Firestone, S. (2015). *The dialectic of sex: The case for feminist revolution*. Verso Books.

27. Karpin, I. (2006). The uncanny embryos: Legal limits to the human and reproduction without women. *Sydney L. Rev.*, *28*, 599.

28. Annex, A. (1989). *Convention on the Rights of the Child* (Vol. 1577, p. 15). Treaty Series.

29. C.S Okoli, 'Legal and Ethical Challenges of Surrogacy in Nigeria: A Review of Regulatory Gaps' (2021) 2(1) African Journal of Medical and Legal Ethics, 83.

30. Smajdor, A. (2007). The moral imperative for ectogenesis. *Cambridge Quarterly of Healthcare Ethics*, *16*(3), 336-345.

31. Surrogacy (Regulation) Act 2021, s. 4, 6.

32. Jamwal, V. D. S., & Yadav, A. K. (2023). The assisted reproductive technology (regulation) act, 2021: a step in the right direction. *Indian journal of community medicine*, *48*(1), 4-6.

33. R. Bhardwaj, and R. Jindal, 'Regulating Assisted Reproductive Technologies in India: Challenges and Prospects' [2022]13(1) Indian Journal of Law and Technology, 45.

34. Human Fertilisation and Embryology Act 1990, as amended by HFEA 2008.

35. HFEA 2008, s. 33(1).

36. Romanis, E. C. (2018). Artificial womb technology and the frontiers of human reproduction: conceptual differences and potential implications. *Journal of Medical Ethics*, *44*(11), 751-755.

37. Children's Act 2005, Chapter 19, s. 292–303.

38. Fortin, J. (2003). *Children's rights and the developing law*. Cambridge University Press.

39. M. Slabbert, and D. van Zyl, 'A South African Perspective on the Legal Regulation of Surrogacy' [2015] 32(1) Journal for Juridical Science, 72.