Regulating public policy regarding assisted reproduction for seroconcordant homosexual couples

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Abstract

Reproductive technologies allow HIV positive seroconcordant homosexual couples to have healthy biological children, since, if executed properly, they prevent the vertical transmission of the human immunodeficiency virus. Given the advance in natural sciences and the accompanying social consequences, law must progress to deal with these new realities. Based on that, the present study proposes to investigate the state obligation on the regulation of public policies that contemplate assisted reproduction techniques, since the right to health and family planning should encompass the object group of this research. We used the deductive method and literary review techniques focusing on the Brazilian legislation in force, biolaw dissertations and the resolutions of the Brazilian Federal Council of Medicine on the subject.

Keywords: HIV Seropositivity. Reproductive techniques. Public policy.

Resumo

Regulamentação de políticas públicas em reprodução assistida para casais soroconcordantes homoafetivos

Tecnologias reprodutivas permitem que casais soroconcordantes homoafetivos tenham filhos biológicos saudáveis, já que, se aplicadas adequadamente, impedem a transmissão vertical do vírus da imunodeficiência humana. Diante do avanço das ciências naturais e das consequências sociais que o acompanham, a ciência jurídica deve progredir para lidar com essas novas realidades. Com base nisso, a pesquisa propõe-se a investigar a obrigação estatal de regulamentar políticas públicas que contemplem técnicas de reprodução assistida, visto que a integralidade do direito à saúde e ao planejamento familiar deve abarcar o grupo-objeto deste estudo. Utilizou-se método dedutivo e técnicas de revisão literária, com enfoque na legislação brasileira vigente, em monografias do biodireito e resoluções do Conselho Federal de Medicina sobre o tema.

Palavras-chave: Soropositividade para HIV. Técnicas reprodutivas. Política pública.

Resumen

Reglamentando políticas públicas en reproducción asistida para parejas seroconcordantes homoafectivas

Las tecnologías reproductivas permiten que las parejas seroconcordantes homoafectivas tengan hijos biológicos saludables, ya que, si se aplican adecuadamente, impiden la transmisión vertical del virus de la inmunodeficiencia humana. Frente al avance de las ciencias naturales y de las consecuencias sociales que lo acompañan, la ciencia jurídica debe progresar para lidiar con estas nuevas realidades. En base a ello, el presente estudio se propone investigar la obligación estatal de reglamentar políticas públicas que contemplen técnicas de reproducción asistida, puesto que la integralidad del derecho a la salud y a la planificación familiar debe abarcar al grupo-objeto de esta investigación. Se utilizaron el método deductivo y técnicas de revisión de la literatura, enfocándose en la legislación brasileña vigente, en monografías de bioderecho y en resoluciones del Consejo Federal de Medicina acerca del tema. Palabras clave: Seropositividad para VIH. Técnicas reproductivas. Política pública.

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This article discusses the access of seroconcordant homoaffective couples (both with the human immunodeficiency virus — HIV/AIDS) to assisted reproduction public policies. New reproductive technologies have enabled infertile couples to have biological children, as well as the prevention of mother-to-child transmission of HIV. These techniques aid conception, being used mainly in cases of infertility (difficulty in getting pregnant), sterility (inability to conceive) and to prevent the spread of diseases, either vertically or horizontally (between partners).

The International Convention on Population and Development of 1994 (Cairo Convention)¹ was a framework for sexual and reproductive rights. From this, it was understood that the individuals have autonomy over their reproductive tract. However, new reproductive technologies have raised some questions about this autonomy and the role of the state, that is, it would be up to the public power merely to guarantee this freedom only by preventing third parties from violating it, or it should elaborate and implement public policies moving away from the guaranteeing inertia?

For this study, the deductive method was adopted, with literary revision of the doctrine, jurisprudence and legislation concerning sexual and reproductive rights, in addition to the right to health of the group in focus, seroconcordant homosexual couples, as well as resolutions of the Federal Council of Medicine (CFM) that address the issue.

This research did not consider serodiscordants, which would add horizontal transmission to the problem, a theme that would not converge with the purposes of this work. In addition, it was limited to homosexual couples, not only because they are a vulnerable group, but also because they are stigmatized in relation to HIV.

Thus, in order to understand the regulation of public policies on assisted reproduction for this group, the article proposes to sew fundamental rights, object-relevant norms and knowledge about assisted human reproduction (AHR), the latter in compliance with the interdisciplinarity that the theme require.

Fundamental rights inherent in reproductive health

Fundamental rights, as a positivization of human rights in countries, extend to all human beings and not just citizens or taxpayers. They aim at the general well-being of society without any kindof selectivity as to who is subject to rights. Therefore, it is essential

to use the Magna Carta as a major foundation to support the access of vulnerable groups, such as homoaffective seroconcordant couples, to reproductive technologies. It is noteworthy that the novelty of these technologies is not a hindrance, since fundamental rights are constantly evolving precisely to fit to the new realities.

In this discussion, the right to health deserves attention, given its intimacy with the right to life itself, since the lack of the first compromises the preservation of the second, as pointed out by Sarlet and Figueiredo². This relationship is essential, because life is one of the main guarantees of the individual and can hardly be relativized. Therefore, the inflexibility of the right to life ends up making the right to health unfeasible.

The latter is difficult to conceptualize, since the very idea of health is little measurable. In the words of Ribeiro Filho³, the higher the welfare levels reached, the greater the demands for sanitary services made to the public authorities. That is, the idea of health is not static, but always an expanding concept.

The World Health Organization (WHO), in its constitution protocol, defines health as *state of complete physical, mental and social well-being,* (...) [which] *does not consist solely in the absence of disease or illness*⁴. In addition, it is worth mentioning that the right to health encompasses all situations of human life in which the well-being of the individual must be guaranteed ³. In Brazil, under the terms of article 196 of the Federal Constitution (CF) of 1988⁵, this guarantee is the duty of the State.

According to Sarlet and Figueiredo², fundamental rights have two classifications: one negative, which involves health advocacy, and the other positive, that is, service providing and public policy enforcement. Although state duty in this context includes both definitions, when it comes to the access of seroconcordant homosexual couples to assisted reproduction, the need to debate the positive side is clear.

Still considering article 196 of the Federal Constitution of 1988, this right is universal and egalitarian, which does not mean that the way to guarantee it must be equal for all people, especially in an unequal country like Brazil². In this context, we should seek material equality, that is, unequal treatment for the unequal. Therefore, it is important to consider the right to health along with the right to equality, the first not being dispensed to only a portion of the population.

In this sense, Marmelstein⁶ points to negative discrimination, that is, the duty not to segregate the different, and positive discrimination, the commitment to equalize. Thus, it is up to the State to promote compensatory measures that guarantee equal conditions between disadvantaged groups and other citizens. This refers to positive discrimination, aiming at material equality.

The WHO Constitution also deals with isonomy in access to health, defining it as follows: *Enjoying the best attainable state of health is one of the fundamental rights of every human being, regardless of race, religion, political creed, economic or social condition*⁴. Therefore, in the isonomic perspective, health must be guaranteed in such a way nationally as internationally.

Because it is a broad theme, to speak about the right to health is more appropriate to make specific cut – in the context of this article, the right to reproductive health from assisted techniques. These techniques were defined by *International Conference on Population and Development Report* ¹ and reaffirm the concepts of the WHO Constitution: to reproductive health is a state of complete mental and social physical welfare (...) in all matters concerning the reproductive system and its functions and processes ⁷. Thus, preventing hereditary transmission of HIV is part of the right to reproductive health, while respecting the isonomy in this process.

Reproductive rights are based on the freedom of every couple or individual to decide responsibly when and how often to have children, and to obtain information and ways to do so while enjoying the highest standard of sexual and reproductive health. The Cairo Conference Report also addresses family planning, implying that women and men must have access to efficient, safe and acceptable methods for healthy offspring.

According to Heloisa Helena Barbosa, cited by Moás et al.⁸, it was formerly attributed to the right to procreate only negative connotation, associated with the freedom to decide not to have children through fertility control methods. Today, the idea has also acquired a positive meaning, referring to the freedom to choose how to procreate, with the Cairo Conference¹ one of the milestones for the appreciation of this positive facet.

Lemos and Chagas ⁹ understand that reproductive rights are not necessarily absolute, since their exercise can affect the life and intimacy of the one who will be conceived. This person cannot be a simple object of wish fulfillment, for they have a purpose in themself. Nevertheless, reproduction

of seroconcordant couples cannot be prevented on the grounds that it would endanger the health of the child, nor even point to adoption as an alternative to satisfying biological parenting.

In the same direction, Paiva and collaborators 10 highlight the ethical and constitutional obligation to promote the reproductive rights of people living with HIV, whose freedom to have children is legitimate, although the stigmatization of the disease even among health professionals. In practice, this guarantee involves public policies, such as the Assisted Reproduction Program for HIVpositive people, implemented by the São Paulo government in 2010, and the DSTAids-SP State Program. According to Maria Clara Gianna, the latter's coordinator, the objective would provide a safe threat with no risk of infection from the seronegative partner in case of serodiscordant couples or no risk of reinfection for couples in whom they are seropositive for HIV¹¹.

What we see here is that the application of RHA public policies to homoaffective seroconcordant couples, as positive discrimination aimed at compensating inequalities, also materializes the positive aspect of reproductive rights, allowing members of this group to have children. Thus their reproduction rights would not be restricted to the possibility of deciding only *not* to procreate, but always to prevent vertical transmission of HIV. That said, in the next section are some more in-depth reflections on the RHA techniques that can guarantee these rights.

Techniques of assisted reproduction

Given the lack of legislation on AHR in Brazil, CFM published Resolution 2,168/2017 ¹², which addresses principles and requirements for these techniques in the national health system. The deliberation defines these methods as auxiliary in solving the problems of human reproduction, facilitating the procreation of hetero and homoaffective couples, as well as single people, safeguarding the medical right to conscientious objection. In order to undergo these procedures, individuals must be deemed capable and in full agreement and properly informed, following the principle of informed consent.

This research highlights AHR techniques for seroconcordant homoaffective couples wishing to raise a family, because the presence of the virus requires greater attention to prevent transmission by blood

contact, horizontally or vertically (during management, delivery and breastfeeding). These techniques include intrauterine insemination (IUI), *in vitro* fertilization (IVF), and intracytoplasmic sperm injection (ICSI).

Given the responsibility of parents and the state to ensure the health of the baby, by avoiding vertical transmission and ensuring the right to life and health, pursuant to article 227 of CF/88⁵, before applying the technology cited above, it is necessary to wash sperm. According to Vaz¹³, this method is divided into the following steps: collection, centrifugation, washing and filtering of semen, when the partner is seropositive. This allows the isolation of male gametes not infected with seminal fluid, where the virus is installed.

For serodiscordant heterosexual couples in which the man is seropositive, after sperm washing, IVF is performed, which, according to Souza and Alves ¹⁴, aims at the manipulation in laboratory of both gametes (sperm and ovum), looking for good quality embryos. After the male stage, ova are captured by transvaginal ultrasound guided puncture and fertilized with the already washed sperm. Three to five days after IVF, embryos are transferred to the uterus.

At ICSI, the sperm is evaluated with a powerful microscope, which allows you to choose gametes with more motility and normal morphology. After the analysis, ICSI consists of injecting the sperm directly into the egg, in a laboratory procedure performed by an embryologist, according to the report of Souza and Alves ¹⁴.

For heterosexual couples in which only women are seropositive, IUI is usually more recommended as it is considered to be of low complexity. In this technique, semen collected and prepared in the laboratory, is introduced into the womb with the aid of a specific catheter ¹⁴. Another method indicated for these couples is ICSI, which avoids contact transmission, since it is a procedure performed by direct injection of sperm into the egg, followed by a preimplantation diagnosis that selects healthy embryos, according to Corrêa and Loyola ¹⁵.

It is noteworthy that for all these techniques of serodiscordant couples, it is still necessary medical follow-up, with antiretroviral drugs, cesarean delivery and, in cases of seropositive women, seek alternatives to breastfeeding, because breast milk contains the virus.

For female homosexual seroconcordant couples, there are two possibilities: IUI, also called artificial insemination, and IVF; both need donated semen. In this method, one of the partners fertilizes

with the sperm only their egg or the other also – the so-called shared pregnancy by CFM Resolution 2,168/2017¹². It is important to remember that, according to the Resolution, the maximum age for women to use this technique is 50 years, as the difficulties increase with age.

When male homoaffective seroconcordant couples wish to have biological children, the presence of a third person goes beyond donating gametes: it is necessary a replacement pregnancy, i.e., the temporary use of the uterus, popularly known as the "surrogate belly". CFM Resolution 2,168/2017, in item VII, item 1, makes it clear that *temporary uterine donors must belong to the family of one of the partners* ¹², and may be a mother, sister, aunt or cousin since respected the age of up to 50 years.

In these cases, IVF or IUI is performed on the uterus donor with semen from one partner after sperm washing in the laboratory. It is noteworthy that the temporary donation of the womb cannot be profitable or commercial ¹⁶. In order to avoid horizontal and vertical transmission in the application of reproductive techniques sperm washing is necessary when the seropositive in the couple is male and the IUI when it is female. In addition to maintaining antiretroviral therapy during pregnancy, proper medical care should be taken at birth and breastfeeding prevented, as vertical transmission may occur during these last three stages.

A process little used, but gradually gaining prominence in studies of Brazilian biomedicine is gene therapy. According to Paiva, this procedure consists of introducing therapeutic genetic material into a cell [to replace or silence] defective genes using recombinant DNA and genome editing techniques ¹⁷. The author further explains that vectors protect and transport genetic material into cell; the ideal vector is selected according to the therapeutic objective, with being able to choose between viral and nonviral vectors ¹⁷.

Although it was thought to prevent monogenic hereditary diseases, in current studies this therapy is most commonly used to treat acquired diseases such as cancer and HIV infection ¹⁸. Germ technique, part of gene therapy, has drawn the attention of people living with HIV and wanting children, as it fundamentally proposes the definitive transformation of gene expression for therapeutic purposes.

All of these resources mentioned seek to offer more quality of reproductive life to the citizen, thus also guaranteeing their right to health and human dignity⁸. For seropositive couples wishing to have

children, germline gene therapy could be the hope to prevent vertical transmission, since their end cells are the gametes located for extraction of the defective gene. However, there are several criticisms of this method, and one of them is the interference with human reproduction, genetic heritage, not to mention the possible consequences to DNA, such as embryo malformation, morphological changes and, in some cases, mortality rates.

Regulation of public policies

It is necessary to investigate the implementation of these RHA techniques through public policies, in view of the fundamental principles and rights that surround the problem, as well as the jurisprudential recognition of the protection of vulnerable groups. In this context, the judgment of the Direct Action of Unconstitutionality (ADI) 4.277 ¹⁹, which recognized homosexual union as a family entity and guaranteed the right to self-esteem and the pursuit of happiness for same-sex couples, must be considered.

In the Brazilian legal system, ensuring the protection of minorities and vulnerable groups qualifies, in fact, as an indispensable foundation for the full material legitimation of the Democratic Rule of Law²⁰. Thus, regulating assisted reproduction policies for homosexual seroconcordant couples would realize such rights.

This possibility is recognized in article 2 of Law 8.080/1990 (Law of the Unified Health System), considering health as a fundamental right of all, giving the State the duty to provide the conditions necessary for its full exercise by means of creation and implementation of economic and social policies aimed at reducing the risk of disease and other grievances ²¹. Therefore, the legislation gives the public authorities a positive role, without limiting the guarantee of universal access to their policies.

Infertility and the impossibility of forming a healthy family nucleus, adversities that affect people living with HIV, should be thought of as health problems. The CFM, in the preamble of Resolution 2,168/2017 ¹², already recognizes human infertility as a health issue, as it is accompanied by medical and psychological implications for the infertile and legitimizes the duty to overcome them. The same document admits the advancement of scientific knowledge to overcome obstacles to human reproduction, and uses the judgment of ADI 4,277 to guarantee the same rights to same-sex couples.

This perspective has also been discussed administratively in the last two decades. According to Nascimento, in her doctoral dissertation, in the National Plan for Integral Attention to Women's Health – Principles and Guidelines, presented in 2004, infertility and assisted reproduction are considered as one of the gaps in health care policies for woman ²².

Recognizing these problems and the reproductive rights of homoaffective seroconcordant couples, which must still be protected by the principle of isonomy, the state duty arises to realize fundamental rights through public policies, according to Faro ²³. According to the researcher the State, through the Public Administration, has a duty to effectively and effectively implement public policies that achieve rights, with the expected (correct) use of public resources in the best possible cost-benefit ratio ²⁴.

Discussions about government programs that make reproductive rights viable date back more than two decades. Section 7.3 of the *International Conference on Population and Development Report* ¹, when considering reproduction rights as guaranteed by national and international laws, states that the promotion of responsible exercise of these rights by every individual must be the fundamental basis of government and community policies and programs on reproductive health ⁷.

The protection of HIV-infected individuals was widely discussed during the Conference, and among the actions established for governments, the following stand out: support and develop appropriate mechanisms to help families care for their children, elderly dependents and family members with disabilities, including those resulting from HIV/AIDS²⁵ (item 5.11); (...) recognizing the needs, inter alia, reproductive health, including family planning and sexual health, HIV/AIDS, information, education, and communication²⁶ (item 6.30).

The Brazilian state was already recognizing the need to create efficient assisted reproduction services offered by SUS. Ordinance GM/MS 426/2005 ²⁷ instituted within the SUS the National Policy of Integral Attention in AHR, which would effect the right to family planning by the techniques of AHR, identifying, according to its article 2, item II,, the determinants and conditioning factors of major infertility problems in married couples in their fertile life, (...) [and developing] cross-sectoral public liability actions ²⁷.

However, even with the institution of national policy, little progress has been made. In 2012, with Ordinance 3,149²⁸, the Ministry of Health again spoke on the issue, determining the allocation of financial

resources to health facilities that perform these procedures. It also used as justification the idea *that* assisted human reproduction techniques contribute to the reduction of horizontal and vertical transmission of infectious and genetic diseases, among others ²⁸.

In May 2010, the government of São Paulo launched the Assisted Reproduction Program for HIV-positive people, which, with one year in force, served about 100 couples ²⁹. However, it is not known how many of these couples were samesex couples and whether any HIV-positive couples were treated by the outpatient clinic. Therefore, it is necessary to consider the unconstitutionality of a restriction (even if not intentional) in the access to these technologies to heterosexual couples, excluding single men or women or homosexual individuals, considering a conception of family that does not account for the diversity and pluralism of our city, as stated by Nascimento ³⁰.

The advancement of the reproductive rights of seroconcordant couples cannot be denied by the implementation of such a program, but these public policies need to be expanded at the federal level in order to meet the demands of all people living with HIV who wish to have biological children. The state should encourage this trend, as well as the participation of homosexual couples, given the vulnerability of the group in question.

The Brazilian State, even shyly, assumed the importance of regulating public policies in RHA for seropositive couples (seroconcordant or not). However, these actions still need to be put in place to guarantee their rights. In confronting the resources available to implement these actions, the Brazilian government must first assess their importance and scope for society as a whole. As pointed out by Liana Cirne Lins, quoted by Santos, in Brazil the principle of the possible reserve has often exercised the role of mere rhetorical topos destined to a priori disqualification of social rights, since it is used even without checking effective availability of the state cash register 31.

According to Fernando Facury Scaff, quoted by Santos, the theory of the reserve of the possible manifests economic concept that stems from the realization of the existence of scarcity of resources, public or private, in the face of the vastness of human, social, collective or individual needs ³². Thus, it cannot be used by the State as a determining factor to realize the right to health without first, at least through financial study and public resources,

analyze the real state condition of guaranteeing the rights discussed here.

RHA public policies for homoaffective seroconcordant couples would bridge the gaps in the realization of the health and reproductive rights of this social group. They are important not only to guarantee them, but to recognize them before the whole of society. According to Lobato, social policies today require, therefore, this dimension, which places them as guarantors of social goods as rights recognized by society, which demands state intervention for their realization, but which locates them in the public sphere, in particular opposition to the private and beyond the state ³³.

It should be noted that these policies would even protect the economic order of the right to health. In addition to ensuring the reproductive rights of homoaffective seroconcordant couples, they can help prevent the spread of HIV by reducing government spending on retrovirals and the entire medical and psychological apparatus provided by SUS.

Final Considerations

This paper aims to investigate the state role, through public policies, in guaranteeing the reproductive rights of homosexual seropositive couples, in view of the principle of isonomy. The need to regulate and implement AHR policies for this portion of the population was current and relevant, given the discussions that were already being held in Brazil (for example, the establishment of the National Plan for Integral Attention in Assisted Human Reproduction in SUS, by Ordinances MS 426 and 3,149)^{27,28}.

However, despite the discussion of the subject, little has been done. This paper defends the urgency of ensuring the access of homoaffective seroconcordant couples to the public policies of AHR, observing their condition of socially vulnerable group and the special attention that the State must offer them, seeking the full exercise of material isonomy.

It is imperative that this debate be put into practice by the Brazilian state, because assisted reproduction techniques that prevent vertical transmission of HIV are often expensive, restricting access for under-married couples. Other relevant issues should also be on the agenda, such as the role of public health in fighting HIV, as well as the full health of the baby.

Referências

- Fundo de População das Nações Unidas. Relatório da Conferência Internacional sobre População e Desenvolvimento: plataforma de Cairo, 1994 [Internet]. Brasília: UNFPA; 2005 [acesso 21 ago 2018]. Disponível: https://bit.ly/219MO6H
- Sarlet IW, Figueiredo MF. Algumas considerações sobre o direito fundamental à proteção e promoção da saúde aos 20 anos da Constituição Federal de 1988. Rev Direito Consum [Internet]. 2008 [acesso 16 ago 2018];17(67):125-72. Disponível: https://bit.ly/35BG910
- 3. Ribeiro Filho HD. A terapia gênica como decorrência do direito fundamental à saúde: fundamentos e limites. In: Stancioli BS, Albuquerque L, Freitas RS, coordenadores. XXIV Congresso Nacional do Conpedi: UFMG/Fumec/Dom Helder Câmara: biodireito e direitos dos animais I [Internet]. Florianópolis: Conpedi; 2015 [acesso 19 ago 2018]. p. 296-311. Disponível: https://bit.ly/2ORwu0j
- Organização Mundial da Saúde. Constituição da Organização Mundial da Saúde (OMS/WHO), 1946 [Internet]. São Paulo: Comissão de Direitos Humanos da USP; [s.d.] [acesso 17 ago 2018]. Disponível: https://bit.ly/1x8itdQ
- Brasil. Constituição da República Federativa do Brasil de 1988. Diário Oficial da União [Internet].
 Brasília, 5 out 1988 [acesso 17 abr 2019]. Disponível: https://bit.ly/1bIJ9XW
- 6. Marmelstein G. Curso de direitos fundamentais. São Paulo: Atlas; 2008.
- 7. Fundo de População das Nações Unidas. Op. cit. p. 62.
- Moás LC, Vargas EP, Maksud I, Britto R. HIV/aids e reprodução: a perspectiva jurídica em análise. Cad Pesqui [Internet]. 2013 [acesso 18 ago 2018];43(150):948-67. DOI: 10.1590/S0100-15742013000300011
- 9. Lemos MO, Chagas MC. O direito ao planejamento familiar como direito humano fundamental autônomo e absoluto? In: Silva MNA, Engelmann W, coordenadores. Biodireito [Internet]. Florianópolis: Funjab; 2013 [acesso 17 abr 2019]. p. 274-94. Disponível: https://bit.ly/35vEGcN
- Paiva V, Lima TN, Santos N, Ventura-Filipe E, Segurado A. Sem direito de amar? A vontade de ter filhos entre homens (e mulheres) vivendo com HIV. Psicol USP [Internet]. 2002 [acesso 19 ago 2018];13(2):105-33. DOI: 10.1590/S0103-65642002000200007
- 11. Saúde lança programa pioneiro na rede pública de reprodução assistida para soropositivos. Governo do Estado de São Paulo [Internet]. Saúde; 6 maio 2010 [acesso 4 dez 2018]. Disponível: https://bit.lv/33wdVTz
- 12. Conselho Federal de Medicina. Resolução CFM nº 2.168, de 21 de setembro de 2017. Adota as normas éticas para a utilização das técnicas de reprodução assistida. Diário Oficial da União [Internet]. Brasília, 10 nov 2017 [acesso 23 ago 2018]. Seção 1. Disponível: https://bit.ly/31b5MT6
- 13. Vaz SFP. Técnicas de reprodução humana assistida para pacientes sorodiscordantes, portadores da síndrome da imunodeficiência adquirida (HIV) [Internet]. Goiânia: Pontifícia Universidade Católica de Goiás; [s.d.] [acesso 27 ago 2018]. Disponível: https://bit.ly/31f0Egz
- 14. Souza KKPC, Alves OF. As principais técnicas de reprodução humana assistida. Saúde Ciênc Ação [Internet]. 2016 [acesso 23 jan 2019];2(1):26-37. Disponível: https://bit.ly/2BggFbz
- Corrêa MCDV, Loyola MA. Tecnologias de reprodução assistida no Brasil: opções para ampliar o acesso.
 Physis [Internet]. 2015 [acesso 27 ago 2018];25(3):753-77. DOI: 10.1590/S0103-73312015000300005
- 16. Regino FA. O desejo de ter filhos e a construção de gênero nas políticas de saúde: análise da Política Nacional de Atenção Integral em Reprodução Humana Assistida [tese] [Internet]. Recife: Fundação Oswaldo Cruz; 2016 [acesso 15 mar 2019]. Disponível: https://bit.ly/32umGNK
- Paiva JCC. Terapia gênica e suas aplicações no tratamento de doenças [trabalho de conclusão de curso] [Internet]. Brasília: Centro Universitário de Brasília; 2017 [acesso 29 ago 2018]. p. 1. Disponível: https://bit.ly/33BSQHE
- 18. Azevêdo ES. Terapia gênica. Bioética [Internet]. 1997 [acesso 27 ago 2018];5(2). Disponível: https://bit.ly/2srZfoA
- 19. Brasil. Supremo Tribunal Federal. Ação direta de inconstitucionalidade nº 4.277 [Internet]. 5 maio 2011 [acesso 20 ago 2018]. Disponível: https://bit.ly/2ryLWVJ
- 20. Brasil. Supremo Tribunal Federal. Op. cit. p. 849-50.
- 21. Brasil. Lei nº 8.080, de 19 de setembro de 1990. Dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências. Diário Oficial da União [Internet]. Brasília, 20 set 1990 [acesso 22 jan 2019]. Disponível: https://bit.ly/2MVvkP9
- 22. Nascimento PFG. Reprodução, desigualdade e políticas públicas de saúde: uma etnografia da construção do "desejo de filhos" [tese] [Internet]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2009 [acesso 15 mar 2019]. p. 45. Disponível: https://bit.ly/2IR5sTh
- 23. Faro JP. Políticas públicas, deveres fundamentais e concretização de direitos. Rev Bras Polit Públicas [Internet]. 2013 [acesso 22 jan 2019];10(1):251-69. p. 254. DOI: 10.5102/rbpp.v3i2.2161
- 24. Faro JP. Op. cit. p. 261.
- 25. Fundo de População das Nações Unidas. Op. cit. p. 56.
- 26. Fundo de População das Nações Unidas. Op. cit. p. 61-2.
- 27. Brasil. Ministério da Saúde. Portaria GM/MS nº 426, de 22 de março de 2005. Institui, no âmbito do Sistema Único de Saúde (SUS), a Política Nacional de Atenção Integral em Reprodução Humana

- Assistida e dá outras providências. Diário Oficial da União [Internet]. Brasília, 22 mar 2005 [acesso 22 jan 2019]. Seção 1. Disponível: https://bit.ly/31f65vZ
- 28. Brasil. Ministério da Saúde. Portaria GM/MS nº 3.149, de 28 de dezembro de 2012. Ficam destinados recursos financeiros aos estabelecimentos de saúde que realizam procedimentos de atenção à reprodução humana assistida, no âmbito do SUS, incluindo fertilização in vitro e/ou injeção intracitoplasmática de espermatozoides. Diário Oficial da União [Internet]. Brasília, 31 dez 2012 [acesso 22 jan 2019]. Seção 1. Disponível: https://bit.ly/2ISuf9f
- 29. Reprodução assistida para soropositivos atende 100 casais em 1 ano. Governo do Estado de São Paulo [Internet]. Secretaria de Estado da Saúde; 2011 [acesso 22 jan 2019]. Disponível: https://bit.ly/2olRuff
- 30. Nascimento PFG. Op. cit. p. 40.
- 31. Santos CRV. Reserva do possível como uma estratégia jurídica para restringir o direito à saúde: o argumento da "reserva do possível" na jurisprudência do Supremo Tribunal Federal [dissertação] [Internet]. Recife: Universidade Católica de Pernambuco; 2014 [acesso 15 mar 2019]. p. 114. Disponível: https://bit.ly/2MMBvoB
- 32. Santos CRV. Op. cit. p. 114-5.
- Lobato L. Algumas considerações sobre a representação de interesses no processo de formulação de políticas públicas. Rev Adm Pública [Internet]. 1997 [acesso 15 mar 2019];31(1):30-48. p. 45. Disponível: https://bit.ly/35ARwpX

Participation of the authors

Antônio de Freitas Freire Júnior, Lethícia Geovânia Bezerra de Brito e Ricardo Jorge de Araújo Filho organized the research and wrote the manuscript. Rosângela Viana Zuza Medeiros, as advisor, collaborated in the organization of the work and reviewed the paper.

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