Legal Dilemma and Countermeasures of Frozen Embryo Transfer Technology for Widowed Women in China

Qinglian Deng¹ Haicen Guo² Ke Huang³ Xing Jiang⁴ Siying He⁵ Yuqing Zhang⁶

ABSTRACT

While assisted reproductive technology has brought about new ways of reproduction, it has also brought about new legal issues. The clinical cases of widowed women in China using frozen embryo transfer technology for post-mortem reproduction are gradually increasing, and the debate on whether to open up donor assisted post-mortem embryo reproduction has also sparked heated discussions in the legal theory and practice circles. By combing the relevant cases of judicial adjudication and combining the social development situation in China, this paper puts forward suggestions and countermeasures for the plight of widowed women in the frozen embryo transfer technology, with a view to protecting the rights and interests of widowed women, the deceased and children, and promoting the process of improving the legislation of assisted reproduction in China.

Keywords: Widowed women, Assisted reproductive technology, Frozen embryo transfer technology.

1. INTRODUCTION

With the rapid development of modern biotechnology, frozen embryo transfer technology has brought hope for fertility to many infertile families, especially for widows, this technology has become a new way for them to achieve their reproductive dreams. However, under the current legal system and ethical principles in China, the practice of frozen embryo transfer technology for widowed women faces complex legal dilemmas and ethical challenges. This article reviews relevant judicial cases, analyzes the legal difficulties faced by widowed women using frozen embryo transfer technology in China by discussing the controversial focus and judgment results of similar cases, and proposes corresponding countermeasures and suggestions, in order to provide reference for relevant legislation and judicial practice.

2. JUDICIAL STATUS OF FROZEN EMBRYO TRANSFER TECHNOLOGY FOR WIDOWED WOMEN IN CHINA

2.1 Judicial Overview

As of April 2, 2024, a search was conducted on the China Judgements Online using "medical service contract disputes" as the cause of action and "assisted reproductive technology" as the keyword, resulting in 45 judgement documents. After gradual screening and confirmation, 22 judgement documents on frozen embryo transfer technology for widowed women were obtained as shown in "Table 1".

22 judgement documents were all requests made by widowed women to medical institutions to continue embryo transfer surgery after their spouse's death or disappearance. Most of the cases were closed in the first instance, with a total of 20 cases, and 2 cases were appealed to the second instance for closure. Except for 5 cases where the court rejected the lawsuit request, the court

^{1,2,3,4,5,6} School of Medical Humanities, Hubei University of Chinese Medicine, Wuhan, Hubei, China

⁶ Hubei Health Industry Development Research Center, Wuhan, Hubei, China

⁶Corresponding author. Email: zyq95@hbtcm.edu.cn

supported the widow's lawsuit request in the remaining 17 cases and ordered medical institutions to continue implementing frozen embryo transfer surgery.

During the court proceedings, the reproductive status of the parties was investigated. Except for four cases where IVF-ET was used to conceive children and the court determined that the medical service contract between the plaintiff and defendant had been fulfilled, there was only one case where the court ruled that even if the parties did not have children, the medical service contract signed by the plaintiff and defendant did not guarantee complete pregnancy. Therefore, when the plaintiff and defendant performed frozen embryo transfer surgery, the medical institution fulfilled its

corresponding obligations. Then, the court ruled that the medical service contract between the plaintiff and defendant had been fulfilled and rejected the plaintiff's lawsuit request. After the death of the spouse of the party concerned, inheritance issues inevitably arise. If the party concerned gives birth to children through IVF-ET, it will inevitably lead to changes in the inheritance of the deceased spouse's property. Therefore, the court has identified the opinions of relatives who have an inheritance relationship with the male party. As shown in "Table 1", except for the male party's relatives who have passed away or their children are still minors, all other relatives support the party concerned in giving birth to children through IVF-ET.

Table 1 Overview of frozen embryo transfer technology cases for widowed women

Case name	Case number	Lawsuit request	Judgement result	Spouse status of the parties involved	The reproductive status of the parties involved	Opinions of male relatives	
1. Case No.5544, Fuzhou, Fujian	(2021) Min 01 Minzhong No.5544	Request medical institutions to continue implementing embryo transfer surgery	Reject	Died of illness	Had given birth to a child through IVF-ET	Both parents support	
2. Case No.9156, Luoyang, Henan	(2020) Yu 03 Minzhong No.9156		Support	Died unexpectedly	Never given birth	Not mentioned	
3. Case in Pudong New Area, Shanghai	(2022) Hu 0115 Minchu No.27481		Support	Died of accident	Never given birth	Both parents support	
4. Case in Linyi, Shandong	(2022) Lu 1311 Minchu No.2647		Reject	Died of traffic accident	Had given birth to a child through IVF-ET, and naturally given birth to a daughter	Both parents support	
	(2021) Xin 0105 Minchu No.6028		Support	Died of illness	Never given birth	Mother supported, father was dead	
6. Case No.13176, Kunming, Yunnan	(2021) Yun 0103 Minchu No.13176		Support	Died of production accident	Never given birth	Both parents support	
7. Case No.6739, Ji'nan, Shandong	(2021) Lu 0103 Minchu No.6739		Support	Died unexpectedly	Had given birth to a child through IVF-ET	Both parents support	
8. Case No.8771, Guiyang, Guizhou	(2021) Qian 0102 Minchu No.8771		Support	Died unexpectedly	Never given birth	Both parents support	
9. Case No.7694, Kunming, Yunnan	(2020) Yun 0103 Minchu No. 7694		Support	Sacrificed on duty	Naturally given birth to a son	Both parents were dead	
10. Case in Fujian, China	(2020) Min 0203 Minchu No.12598		Support	Died of work	Never given birth	Both parents support	
11. Case in Wuxi, Jiangsu	(2019) Su 0213 Minchu No.10672		Support	Died of accident	Never given birth	Both parents support	
12. Case in Qingjiang, Huai'an	(2020) Su 0812 Minchu No.738			Support	Died unexpectedly	Never given birth	Mother was dead, and father supports

Case name	Case number	Lawsuit request	Judgement result	Spouse status of the parties involved	The reproductive status of the parties involved	Opinions of male relatives
•	(2020) Yun 0103		Support	Died of sudden	Naturally given birth to	
Kunming, Yunnan	Minchu No. 676	medical		illness	a daughter, but with	
		institutions to			severe amentia	
	(2019) Yun 0112		Reject	Died on duty	Never given birth	Parents of the male
Kunming, Yunnan	Minchu No. 9370	implementing	_			party were both dead
	(2019) Yun 0103		Support		Naturally given birth to	
Kunming, Yunnan	Minchu No.6897	transfer		accident	a daughter	and mother and the
		surgery				daughter support
16. Case in Chengdu,	` '		Support		Never given birth	Both parents support
Sichuan	0105 Minchu			accident		
	No.12958					
17. Case in Wenzhou,	` ′		Support	Died of	Never given birth	Father supports
Zhejiang	Minchu No.4777			ventricular		
				hemorrhage		
18. Case in Guangxi	(2018) Gui 0103		Reject	Sacrificed on	Had given birth to a	Not mentioned
Zhuang Autonomous	Minchu No.5920			duty	daughter through IVF-	
Region					ET	
19. Case No.7541,	(2017) Lu 0103		Reject	Die of	Had given birth to a	Not mentioned
Ji'nan, Shandong	Minchu No.7541			poisoning	daughter through IVF-	
					ET	
20. Case in Dinghai,	(2016) Zhe 0902		Support	Lost in a	Never given birth	Both mother and
Zhoushan	Minchu No.3598			marine peril		stepfather support
				and still missing		
21. Case No.10813,	(2022) Qian 0102		Support	Died of sudden	Naturally given birth to	Both mother and
Guiyang, Guizhou	Minchu No.10813			illness	a son	grown-up children
						support
22. Case No.229,	(2022) Xiang		Support	Died of illness	Never given birth	Both parents support
Hengyang, Hunan	0407 Minchu					
	No.229					

2.2 Controversy Focus

2.2.1 Whether the Purpose of Medical Service Contracts Has Been Achieved

According to the judgement documents, the main reason for the court's judgement is whether the contractual purpose between the plaintiff and defendant has been achieved, but there is a difference in understanding between the plaintiff and defendant regarding whether the contractual purpose has been achieved. Most medical institutions believe that the contractual purpose between the plaintiff and defendant has been achieved by performing frozen embryo transfer surgery; Widowed women, on the other hand, believe that the purpose of the surgery is to have offspring, and the successful conception of offspring indicates that the contractual purpose

between the two parties has been achieved. When the court tried the case, it was more inclined towards the perspective of the widowed woman. The two parties entered into a medical service contract, and the fundamental purpose of the contract was to have children through frozen embryo transfer technology. Therefore, the court determined that the medical institution had not fulfilled its obligations.

2.2.2 Whether Widowed Women Were Considered as Single Women

The "Technical Specifications for Assisted Reproductive Technology" (hereinafter referred to as the "Technical Specifications") stipulate that medical institutions are prohibited from implementing assisted reproductive technology for

single women. In the 22 cases mentioned above, the common identity of the plaintiffs was widows, and only 2 cases did not involve the issue of widows' identity because the medical service contract between the plaintiff and defendant had been fulfilled. The medical institutions in the remaining 20 cases mixed widows with single women mentioned in the "Technical Specifications" and refused the plaintiffs' requests on this basis. But 70% of the courts hold a different view, believing that widowed women are different from single women and can advocate for the continued implementation of frozen embryo transfer surgery.

2.2.3 Whether It Violates the Principle of Informed Consent

"Ethical **Principles** Assisted Reproductive Technology and Human Sperm Bank" (2003) (hereinafter referred to as the "Ethical Principles") and the "Technical Specifications" both require both spouses to sign an "Informed Consent Form". The medical institution argues that the plaintiff's husband has passed away and cannot sign the "Informed Consent Form". Continuing to perform frozen embryo transfer surgery for the plaintiff would violate legal provisions. Based on this, 59% of the courts believe that it can be inferred from the deceased's expression of intention before their death that they have a desire for the plaintiff to continue having children, which does not violate the principle of informed consent. Only 9% of courts consider it impossible to determine whether continuing to perform is in line with the husband's wishes, and 32% of courts do not provide an explanation on whether the principle of informed consent has been violated.

2.2.4 Whether It Violates the Principle of Protecting Future Generations

As the plaintiff is a widow, her children born through frozen embryo transfer surgery are highly likely to grow up in a single parent family. Whether the psychological, physiological, and personality aspects of children born into incomplete families will be affected is also one of the points of dispute between the plaintiff and defendant. The "Ethical

Principles" stipulate that if there is evidence to prove that the implementation of assisted reproductive technology will have a serious impact on children, medical personnel have an obligation to stop the implementation of the technology. Although medical institutions have refused to implement assisted reproductive technology for the plaintiff on these grounds, according to the court's review, there is currently no direct evidence to prove that it will cause serious physiological, psychological, and social damage to children. Therefore, in the above-mentioned cases, only 4% of the courts believed that it would have a negative impact on children.

3. LEGISLATION STATUS OF FROZEN EMBRYO TRANSFER TECHNOLOGY FOR WIDOWED WOMEN IN CHINA AND OVERSEAS

3.1 Current Status of Chinese Legislation

3.1.1 Mainland China "Civil Code"

The "Technical Specifications" stipulate: "It is prohibited to perform human assisted reproductive technology on couples and single women who do not comply with national population and family planning laws and regulations." ² Departmental regulations and normative documents such as the "Management Measures for Assisted Reproductive Technology" and "Ethical Principles for Assisted Reproductive Technology and Human Sperm Bank" also stipulate that the implementation of embryo transfer must follow the principle of informed consent and sign the "Informed Consent Form".

3.1.2 Hong Kong, Macao and Taiwan Regions in China

Article 15 (5) of the "Human Reproductive Technology Regulations" in Hong Kong stipulates that "except as otherwise provided, no one shall provide reproductive technology procedures to persons who are not parties to a marriage," 3 indicating that Hong Kong also only provides assisted reproductive technology to couples.

^{1.} Notice of the Ministry of Health on Revising Technical Specifications, Basic Standards, and Ethical Principles Related to Assisted Reproductive Technology and Human Sperm Bank (nhc. gov.cn) http://www.nhc.gov.cn/bgt/pw10303/200708/68ba58984aba4a44 a3bcf74b0c3e2048.shtml Visited on April 10, 2024.

^{2.} Ibid.

^{3.} Chapter 561: Human Reproductive Technology Regulations (elegislation. gov.Hk) https://www.elegislation.gov.hk/hk/cap561 Visited on April 10, 2024

However, the seventh paragraph of this article stipulates that, if both spouses have provided gametes or embryos to be placed in a woman's body before the end of the marriage, embryo transfer surgery is allowed to continue after the end of the marriage.

Article 37 of "Medical the Reproductive Technology" in the Macau region stipulates that "embryo transfer for the purpose of carrying out a clearly established birth plan in writing before the death of the husband or the man in a de facto relationship may only be carried out after a period of sufficient consideration has been given, but shall not be carried out twelve months after the death of the husband or the man in a defacto relationship." At the same time, the article also stipulates that if this provision is violated, according to Article 1728 of the Macau "Civil Code", if the informed consent of the male party is not obtained before his death, the children born from this shall not have an inheritance relationship with the male party and shall not have a parentchild relationship. It can be seen that Macau, China belongs to conditional access to frozen embryo transfer after death, limited to post-mortem reproduction with the informed consent of the deceased.

According to Article 20 of the "Artificial Reproduction Law" in Taiwan region, "When an through embryo is formed artificial reproduction by a married couple, artificial reproduction institution shall destroy it if the marriage of the married couple is invalid, dissolved, divorced, or one party dies." This regulation completely eliminates the possibility of reproduction after death.

3.2 Current Status of Legislation Overseas

3.2.1 Fully Open Mode

The world's first case of extracting sperm after death for artificial reproduction was in Belgium. Belgium does not require written consent from the husband to implement assisted reproduction after death, and the policy is relatively open.

Men who have passed away in Israel do not need to leave written consent. As long as the widow or even parents believe they can represent the deceased's wishes, they can undergo sperm retrieval after death. The government even provides financial assistance to the parties involved, and the national health insurance can cover the costs of various stages of in vitro fertilization.

Vietnam's post death artificial reproduction only requires the consent of the spouse, without the need to attach the husband's consent before death or other requirements such as time and form. Compared to the conditional open model, its policy is more relaxed, but the children born as a result are illegitimate.

3.2.2 Strictly Prohibited Mode

Germany takes a very cautious attitude towards the openness of artificial reproductive technology, clarifying that artificial reproduction should be carried out within marriage, and Article 4 of the "Embryo Protection Law" prohibits post death artificial reproduction, which is punishable by imprisonment for up to 3 years and a fine.

In 1953, France explicitly prohibited any human assisted reproductive activity after death in Article 152 of the "Public Health Code". The 2004 "Bioethics Law" stipulates that assisted reproductive technology aims to meet the needs of living heterosexual partners who desire to become parents.

Japanese medical institutions will inform and obtain consent from the implementing parties in accordance with the requirements of the Japanese Obstetrics and Gynecology Society. The content of the notification letter includes the circumstances of the death of one spouse. If one spouse dies, the instructions of the Japanese Society of Obstetrics and Gynecology will be followed, and the frozen embryos will be discarded using appropriate methods in accordance with ethical principles.⁶

3.2.3 Conditional Open Mode

The legal regulation of artificial reproduction after death in the United States is relatively complete: the "Uniform Parenthood Act" and the "Uniform Inheritance Code" stipulate that children

^{4.} Legislative Council of the Macau Special Administrative Region (al.gov.mo) https://www.al.gov.mo/zh/law/lawcase/551 Visited on April 12, 2024.

^{5.} Regulation Name: Artificial Reproduction Law (rootlaw. com. tw) fahttps://www.rootlaw.com.tw/LawArticle.aspx?LawID=A040170030011600. Visited on April 14, 2024.

^{6.} Zhou Jianghong, The Legal Status of Artificial Embryos in the Process of Legalization: A Brief Review of the Legal Status and Theory of Japanese Law [J]. Ecupl Journal, 2015, 18(05): 50-56.

born after death can establish a parent-child relationship with the deceased, but there should be clear written documents or convincing reasons to assume that the deceased is willing to become the parents of children born after death through reproductive technology; The "Restatement of Property Law" stipulates the right to inherit property by reproducing children after death. But most states in the United States have no regulations on reproduction after death, with only 12 states having legislation on reproduction after death.

The attitudes towards artificial reproduction after death vary among different states in Australia. In Victoria, a person's gametes are limited to use by their legal spouse in specific circumstances, including written consent given prior to their death. When requesting artificial reproduction after death, the spouse must submit proof of their family planning and receive psychological counseling.

West Australia prohibits the use of dead gametes for artificial reproduction. South Australia does not have a ban on artificial reproduction after death. In other regions without legislation, such as Queensland, courts typically operate based on the "Code of Ethics for Clinical Practice and Research of Assisted Reproductive Technologies" issued by the Australian National Health and Medical Research Council. This "Code" also allows for reproduction after death, but requires the consent of the deceased before death. The extraction of gametes requires the consent of the deceased before death, and spouses also need psychological counseling.

According to relevant Spanish laws, within 6 months after the death of the husband, the spouse can use the husband's reproductive cells for post death artificial reproduction, but must provide a notarized certificate or will of the husband before his death. From this, it can be seen that in Spain, reproduction after death requires meeting the subject requirements of the legal spouse, the substantive requirements of the husband's consent before death, the formal requirements of written consent, and the time requirement of no more than 6 months before implementation. However, after 6 months, reproduction after death can still be carried out, but the children born from this are illegitimate and have no inheritance rights.

3.3 Implications for China

Considering the current population development situation in China, this article believes that it is not appropriate to completely prohibit single women from using assisted reproductive technologies. Based on the current legislative situation in Hong Kong, Macao, Taiwan region, and others, the fully open mode and the conditional open mode are worth learning by mainland China. Specifically, they can be summarized as follows: firstly, both spouses and medical institutions should sign a clear informed consent form, which includes whether to accept reproduction after death. The second is to limit the time during which frozen embryo transfer surgery can be performed, give widows appropriate time to make choices, and clarify the time range within which women can engage in post death reproduction after their husband's death. The third is that the determination of the legal status of children born through assisted reproductive technology after death can be based on relevant regulations in Macau and Spain. Children born after death within the prescribed time can obtain inheritance rights.

4. LEGAL DILEMMA OF FROZEN EMBRYO TRANSFER TECHNOLOGY FOR WIDOWED WOMEN IN CHINA

4.1 Low Level of Normative Effectiveness

The normative documents such as "Technical Specifications" and "Ethical Principles" of the former Ministry of Health are not laws or administrative regulations, but normative legal documents with a lower level of effectiveness. As regulations and rules formulated by the State and its supervisory administrative departments, they also have a certain degree of seriousness and authority, but it should be clarified that these are not laws and have a different status from the laws formulated by the National People's Congress. The lack of higher-level laws in legislation may lead to uncertainty and confusion in law enforcement. Without clear upper level legal provisions, it may lead to differences in legal interpretation and implementation among different departments or institutions, and may also make it difficult to unify and effectively enforce the law. In practice, due to different understandings of the above norms among plaintiffs, medical institutions, and courts, the desire of widowed women to undergo frozen embryo transfer surgery to have children often needs to be realized through litigation, which not only increases the burden of litigation for the parties, but also increases judicial costs.

4.2 Unclear Definition of Single Women Concept

The term "single women" mentioned in the "Technical Specifications" currently has no relevant legal provisions to explain it. But according to general understanding, single women can be understood in both a broad and narrow sense. Narrowly defined single women only refer to women who have not experienced legal marital status. Broadly speaking, single women refer to women who have reached the legal age for marriage but have not yet established a marital relationship with others, including unmarried, divorced, widowed, and other situations.⁷

In judicial practice, the distinction between single women and widowed women in the trial of similar cases is made by analyzing the legislative purpose of the "Technical Specifications" legislators. The court believes that the single women referred to in the "Technical Specifications" are single women who undergo the entire process of implementing assisted reproductive technology without the participation of their spouses at any stage, which is significantly different for widowed women.⁸ It can be seen that the court has a narrow understanding of single women in the "Technical Specifications", while medical institutions often have a broad understanding. The proverb goes, "If the law is not clear, it is equal to having no law The vague meaning of legal provisions cannot guarantee uniformity and authority of legal implementation, nor is it conducive to resolving legal disputes.

4.3 Disputes over the Reproductive Rights of Widowed Women

The controversy over whether widowed women can engage in post death reproduction in recent times is mainly due to the lack of unified understanding of the nature of reproductive rights, that is, whether reproductive rights belong to personality rights or identity rights? The theory of identity rights claims that the existence of rights is

necessary for a specific "identity", that is, a person who has the ability to reproduce physically and psychologically, and is not excluded by laws and social order and good customs, can be considered to have this specific "identity". Minors, sex offenders, incestuous relatives, and those with incurable infectious or genetic diseases do not have the necessary "identity" to exercise their reproductive rights. The theory of personality rights advocates that the emergence of reproductive rights has a strong correlation with the essential attributes of human beings, and is an inherent right of natural persons. Moreover, the reproductive interests of the object of reproductive rights are personality interests rather than identity interests. ¹⁰

This article supports the theory of human dignity and rights. The right to reproduction is inherent to women and existed before the state. Regardless of marital status, women have the right to decide whether and when to have children. Personality rights are inherent rights of civil subjects. As long as a natural person is born, they naturally acquire and receive legal protection without any intention or action.

4.4 Protection of the Deceased's Autonomous Interests in Childbirth

Both the "Technical Specifications" and the "Ethical Principles" require that the implementation of assisted reproductive technology requires the voluntary consent of both spouses and the signing of an "Informed Consent Form". When one spouse passes away, the deceased's reproductive intentions cannot be known, and the "Informed Consent Form" cannot be signed, so assisted reproductive technology cannot be implemented. In judicial practice, the court's review of the deceased spouse's intention to have children is mainly based on the informed consent form they have signed before their death to infer the deceased's intention. However, currently, the informed consent forms provided by medical institutions do not disclose the deceased's attitude towards post-mortem reproduction, and it is still unclear based solely on the current informed consent form. Further improvement of the content of the informed consent form is needed.

^{7.} Nie Weifang, Theory of Single Women's Reproductive Rights and Their Protection [D]. Hunan University of Technology, 2016.

^{8.} Zou v. Hunan Provincial Health Hospital Medical Service Contract Dispute Case - Hunan Provincial High People's Court (hunancourt. gov.cn), visited on April 14, 2024.

^{9.} Luo Shi, Hu Xuemei, Reproductive Rights for Single Women: Disenchantment, Justification and Realization [J]. Hubei Social Sciences, 2022(6): 120-130.

^{10.} Cao Yongfu, Ethical Reflection on the Reproductive Rights in the Context of Optimizing Reproductive Policies [J]. Medicine and Philosophy, 2023, 44(13): 21-24.

4.5 Protection of the Rights and Interests of Offspring

The main reasons for opposing post death reproduction at present are: artificially reproduced children are born without a father, deprived of the right to grow up in a two parent family, which is not conducive to the physical and mental development of children; According to the "Civil Code", inheritance begins from the death of the deceased. ¹¹ However, if a child born through artificial reproduction is in the form of an embryo or gamete after this time and the inheritance begins, does it have inheritance rights?

Children are in a disadvantaged position in society and require special protection from guardians and society in order to grow up healthy. Children are the future of world development, and protecting them is protecting the future socialist successors. Therefore, the protection of children's rights and interests should be approached with utmost caution.

5. SOLUTIONS TO THE LEGAL DILEMMA OF FROZEN EMBRYO TRANSFER TECHNOLOGY FOR WIDOWED WOMEN IN CHINA

5.1 Actively Formulating the "Regulations on the Management of Assisted Reproductive Technology"

It is necessary to actively formulate the "Regulations on the Management of Assisted Reproductive Technology" to reduce the burden of litigation for parties involved in similar cases, while also helping to protect the reproductive rights of widowed women, the right to informed consent of the deceased, and the protection of the rights and interests of their offspring. The National Health Commission stated in its response to the "Proposal on Granting Single Women the Right to Implement Assisted Reproductive Technology and Effectively Ensuring Women's Equal Reproductive Rights" (hereinafter referred to as the "Proposal") in 2020 that it will actively promote the improvement of the legislative level of assisted reproductive technology management. According to the legislative procedure of the Standing Committee of the National People's Congress, the legislative cycle is usually about 3-5 years. It is nearly 4 years since the drafting of the "Regulations on the Management of Assisted Reproductive Technology", but no progress has been made so far.

5.2 Clearly Defining the Scope of Subjects Eligible for Frozen Embryo Transfer Surgery

Among the 22 judgements shown in "Table 1", disputes regarding assisted reproductive technology for widowed women are mostly caused by medical institutions treating them as single women. This article suggests that before the promulgation of the "Regulations on the Management of Assisted Reproductive Technology", the scope of subjects that can undergo frozen embryo transfer surgery in the existing Technical Specifications should be clearly defined in order to better protect the rights and interests of widowed women. According to general social concepts and the normal family ethical order and customs in China, widowed women are different from single women. They are significantly different from divorced women who voluntarily give up their marriage relationship and women who have never established a marriage with others. Considering only the automatic dissolution of marriage by widowed women due to the death of their spouse in law, including widowed women in the category of single women and prohibiting them from having offspring for their deceased husband is inconsistent with the naive perception of the public.

5.3 Restricted Protection of the Reproductive Rights of Widowed Women

5.3.1 Restrictions on Reproductive Subjects After Death

The protection of any right must be carried out within the framework of fundamental legal principles. In real life, the subjects who wish to engage in post death reproduction include parents, girlfriends, spouses, and cohabitants outside of marriage. The limited openness of post death reproduction is first reflected in the limited nature of the subject. This article believes that the subject should be limited to the spouse of the deceased who had the intention to have offspring through frozen embryo transfer surgery before their death, but the surgical purpose could not be achieved due to the interruption of death.

^{11.} The Civil Code of the People's Republic of China - Supreme People's Court of the People's Republic of China (court. gov.cn), visited on June 3, 2024.

Widowed women's request for reproduction after death based on their previous marital relationship conforms to the general concept of society and should not be restricted by law. Except for the spouse of the deceased, the application for post death reproduction by other entities may violate laws, regulations, and public order due to their identity, such as illegal surrogacy and competition for the deceased's estate, which will not be discussed in this article.

5.3.2 Establishing a "Cooling-off Period" for Exercising Rights

Both Macau and Spain have established an effective period for post death reproduction for widows. Mainland China can learn from relevant experience to establish a "cooling off period" for exercising rights, giving widows sufficient time to consider and avoid making irrational choices to alleviate grief. At the same time, it is also conducive to making more cautious choices about the birth of children. If a one-year cooling-off period is established, the actual implementation of post death reproduction will only be allowed upon the expiration of the period. 12 At the same time, it is also necessary to draw on the statute of limitations system to establish a maximum exercise period for rights, such as three years. If it exceeds this time frame, it may violate public order and good customs, disrupt inheritance order, and should be strictly prohibited.

5.3.3 Obtaining Consent from Other Heirs

Postpartum reproduction by widowed women will affect the inheritance of the deceased's estate by others with inheritance rights, such as the deceased's parents and children. From "Table 1", it can be seen that the court takes into account the opinions of the man's relatives in order to maintain social order and stability. But the opinions of other inheritors can only be used as reference factors, not as decisive factors. As long as the deceased agrees before death and the widow has the intention to have children, the decision-making power still remains in the hands of the widow.

5.4 Suggestions for Improving the Informed Consent System for Postdeath Reproduction

5.4.1 Respecting the Deceased's Wishes to Have Children Before Their Death

The autonomous decision of the deceased before death is the result of their natural development of personality. The individual's desire to oppose assisted reproduction after death must be respected, which is an expression of their reproductive autonomy. 13 The prerequisite for widowed women to undergo frozen embryo transfer surgery is that the deceased was informed and gave written consent before their death. If the deceased did not express their intention before death, it should be inferred whether they had the intention to have children based on their behavior during their lifetime. If the deceased explicitly refuses or is presumed to refuse during their lifetime, their wishes should be respected and they should not engage in post death reproduction. Their decisionmaking interests during their lifetime will not disappear after death.

5.4.2 Clarifying the Contents That Should Be Included in the Informed Consent Form

The "Medical Record Writing Standards" issued by the former Ministry of Health stipulate that the informed consent form should include: preoperative diagnosis, surgical name, possible complications during or after surgery, surgical risks, patient signature, physician signature, and other contents. 14 According to the "Technical Specifications", the indications and contraindications for implementing assisted reproductive technology should also be specified, as well as alternative treatment measures, obligations of medical institutions and both spouses undergoing surgery, and precautions to be taken after surgery, etc. In addition, due to the influence of the "Technical Specifications", the current informed consent forms for assisted reproductive technology provided by medical institutions and the

^{12.} Song Xiaohui, Ethical and Legal Considerations for Postpartum Reproduction [J]. Journal of Shandong Academy of Governance, 2019(1): 81-90.

^{13.} Shi Jiayou, Zeng Jia, Protection of the Interests of Children Born Through Assisted Reproductive Technology After the Death of Parents [J]. Journal of Law Application, 2023(7): 35-45.

^{14.} Notice from the Ministry of Health on Issuing the Basic Norms for Medical Record Writing - National Health Commission of the People's Republic of China (nhc. gov.cn) http://www.nhc.gov.cn/wjw/gfxwj/201304/1917f257cd774afa83 5cff168dc4ea41.shtml Visited on June 3, 2024.

recommended template for informed consent forms for human assisted reproductive technology provided by the Reproductive Medicine Branch of the Chinese Medical Association¹⁵ do not mention any relevant content on post-mortem reproduction.

The informed consent form is a document proving that the patient voluntarily agrees to undergo medical treatment. If the informed consent form fully informs the couple of reproductive matters after death and seeks their opinions, stating whether they agree to reproduction after death and whether they are willing to become the father of the child born, it can serve as strong evidence to prove the deceased's fertility intention.

5.5 Suggestions for Improving the Protection of Offspring Rights and Interests

5.5.1 Qualification Review of Parenting Ability

At present, there is no direct evidence to prove that children growing up in single parent families will have adverse effects on their psychology, physiology, and personality. There are many factors that are not conducive to a child's growth, but not all of them will have a serious impact on the child. Moreover, not all parents' families can provide their children with a completely suitable environment for growth, such as left behind children's families and the three situations stipulated in Article 36 of the Civil Code where guardians fail to fulfill their guardianship duties. It can be seen that the key to a child's healthy growth does not lie in whether they are from a single parent family or a two-parent family. Therefore, simply because a child is born into a single parent family should not hinder widowed women from reproducing after death.

It is undeniable that the pressure of widowed women raising their offspring alone is imaginable. Therefore, it is out of consideration for the interests of widows themselves and their children. This article believes that the court should examine whether widowed women have the ability to support them, including but not limited to whether they have full civil capacity, whether they have major illnesses and mental health conditions that may directly affect the growth of children. If the review determines that widowed women do not have the ability to raise children alone, they should be restricted from engaging in post death reproduction.

5.5.2 Clarifying the Inheritance Rights of Embryos or Gametes

Gametes, embryos, and fetuses are all essential stages of life and have the potential to develop into humans. Although Article 16 of the "Civil Code" only stipulates that fetuses have the right to inherit, a thorough analysis of the meaning behind the law aims to protect the rights and interests of future civil subjects. ¹⁶ When gametes or embryos are determined to be used for reproduction, they both have the potential to develop and eventually form civil subjects, similar to fetuses.

This article argues that gametes and embryos used for reproduction should enjoy the same protection as fetuses. When it comes to protecting interests such as inheritance, gametes or embryos are considered to have civil capacity and retain their inheritance shares. If the final fetus is delivered as a dead body, the capacity for civil rights does not exist from the beginning. Judicial interpretations should be added to the "Civil Code" to expand the definition of "fetus" to include gametes, embryos, and fetuses that are essential stages of life development.

6. CONCLUSION

Assisted reproduction after death poses challenges to the current laws in China, and the ambiguity and vagueness of legal provisions expose the shortcomings in protecting the reproductive rights of widowed women. It is necessary to actively formulate the "Regulations on the Management Assisted Reproductive of Technology", implement the protection of limited access to the reproductive rights of widowed women, improve the system of informed consent after the death of the deceased, and safeguard the interests of future generations. Efforts should be made to eliminate the phenomenon of "different

^{15.} Quan Song, Deng Chengyan, Huang Xuefeng, Liu Ping, Zhou Canquan, Feng Yun, Hao Guimin, Lu Wenhong, Shen Huan, Shi Juanzi, Zhang Songying, Teng Xiaoming, Wang Xiaohong, Wang Xiuxia, Wu Qiongfang, Zeng Yong, Zhong Ying, Shao Xiaoguang, Sun Yingpu, Sun Haixiang, Huang Guoning, Recommended Template for Informed Consent Form for Assisted Reproductive Technology by the Reproductive Medicine Branch of the Chinese Medical Association [J]. Journal of Reproductive Medicine, 2023, 32(12): 1777-1777.

^{16.} Shi Jiayou, Zeng Jia, Protection of the Interests of Children Born Through Assisted Reproductive Technology After the Death of Parents [J]. Journal of Law Application, 2023(7): 35-45.

judgements for similar cases", achieve the goal of judicial unity of "same judgement for similar cases", safeguard the legitimate rights and interests of citizens, enhance people's confidence in judicial fairness and authority, and improve the credibility of the judiciary in the whole society.

REFERENCES

- [1] Zhou Jianghong, The Legal Status of Artificial Embryos in the Process of Legalization: A Brief Review of the Legal Status and Theory of Japanese Law [J]. Ecupl Journal, 2015, 18(05): 50-56.
- [2] Nie Weifang, Theory of Single Women's Reproductive Rights and Their Protection [D]. Hunan University of Technology, 2016.
- [3] Luo Shi, Hu Xuemei, Reproductive Rights for Single Women: Disenchantment, Justification and Realization [J]. Hubei Social Sciences, 2022(6): 120-130.
- [4] Cao Yongfu, Ethical Reflection on the Reproductive Rights in the Context of Optimizing Reproductive Policies [J]. Medicine and Philosophy, 2023, 44(13): 21-24.
- [5] Song Xiaohui, Ethical and Legal Considerations for Postpartum Reproduction [J]. Journal of Shandong Academy of Governance, 2019(1): 81-90.
- [6] Shi Jiayou, Zeng Jia, Protection of the Interests of Children Born Through Assisted Reproductive Technology After the Death of Parents [J]. Journal of Law Application, 2023(7): 35-45.
- [7] Quan Song, Deng Chengyan, Huang Xuefeng, Liu Ping, Zhou Canquan, Feng Yun, Hao Guimin, Lu Wenhong, Shen Huan, Shi Juanzi, Zhang Songying, Teng Xiaoming, Wang Xiaohong, Wang Xiuxia, Wu Qiongfang, Zeng Yong, Zhong Ying, Shao Xiaoguang, Sun Yingpu, Sun Haixiang, Huang Guoning, Recommended Template for Informed Consent Form for Assisted Reproductive Technology by the Reproductive Medicine Branch of the Chinese Medical Association [J]. Journal of Reproductive Medicine, 2023, 32(12): 1777-1777.