



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research

Vol. 11, Issue, 04, pp. 46055-46058, April, 2021

<https://doi.org/10.37118/ijdr.21476.04.2021>



RESEARCH ARTICLE

OPEN ACCESS

BIOETHICAL REFLECTIONS ON ASSISTED REPRODUCTION IN ADVANCED AGE

*Ivelise Fhrideraid Alves Furtado da Costa, ²Micheline Oliveira Machado Dutra, ³Arthur Gabriel Alves Furtado de Carvalho Noya, ⁴Michelly Guedes de Oliveira Araújo, ⁵Fátima Maria da Silva Abrão, ⁶Aurélio Molina da Costa and ⁷Rosilene Santos Baptista

¹PhD in Nursing from the University of Pernambuco. Rua Sinhazinha de Oliveira, 10, Palmeira, Campina Grande, PB. CEP: 58401; ²PhD in Nursing from the University of Pernambuco; ³Medical student from the University of Pernambuco; ⁴PhD student at the Graduate Program in Nursing at the University of Pernambuco; ⁵Professor at the University of Pernambuco; ⁶Adjunct professor at the University of Pernambuco; ⁷Professor LEVEL D at the State University of Paraíba

ARTICLE INFO

Article History:

Received 11th January, 2021

Received in revised form

22nd February, 2021

Accepted 17th March, 2021

Published online 22th April, 2021

Key Words:

Reproductive Techniques, Reproductive Rights, Middle age, Nursing, Ethics, Professional.

*Corresponding author:

Ivelise Fhrideraid Alves Furtado da Costa

ABSTRACT

Objectives: To verify contraptions between late gestation and bioethical postulates. **Research design:** This is an integrative review of studies published between 2010 and 2015 in international journals, published in English, Spanish and Portuguese, was conducted in the PubMed and Scopus platforms. Eight articles were found, and two were selected. The latter addressed ethical-legal issues that justify a coercion of autonomy that makes it difficult for women in advanced ages to access assisted reproduction. **Discussion:** The desire for a pregnancy in advanced ages through assisted reproduction includes the health implications for the main actors involved and the ethical and legal aspects. As for health, pregnancy at older ages, it is associated with hypertensive conditions, diabetes, pre-eclampsia, preterm delivery, and lower birth weight, in addition to the aging of women which is considered per se a risk factor for many pathologies. Such a phenomenon meets the principle of autonomy on the maternal side, but also puts into question a possible disrespect for fetal autonomy, as well as the principles of non-maleficence and justice that assists. **Conclusion:** Assisted reproduction is an important tool for the success of pregnancy in older women. However, in addition to specific technical issues, its use involves the Bioethical Principles of Autonomy, Non-Maleficence and Justice, characterizing an emerging bioethical challenge that deserves more attention from health professionals.

Copyright © 2021, Ivelise Fhrideraid Alves Furtado da Costa. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Ivelise Fhrideraid Alves Furtado da Costa. 2021. "Bioethical reflections on assisted reproduction in advanced age", *International Journal of Development Research*, 11, (04), 46055-46058.

INTRODUÇÃO

The advent of effective contraceptive methods and techniques has allowed couples, particularly more instructed, independent and professionally stable women to exercise greater autonomy in their reproductive life (1). Advances in assisted reproduction have allowed older women to become pregnant and have successful gestations. Some examples are Elizabeth Adeney, Maria Del Carmen Balsada of Lara and Adriana Iliescu who became mothers after 60 years of age (2) and Omkari-Panwar, Rajo Devi and Daljinder Kaur, who gestated and gave birth even later (after age 70). However, the option for a pregnancy after 45 years of age is always accompanied by a bioethical debate, especially when assisted reproduction is involved. The latter includes the exercise of free will and the risks of physical-emotional and social damages for both the mother and the unborn child, especially in the management, attention, and care of socio-economic-educational responsibilities towards the child born of a

pregnancy in advanced ages (3). Despite this complex context, the challenges imposed on contemporary women have led them to postpone pregnancy (4). This decision is facilitated by the development and improvement of a set of fertilization techniques known as Assisted Reproduction (AR) (5) which ranges from ovarian stimulation to the manipulation of gametes in the laboratory (sometimes using intracytoplasmic sperm injection) with subsequent embryo transfer to the maternal uterus and support for the maintenance of gestation (6). In general, conception and gestation in women aged 35 years or older present more difficulties, so much so that the pregnancy-puerperal cycle in these cases is considered to offer high risks for mothers and fetuses and, therefore, deserving of special care for both lives (7). Late motherhood is often associated with complications such as diabetes, hypertensive syndromes (including preeclampsia), premature rupture of membranes, preterm birth, low birth weight, and chromosomal abnormalities (8,9). Therefore, the option for an old-age pregnancy should be taken within a full context of information about immediate and future risks

and benefits in relation to all the individuals involved, so that their autonomy is effectively exercised. In this line, the present study was designed based essentially on the counterpoints between late gestation and bioethical postulates, taking into account works published in the world literature on the subject.

METHODOLOGY

The study is based on an integrative review of international productions regarding the reproductive rights of middle aged women (45 years and over), particularly the access to Assisted Reproduction. The research was carried out between March and April 2016 and the information obtained comes from articles published in the period 2010-2015 and found in the databases of the Medline and Elsevier electronic libraries through their respective PubMed and Scopus platforms. The main terms used in the research originated from the Health Sciences Descriptors (DeCS) "reproductive techniques" and "reproductive rights" and "middle aged". The criteria used to select the articles are described in the Chart (1). After the selection, the publications were read in their entirety and analyzed regarding the discussion of AR in old age and the ethical and bioethical issues raised. The present study did not carry out an approach or intervention in human beings, so it did not offer risks or burden during its execution.

RESULTS

Characteristics of the Analyzed Articles: Two articles published in 2013 in English were read in full length.

The first analyzed a sample of French couples and the second a judicial decision of the Italian court. Other characteristics of these studies are outlined in the Table below (1).

Late assisted reproduction under bioethic principle: Fournier et al. (10) and Gulino et al. (11) analyzed in their articles the ethical and legal basis that justifies the restriction of reproductive autonomy in morally complex and conflicting situations, specifically the use of assisted reproduction in women in advanced age (> 50 years), the presence of parental diseases, and shared gestation. For the authors, the promotion of happiness and well-being of the child should play a relevant role in the reflection of "pros and cons" of the reproductive decision to be made. As in other European countries, the authors pointed out that the ethical and legal discussion in France and Italy raised questions about the ability of older parents to provide a secure future for their children, creating favorable conditions for the stunting of the reproductive freedom of women in old ages through the law. The methodological characteristics and results of the analyzed studies are listed in the following Table (2).

DISCUSSION

One of the conceptual pillars of reproductive health is the recognition that all individuals have the right to decide, freely and responsibly, on the timing, number and interval between pregnancies. However, the discussion about the desire for a pregnancy in advanced ages through assisted reproduction includes the health implications for the main actors involved and the ethical and legal aspects. In order to better understand the discussion of the results of this integrative review, the most relevant arguments of the two selected articles were grouped

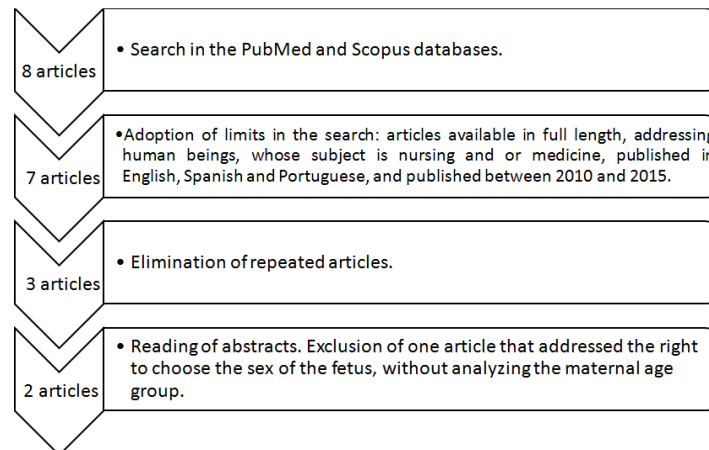


Chart 1. Criteria for article selection, Campina Grande, PB. 2016

Table 1. Information about the studies, Campina Grande, PB. 2016

AUTHORS	YEAR	AREA OF KNOWLEDGE	STUDY SCENARIO	JOURNAL	IMPACT FACTOR	EVIDENCE
FOURNIER et al.	2013	Bioethics, philosophy of medicine and health care	France	Med Health Care and Philos	0.700	The feelings of couples who were not authorized to perform AR express disagreement with the legislation and the ethical conduct of the team responsible for the procedure.
GULINO et al.	2013	Medical Ethics	Italy	J Med Ethics	1.511	The age of the parents is an obstacle to the happiness and well-being of the child.

Table 2. Methodological characterization and results of the analyzed studies, Campina Grande, PB. 2016

TITLE	STUDY DESIGN	AGE GROUP	SAMPLE	INTERVENTION	RESULTS
Access to assisted reproductive technologies in France: the emergence of the patients' voice	Qualitative	59 to 75 years	15 couples	Semi-structured interview aimed at evoking words in the face of refusal to perform AR techniques	Anger, time, normality, legal considerations, and commercial issues were the most evoked words among individuals who had the right to AR denied
Is age the limit for human assisted reproduction techniques? 'Yes', said an Italian judge	Case study	57 and 70 years	One couple	Analysis of the ethical and moral impact of AR in old age	The principles of autonomy and parental authority are disregarded when parents in old ages are judged as agents that compromise the child's well-being and happiness, having therefore their right to reproduce and raise the generated child denied.

into questions related to "late motherhood and health", "late motherhood and ethics" and "late motherhood and legislation". With regard to late motherhood and health, we can state that although the pregnancy-puerperal cycle has the purpose of perpetuating the species and is a natural and physiological phenomenon, it is far from perfect and has risks of death and sequelae for mothers and their fetuses, even in pregnancies considered at low risk of complications. When pregnancy happens at older ages, it is associated with hypertensive conditions, diabetes, pre-eclampsia, preterm delivery, and lower birth weight, in addition to the aging of women which is considered per se a risk factor for many pathologies (12).

Problems during and after AR are also expected with increasing age (13). The use of donated or cryopreserved eggs is frequent, especially after age 40, and this puts into question the social equity of the procedure, taking into account the access to possible donors or egg banks and, especially, the amount of financial resources involved (12, 13, 14). Another controversial aspect is well portrayed in a study carried out in the Czech Republic, where AR is allowed and subsidized for women up to 49 years of age. When youngsters were asked about their desire regarding parental age, they reported that they would prefer to have younger parents. This led the authors to state that, from multiple perspectives, the current age limit for late pregnancy could perhaps even be reduced (12). Although the life expectancy in Europe is higher than in other continents, ranging from 77 years for men to 83 years for women (12), most European countries present restrictions on assisted conception in old age. France and Italy are not only among the most rigid in their legislation, but also overestimate the use of gametes of the own parents, indicating that in the parental relationship, genetic ties are considered more important than social linkage (2). It is worth noting that besides the pathologies and complications associated with gestation in old age, the education of a child always is an aspect that requires attention, stimulation, care, and shelter. These conditioning factors will reflect on the child's future behavior and psyche. These aspects demand physical energy and resilience from the parents, characteristics that clearly decrease with age (2,12).

Furthermore, late motherhood may raise an emotional ambivalence where there is a conflict between the maternal desire and the habitual autonomy and "control" of her former daily and professional life, which may compromise "mothering" (3). Regarding the ethical implications of late motherhood, in particular those brought about by AR, it is important to use the bioethical principles suggested by Beauchamp and Childress (15) as an analytical tool. This is because, if on the one hand it is correct to respect the philosophical justification that has been known as Bioethical Autonomy, that is, to respect the free will of the subjects involved in actions related to physical, emotional and social health, on the other, and no less important, is the respect for the principles of Non-Maleficence (avoid harm or cause as little harm as possible) and of Justice, which favors fairness more than equality, that is, treating equal things with equality and different things, differently, where the neediest receive more, aiming to further equality. Undoubtedly, the realization of the female desire for motherhood through assisted reproduction meets the principle of autonomy on the maternal side (14), but also puts into question a possible disrespect for fetal autonomy, particularly its potential right to preservation of its future physical and mental health, and to socio-affective protection during the period of the life in which the care of the parents will be needed.

The fact of exposing a vulnerable person to a situation that potentially compromises the physical and social integrity without his consent (or the consent of his legal guardian), can represent a non-observation of the bioethical principles of autonomy and non-maleficence. We can also say that the Principle of Justice is also disrespected because only one individual involved in the mother-child relationship has the power of decision while the other, in this case the future unborn child, does not have a defender with discernment compatible to the "ethical-dialectical pair" (16). Regarding the legal aspects, we can affirm that motherhood at ages over 40 years has been discussed globally, but countries differ in their legislation. In the study of Fournier (10), we

can observe that the French state establishes in its legislation limits of age and health conditions to have access to AR. The study of Gulino (11) showed that the Italian Parliament has restricted the access to assisted reproduction and shared gestation, placing them as conditioned to maternal age. In both cases, the legislation is based on the claim that the protection and well-being of the child are at risk when parents are over 42 years of age up to 51 years (2). On the other hand, assisted motherhood is permitted between the ages of 40 years to 51 years in Finland, Belgium, Bulgaria, Denmark, Ireland, Estonia, Greece, the Netherlands, Luxembourg and Slovenia (2, 12). Among the European countries, only England does not impose limits or conditions for legal and assisted late motherhood, and since adoption agencies independently set the limit of 35 to 40 years, there is an indirect incentive to the search for assisted reproduction (13). At this moment, different normative councils of diverse countries have placed attention on this question. In Brazil, the Federal Council of Medicine is the locus of discussion about AR and late pregnancy. In its last position expressed in the Resolution 2121 of 2015 (17), the council established that AR is admissible in the case of women over 50 years of age provided the patient and her doctor assume the risks of a late pregnancy. The current situation demonstrates the progress in the normatization of assisted reproduction, once observed by Santos and Santos. However, the bioethical discussion needs to be fomented in other professional spheres that are directly involved in the process (14).

CONCLUSION

Although there is no easy answer to any bioethical dilemma, the Principlistic Theory of Bioethics instrumentalizes and facilitates the reflection in emergent limit situations, as it is the case of the use of assisted reproduction for gestations in women at old ages. All the involved in this process should help women in the early climacteric stages to respond to a triad of (almost existential) questions of the type "why do I want to be a mother after 45 years? Am I able to be a mother after 45? Should I be a mother after 45?" through the richest discussion possible. At the same time, health professionals should help legislators in the conduct of the discussion that may end with the production of legal frameworks on the theme, taking into account not only the issue of autonomy but also the bioethical equation of "cost-benefit-maleficence" for the women, the unborn child, and the society as a whole. Particularly, nursing professionals, who have health education as one of the pillars of their performance, can and should play a relevant role in this debate, stimulating all the actors to reflect on the numerous ethical and legal variables present in the path that can lead to the use of AR. The absence of works in the nursing area found in the present integrative review indicates a new field for studies and research of enormous academic and practical potential to be yet explored by these professionals.

Declaration of Conflicts of Interests: The authors state that there is no conflict of interest.

REFERENCES

- Beauchamp T, Childress J. (2002). Principles of Biomedical Ethics, São Paulo: Loyola.
- Brazil (2010). Ministry of Health. High risk pregnancy: Technical manual. 5th ed. Brasília: Publisher of the Ministry of Health; 302p.
- Caetano LC et al (2011). Pregnancy after 35: a systematic review of the literature. *Rev Min.* 15 (4): 579-587.
- Cutas D, Smajdor A. (2015) Postmenopausal Motherhood Reloaded: Advanced Age and In Vitro Derived Gametes. *Hypatia*;40 (5): 386-402.
- Federal Council of Medicine. (2015). Resolution 2121 of 2015. Brasília.
- Fournier V et al. (2013). Access to assisted reproductive technologies in France: the emergence of the patients' voice. *Med Health Care and Philos.* 16:55-68.

- Gonçalves Z R, Monteiro D L M. (2012) Maternal complications in women with advanced maternal age. *Femina*. 40 (5): 275-9.
- Gravena, AAF et al. (2013). Maternal age and factors associated with perinatal outcomes. *Acta Paul Enferm*. 26(2): 130-5.
- Gulino M et al. (2013). Is age the limit for human-assisted reproduction techniques? 'Yes', said an Italian judge. *J Med Ethics*. 39(4):250-2.
- Kourková J et al. (2015). How old is too old? A contribution to the discussion on age limits for assisted reproduction technique access. *Reproductive BioMedicine Online*. 30 (5): 482-492.
- Lima RA et al. (2009). Experiencing the late motherhood and knowing the factors that influence it. *Journal of Integrated Nursing*. 2 (2): 310-9.
- Molina A et al. (2003). Ethics, bioethics and humanism in scientific research: brief notes and main documents. Recife: EDUPE, 212p.
- Moura MD et al (2009). Assisted reproduction: A bit of history. Rio de Janeiro: *Rev. SBPH*. 12 (2): 24-42.
- Santos SL, Santos SR. (2013) Assisted reproduction: legal and ethical aspects. Scientific production in on-line journals. *Acta Bioethica*. 19 (1): 97-104.
- Smajdor A. (2011) The ethics of IVF over 40. *Maturitas*. 69:37-40.
- Tain L. (2005). A child if I want when I want? Reviewing women's aspiration through IVF uses in a French Hospital. *Rev. Estud. Fem.*;13(1): 216p.
- Travassos-Rodriguez F, Féres-Carneiro T. (2013) Delayed motherhood and ambivalence: some notes. *Psychoanal time*. 45 (1): 111-121.
