LEGAL PROTECTION FOR BORN BABIES FROM THE ECTOLIFE PROGRAM

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Abstract
This research aims to analyze the legal protection of babies born from the EctoLife program and its ethical aspects. The research method used is a normative juridical research method with a statutory and conceptual approach. The data collection technique used is by means of literature research. The results showed that the EctoLife baby program according to positive law in Indonesia does not yet exist because the research is also only conducted in the trial stage on animals with partial ectogenesis design. EctoLife Bioethically prohibited both internationally and in Indonesia due to the prohibition of growing embryos longer than 14 days and the prohibition on selecting gender, skin color and other traits for genetic engineering other than for medical purposes.

Keywords: legal protection; child birth; ectolife
INTRODUCTION

The presence of children is a gift for every married couple and a dream for every family. One of the purposes of forming a family is to continue offspring, and this is one of the human rights protected by law as stated in the 1945 Constitution of the Republic of Indonesia Article 28 B paragraph (1) which reads "Everyone has the right to form family and continuing offspring through legal marriage", then reaffirmed in Law no. 39 of 1999 Article 10 paragraph (1) Concerning Human Rights (hereinafter referred to as the Human Rights Law).

Childless couples may have difficulty fulfilling their desire to have biological children. The inability to get pregnant in married couples who are married and have "relationships" for a period of one year without using barriers or contraception is called infertility/sterility. According to the World Health Organization (WHO), infertility is identified as a global public health problem with an estimated 60-80 million couples experiencing difficulties having children. As many as 2-10% of couples fail to have children naturally, and one in seven married couples come to a specialist doctor for consultation, and even have to be treated using assisted reproductive technology. Approximately 15 million babies are born prematurely every year and prematurity remains the leading cause of neonatal death even in high economic income countries. In situations where a couple cannot have a child naturally and efforts are made to suppress the baby being born very prematurely, there are several options for having a child, including adoption or using human assisted reproduction services such as a baby factory program with the concept of artificial womb technology (AWT). Likewise, AWT is expected to improve the outcomes of premature babies.

The baby factory program is a hot topic of discussion in various circles. This program allows couples who have difficulty having children or are infertile to have children through the process of in vitro fertilization (IVF) or known as IVF, where the baby's development is carried out outside the human body/artificial uterus, and then allows the selection of superior baby characteristics and sophisticated. One of the controversial baby factory programs is EctoLife, a company that provides IVF services and selection of more sophisticated baby characteristics such as selecting skin color, eyes, hair, height, intelligence or even eliminating any disease.

EctoLife technology is an ectogenesis technology or known as artificial uterus technology / AWT, namely pregnancy technology outside the human body (ex vivo or in vitro pregnancy). Homemade uterine technology in various literature is also called artificial amnion and placenta technology. There are two types of ectogenesis technology or artificial uterus, namely total ectogenesis and partial ectogenesis. EctoLife technology is included in total ectogenesis, where embryo development

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1 Husni Thamrin, Legal Aspects of IVF and Womb Rental, Aswaja Presindo, Yogyakarta, 2014, p. 47
3 Hendy Hendarto, IVF: The Latest Reproductive Technology to Overcome Infertility, Speech to Inaugurate the Position of Professor in the Field of Obstetrics and Gynecology at the Faculty of Medicine, Airlangga University, December 19 2019, p.2
4 Azad, K., & Matthews, J., Preventing newborn deaths due to prematurity, Best Practice & Research Clinical Obstetrics & Gynecology, Vol. 36, 2016, p. 132
5 Romanis, EC, Artificial womb technology and clinical translation: Innovative treatment or medical research?, Bioethics, Vol. 34, No.4, 2020, p. 399
6 This artificial womb concept is capable of producing 30 thousand babies per year, like a factory, insidehttps://www.eam.co.id/stories, Accessed January 1, 2023
starting from conception/fertilization and fetal development occurs in an artificial womb.\(^8\) In terms of technological evolution and development, varying degrees of success have been reported in the last decade in non-human animal studies using partial artificial womb technology with sheep models/subjects.\(^9\) Meanwhile, total ectogestation has not yet been carried out due to various obstacles, one of which is the ethical prohibition on carrying out embryo research until they are 14 days old. The adoption of the 14-day rule in international embryo research policy was introduced by the Ethics Advisory Board in the United States in 1979 and the Report of the Warnock Committee of Inquiry and Human Fertilization and Embryology in the United Kingdom.\(^10\) From the 2 research bases above, the ethical rules for embryo research are widespread and agreed upon in almost every country, including Indonesia.

Artificial womb technology includes assisted reproductive technology. Assisted reproduction in Indonesia is regulated in several regulations, including Law Number 36 of 2009, concerning Health (hereinafter referred to as the Health Law) Article 127 paragraph (1), regulates the implementation of reproductive technology with the help of taking into account ethical, religious and cultural aspects. Then Article 127 paragraph (2) regarding requirements for pregnancy outside of natural means as referred to in paragraph (1) is regulated by Government Regulation (PP) Number 61 of 2014 Articles 40 to 46.

The implementation of a baby factory or IVF program with a total artificial uterus, currently there is no single legal regulation that regulates it. However, there are legal rules that approach, namely Government Regulations Number 61 of 2014 Article 43 paragraph (3) which explains that embryos are prohibited from being implanted in the mother's womb if the embryo's father dies or is divorced or the womb of another woman. The EctoLife baby factory program is an example of the rapid development of medical technology but is not balanced with developments in law and ethical issues, so that there are many legal and ethical problems in the health sector that require thought in determining regulatory solutions. This program has the potential to give rise to bioethical and legal debates, especially regarding the appropriateness of regulations governing its use, especially in positive law in Indonesia.\(^11\)

Some programs for babies born outside of natural means or test tube babies have resulted in legal cases, some of which have even entered the courts and have legal force. In 2020 at a hospital in Jakarta, namely the case of Supreme Court (MA) Decision Number 65 K/TUN/2020 on March 10 2020. The Supreme Court's decision convicted 3 doctors at an elite hospital in Menteng, Central Jakarta of not violating ethics. This is related to patient reporting of cases of test tube babies born suffering from Edward Syndrome. The parents demanded that the doctor who carried out the test tube baby was negligent, resulting in the child being born with a disability or not meeting expectations.\(^12\)

Another test tube baby case involving failure to predict gender occurred in Surabaya in 2017. Doctor Aucky, an Andrology specialist who has been involved in the world of reproduction for 30 years, was sued by his patient at the Surabaya District Court (PN) with a civil suit, because test tube babies that are born not according to the sex that was agreed at the beginning. Even though according to doctor Aucky at the beginning of the consultation it was

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\(^{8}\) Seppe Seger, The path toward ectogenesis: looking beyond the technical challenges, BMC Medical Ethics, Vol. 22, No. 59, 2021, p. 2


\(^{10}\) Sarah Chan, How and why to Replace the 14-day Rule, Curr Stem Cell Rep., Vol. 4, No. 3, 2018, p. 228

\(^{11}\) Husni Thamrin, Op.Cit., p.2

explained that the failure rate of IVF with this sex-determining technology was around 15%.

However, the plaintiff's attorney considered that Dr. Aucky was in default.\textsuperscript{13}

In EctoLife's baby factory, embryos are raised in artificial wombs in the form of machines, which are identical to surrogate mothers. Indonesia does not yet have specific and specific rules regarding the surrogate mother. So if we want to know the rules and regulations related to surrogate mother issues, then they are related and related to several laws and regulations that apply in Indonesia. For example, what is the legal status of children born from the rental of the uterus. So we must first look at the definition of a legitimate child in Law no. 1 of 1974 Article 42 concerning Marriage (hereinafter referred to as the Marriage Law). Article 42 of the Marriage Law states that what is meant by a legitimate child is a child born in or as a result of a valid marriage. Meanwhile, in Islamic law, based on the Compilation of Islamic Law (KHI) Article 99, what is meant by a legitimate child is: a. Children born in or as a result of a valid marriage; and b. The result of a legal husband and wife's fertilization outside the womb and birthed by the wife. Actually, biologically, the child born to the surrogate mother from the rental of the uterus is the child of the husband and wife, it's just that it was born through another woman. However, regarding this matter, there are several opinions. In order to see the class of children from surrogate mother cases, the marital status of the surrogate woman must first be seen. A child born from a rented uterus can have the status of an unrecognized child out of wedlock, if the status of the surrogate woman is a girl or a widow. In this case,\textsuperscript{14}

\textbf{RESEARCH METHODS}

This research uses a statutory approach and a conceptual approach. The statutory approach is used to examine statutory regulations whose norms still contain deficiencies or there are deviations at the technical level of implementation in the field. This approach is carried out by examining all statutory regulations related to the problem (legal issue) being faced. For example, this legislative approach is carried out by studying the consistency/conformity between the Constitution and the Law, or between one Law and another Law.\textsuperscript{15}
The conceptual approach is a type of approach in legal research that provides an analytical perspective on problem solving in legal research seen from the aspect of the legal concepts behind it, or can even be seen from the values contained in the norming of a regulation in relation to the concepts. concept used. The laws and regulations that are used are laws and regulations that are related to the research being carried out. The method of collecting legal material in this study was carried out by library research. To analyze the legal material obtained, normative analysis methods will be used. Legal norms are required as a major premise.

\textbf{RESULT AND DISCUSSION}

Babies as part of the child's period have the same rights as children. Infant is the period from newborn to age under 18 years. According to the Child Protection Law, paragraph (1), a child is someone who is not yet 18 (eighteen) years old, including children who are still in the womb. A similar definition is also regulated in the Human Rights Law, Article 1 point 5 states that the definition of a child is a human being under 18 years of age and unmarried, including unborn children if this is in their interests.

Artificial wombs are specifically like EctoLife with the IVF technique, which is an artificial reproduction technique using a total artificial uterus, until now it has not been regulated in positive law in Indonesia. Meanwhile, only regulations regarding the juridical

\textsuperscript{13}PDoctor Aucky admits that he was sued by a patient because of his baby girl, https://www.merdeka.com/cepatan, Accessed July 25 2017 at 03.33 WIB.
\textsuperscript{14}Desrizta Ratman, Surrogate Mother in Ethical and Legal Perspective, PT. Gramedia, Jakarta, 2012, p. 120-123
\textsuperscript{15}Ibid. p. 321
position of children born naturally are regulated in the Civil Code and Law Number 1 of 1974. Test tube babies themselves are a matter of private human interest so they need to be protected. Legal protection related to IVF is to regulate the scope of family law relations and association in the community. Included in "family relations" include the juridical position of the child and inheritance rights.16

Basically, the legal status of children born from the EctoLife program does not yet exist according to positive law in Indonesia. There are no laws governing children who grow and develop in an artificial womb in the form of a machine, starting from the fertilization process to development in the machine's womb, where there is also no biological bond between the mother and the fetus, one of which is the absence of a fetal connection through the natural placenta. Children born from machine-made placentas, which are the source of the child's life, have no law.

Legal vacuum (Rechtsvacuum) is narrowly defined as an absence of applicable laws and regulations in society. The cause of the legal vacuum is that the circumstances or events that occur cannot yet be regulated in a statutory regulation, or even though they have been regulated in a statutory regulation but are not clear or even incomplete. Or there is a consequence that the drafting of laws and regulations, both from the legislature and the executive, in fact takes a long time, so that when the laws and regulations are declared effective, the matters or conditions to be regulated by these regulations have changed. As for the consequences arising from the existence of a legal vacuum,17

If the above happens then the judge is bound by the principle, that a judge is prohibited from rejecting a case submitted to him on the grounds that the law does not exist, a law has not been made, the rules are incomplete, or are not regulated, but a judge must adjudicate the existing case throughout the case. it fulfills the material requirements and is in accordance with its absolute competence and relative competence. Here the judge must explore and find legal values that live in society according to conditions in society.18 This is in accordance with Law no. 1 of 1970 concerning the Basic Provisions of Judicial Power Article 27 paragraph (1) which states that judges as enforcers of law and justice are obliged to explore, follow and understand the legal values that live in society.

In Indonesia, in general, efforts to find law by judges or interested parties use 2 basic methods. The intended legal discovery method includes the method of interpretation (interpretation method) and methods of legal construction or reasoning (redeneerweijzen). Methods of legal interpretation are carried out when there are legal or statutory provisions that can be directly applied to the concrete events at hand, methods are carried out in cases where the regulations already exist, but it is not clear how they can be applied to concrete events because there are vague norms (vage norms), conflicts between legal norms (antinomy norms), and the uncertainty of a statutory regulation.19 The legal construction method is used if there are no statutory provisions or norms that can be directly applied to the legal problem at hand, or there are no regulations, so there is a legal vacuum (recht vacuum) or a legal vacuum (wet vacuum). To fill in the gaps in the law, it is permissible to use logical reasoning to further develop a legal text. without ignoring the principles of law as a system.20

16Husni Thamrin Op.Cit., p.59
20Ibid
The method of interpretation or interpretation of law aims to explain the actual intent of the text of the law so that the provisions in the law can be applied in resolving concrete events faced by judges. Methods of legal interpretation include grammatical interpretation, historical interpretation of laws, systematic interpretation, teleological interpretation, comparative interpretation, futuristic interpretation, restrictive interpretation, extensive interpretation, authentic interpretation, interdisciplinary interpretation and multidisciplinary interpretation.

The legal construction method is carried out if there are no statutory provisions that can be directly applied to the case at hand, or the regulations do not exist, or there is a legal vacuum (recht vacuum), or a legal vacuum (wet vacuum). In the legal construction method, there are four methods used by judges when attempting legal discovery, namely: argumentum per analogium (analogy), argumentum a contrario, legal narrowing, and legal fiction.21

In the development of children in an artificial womb in the form of a machine EctoLife There is absolutely no law that regulates it or there is a legal vacuum. In this thesis, efforts can be made to discover law using three sub-methods, namely legal interpretation using futuristic interpretation, the analogy legal construction method and the argumentum a contrario legal construction method.

The author chose a futuristic interpretation in response to the absence of norms and laws regarding total artificial wombs such as EctoLife This. Futuristic interpretation is a method of finding laws that are anticipatory in nature, namely explanations of statutory provisions that do not yet have legal force. In other words, futuristic interpretation is a method of finding laws that are anticipatory in nature, that is, explaining current laws and regulations (ius constitutum) guided by future or aspired laws and regulations (ius constituendum).22 If EctoLife is to be implemented, it will have more negative impacts than positive impacts, so the right decision is needed in the form of a ban on implementation. This is in accordance with the ethical prohibition on research on embryos that are more than 14 days old and the prohibition on selecting gender and other characteristics without medical indications or the prohibition on abortion if the development of the fetus is not as expected, or there are concerns that the final outcome of the fetus will be uniform/same or its success cannot be ascertained because it was born from the child of a machine, this law is anticipatory or preventative in nature to be implemented.

The second law discovery method is the analogy method. Discovery method using the legal construction method with argumentum per analogium (Analogy) is a legal discovery method by means of which judges look for a more general essence of a legal event or legal action whether it has been regulated by law or which has not been regulated. With the analogy method, similar or similar events regulated in law are treated the same. By discovering law through this analogy, a specific regulation is made general which is not written in a law. From these general rules, specific events are deduced. A statutory regulation is applied to a certain event that is not regulated in the law, but the event is similar or similar to an event regulated in a law.23

Thus, the analogy method provides an interpretation of a legal regulation by allusions to the words in the regulation in accordance with its legal principles so that an event that cannot actually be included is then considered to be in accordance with the sound of the regulation.24

On EctoLife if analogous to natural birth, then the initial process of the EctoLife program is part of a type of assisted reproduction seen from the source of the type of embryo which is valid or legal if it comes from the seeds of both parents from a legal marriage, so there is no difference with children born from a natural pregnancy process. Thus the child gets inheritance.

rights and other rights from both parents, family and government. The legal status of children as contained in the Civil Code is stated in Article 250 which states "Every child born or grown during a marriage has the husband as its father". Furthermore, in Law no. 1 of 1974 Article 42 concerning Marriage states "A legitimate child is a child born in or as a result of a valid marriage". Furthermore, Law Number 1 of 1974 Article 43 concerning Marriage states "Children born outside of marriage only have a civil relationship with their mother and her mother's family". From the explanation of the law relating to the status of children as mentioned above, if parents have IVF in the EctoLife program, because their womb is a machine, the status of their child remains the same as that of the couple who entrusted the embryo to the EctoLife machine according to the insemination of the mother's egg cells and from the sperm of the man who married her means the embryo of a legal marriage partner.

Program EctoLife with a machine womb, it can also be analogous to the law of renting a womb (surrogate mother). According to positive law in Indonesia, womb rental is prohibited, namely according to the Health Law, Article 127 paragraph (1), it is regulated that attempts to conceive outside of natural means can only be carried out by a legal husband and wife provided that the sperm and ovum of the husband and wife in question are fertilized. implanted in the wife's womb where the ovum comes from and in accordance with Government Regulation No. 61 of 2014 Article 43 paragraph (3) letter b where it is prohibited to implant embryos in another woman's womb. A rental uterus or another woman's uterus is analogous to an artificial uterus or machine uterus rented by the embryo's parents. Meanwhile, the status of a child follows that the source of the embryo comes from a legal marriage.

If the woman whose womb is rented is bound by a legal marriage or has a husband, then the child born is the legitimate child of the husband and wife who rented the womb, this is based on Law Number 1 of 1974 Article 42 concerning Marriage which states "a legitimate child is children born in or as a legal marriage." Then, Article 250 of the Civil Code states that "children born or raised during marriage have their husband as their father." In the womb rental process, the surrogate mother or woman who rents out her womb must hand over the child born to the husband and wife who entrusted the seed.

In addition to the status of a child born in an artificial womb, from the viewpoint of positive law, other civil laws need to be considered, namely inheritance rights. In the view of the Civil Code, the position of children in inheritance has top priority. However, in the Civil Code there are no provisions that specifically regulate the inheritance rights of children born through artificial insemination by machine-made wombs (EctoLife), but only regulate the inheritance rights of children who are born naturally such as the inheritance rights of legitimate children, and recognized right of inheritance for children out of wedlock.

Following the law discovery analogy method, then in general, the inheritance and civil rights of children born from artificial wombs are determined from the legal status or position of the child based on the marital status of the woman from whom the ovum or embryo or seed (which gives birth to the child) originates, namely: 1. Out-of-wedlock child, if the woman is of origin ovum for embryo or seed is a woman who is not in a marriage bond or does not have a husband, then Law no. 1 of 1974 concerning Marriage Article 43 paragraph (1) states "children born outside of marriage only have a civil relationship with their mother and their mother's family"; 2. Legitimate child, if the status of the woman from whom the ovum for the embryo/seed originates is a woman who is in a legal marriage or has a husband, then Article 250 of the Civil Code applies which states "every child born or raised during a marriage has the husband as its father", then Law no. 1 of 1974 concerning Marriage Article 42 "a legitimate child is a child born in or as a result of a valid marriage", then the child is entitled to a share of inheritance in accordance with the applicable inheritance law from the woman's husband who originated the ovum for the embryo/seed.
The juridical status of children born through IVF using donor sperm and ovum from the wife, which are then transplanted into the wife's womb can be divided into 2 types of children's legal status, namely: (1) legal children through recognition if the use of donor sperm gets permission from the husband, and (2) that the child is a child of adultery, if donor sperm is used without permission from the husband. According to civil law as stated in the Civil Code Article 280 that the consequence of recognizing a child is the occurrence of a civil relationship between the child and the father or mother who acknowledges him. In other words, the recognition of the child causes the child's status to become a legitimate child, giving rise to rights and obligations, such as granting a marriage license, providing maintenance, guardianship, the right to use the name of the parent who recognizes it, inherit and so on. Legitimate children through recognition get inheritance rights from parents who recognize them, while adultery children do not have inheritance rights from juridical parents and they are only entitled to get a living as necessary in accordance with the Civil Code Article 867 paragraph (1).

If children born through IVF but outside of legal marriage, then stated in the perspective of civil law by reviewing the Constitutional Court Decision (MK) Number 46/PUU-VIII/2010. The Constitutional Court's decision revises Article 43 paragraph (1) of the Marriage Law, which explains that: "Children born outside of marriage only have a civil relationship with their mother and their mother's family and with a man as their father which can be proven based on science and technology. and/or other evidence according to law has blood relations, including civil relations with his father's family".

Regulations regarding the position of children out of wedlock regulated in the provisions of the Marriage Law Article 43 have so far been considered relatively inadequate in providing legal protection and are discriminatory in nature, the status of children out of wedlock or children born out of legal wedlock only have civil relations with their mothers and family his mother without any responsibility from his biological father.

The distribution of inheritance for illegitimate children according to the Civil Code can only be carried out if the biological father or mother who left the inheritance has received recognition. According to the Civil Code Articles 862 to 866 it is stated that a child out of wedlock can only become an heir if there is legal recognition from his biological father or mother. If there is no recognition from their biological parents, illegitimate children cannot inherit from their biological parents at all. Meanwhile, the implementation of the distribution of inheritance for illegitimate children according to Constitutional Court Decision Number 46/PUU-VIII/2010,27

This Constitutional Court decision also reflects the principle of equality before the law as intended in the 1945 Constitution, Article 28 D paragraph (1), which reads: "Everyone has the right to recognition, guarantees, protection and fair legal certainty and fair treatment, equal before the law." Scheltema, believes that the principles of the rule of law include 5 (five) things, one of which is the principle of equality before the law, the application of equality (Similia Similius or Equality before the Law) in the rule of law means that the government must not privilege certain people or groups of people or discriminate against certain people or groups of people. This principle contains (a) the guarantee of equal status for all citizens before the law and government,28 Thus the law must provide fair legal protection and certainty to the status

of every child born and the rights they have, including children born outside of a legal marriage according to statutory regulations.

In civil cases, using the method of legal discovery by analogy is often used, in contrast to criminal cases, using the analogy method is not permitted, because it is considered contrary to the principle of legality in the Criminal Code (KUHP). In criminal law, no action is prohibited and punishable by criminal law if it is not regulated first in law (Nullum delictum nulla poena sine praevia lege poenali). Analogy is a method of discovering law when the law is incomplete or there is no one to regulate it (recht vacuum/wet vacuum) so it requires the creation of a new law, not an interpretation.29

The last law discovery method chosen is the method of law construction by method Argumentum a Contrario which is a method of legal discovery by giving judges the opportunity to make legal discoveries by considering that if the law stipulates certain things for certain events, it means that the regulations are limited to that particular event and for events outside it the opposite applies. Sometimes an event is not regulated or not identified in the law, but is regulated otherwise. So, the essence of this argumentum a contrario is to put forward a way of interpretation that is opposite to the opposite meaning.30

Implementation of an artificial uterus EctoLife is a legal discovery using the argumentum a contrario method in terms of the source or type of uterus used. In assisted reproduction in general, the type of uterus used is a human, in contrast to EctoLife, where the uterus is a machine, so that in assisted reproduction it is permitted to be carried out according to statutory regulations, whereas according to the argumentum a contrario the implementation of EctoLife is prohibited.

The bioethical aspect of the EctoLife program is a dilemma, like a double-edged sword. On the one hand it has positive effects, on the other hand there are more negative effects. The main ethical obstacle is the prohibition on growing embryos older than 14 days. This means that if you use EctoLife, it is bioethically prohibited. Apart from that, bioethically selecting gender, skin color and characteristics that parents want to be genetically engineered is not permitted if it is not based on medical indications. The positive effect is if genetic engineering can be done to select genes to avoid certain diseases, help mothers who are infertile or impossible to get pregnant or help optimize the development of small babies in artificial wombs.

**CONCLUSION**

Based on the results of analysis and research studies, the author can conclude that the legal status of babies born from the EctoLife program according to positive law in Indonesia does not yet exist (Rechtsvacuum). This is normal because until now the artificial uterus in question, namely a total artificial uterus, has not been implemented, either in Indonesia or abroad. What exists to date is a partial artificial womb research design with sheep subjects, not humans. To answer the legal gaps regarding the EctoLife Program, efforts were made to discover the law using the futuristic interpretation method, the analogy legal construction method and the argumentum a contrario legal construction method. Bioethically, the implementation of EctoLife is also still prohibited. The main ethical obstacle is the prohibition on growing embryos older than 14 days. Apart from gender selection.

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30Ahmad Rifai, Op.Cit., p. 81
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