

Revitalizing Organ Donation in China: Lessons from Successful Policies in Other Countries and Strategies for Implementation

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Abstract: In the 21st century, advances in science and technology have led to a significant breakthrough in the average life expectancy of human beings. However, our organs have a limited-service life, and many less fortunate people still face organ failure and necrosis. To tackle this issue, both the government and the public are placing their hopes on organ donation. However, China, as the world's most populous country, has fewer successful organ donation cases compared to some Western countries. This article aims to analyze the specific reasons for this phenomenon. Furthermore, organ donation has been successfully implemented in many Western countries. By examining successful and failed cases in various countries, this article will analyze their feasibility in light of China's national conditions. The article will also explore how policies that have worked in other countries can be implemented in China, taking into account the country's unique cultural and societal contexts. Overall, the article aims to provide insights into the current situation of organ donation in China and to offer recommendations for future policies to improve organ donation rates and save more lives.

Keywords: organ donation, policy implemented, opt-out/opt-in

1. Introduction

Thanks to advanced medical technology, people are living longer than ever before. For diseases that had little chance of being cured in the past, patients have many options to extend their lives. However, many patients dying of organ failure nowadays waits for a donated organ to be transplanted. Therefore, it would be a win-win situation if more people made living wills to donate all their usable organs. However, some people insist on burying their whole package for specific reasons, especially in China.

Traditional Chinese culture believes that everything a person is born with, such as their skin and hair, is inherited from their parents. Therefore, behaviors like cutting one's hair or injuring oneself would be considered a severe offense in Chinese moral culture. Removing a person's organs after death may be even more severe under these circumstances.

Another main reason people refuse to donate their organs through a living will is fear. For example, when I was 18, I signed up for an organ donation statement. However, my perspective changed after working in a law office. I was terrified when I read a terrible case about organ

donation while organizing case documents. Right after reading the case, I canceled my statement online and never signed up again. Therefore, although I support organ donation, I hesitate to do it now.

In China, 17,141 organ donation cases were completed in 2022. However, compared to the data that 10.41 million people died in 2022, the proportion of donations is inadequate. Therefore, patients who need organ transplants are still waiting in long lines. At the same time, the number of organ donations in Spain has been increasing since 2020, and they have become the world leader in organ donations. This is because Spain's legal system and institutions encourage people to do good things, and people have fewer concerns. Unlike the situation in China, people in Spain sign up to opt-out of organ donation instead of opting-in, which has greatly increased the amount of organ donations [1].

2. Reason for China's Prohibition of Organ Donation

2.1. Case of Xianglin Shi

Although the tradition of "burying the whole body" still influences some people in China, many, especially young people, are less affected. The primary factor that depresses organ donation today is people's fear.

In February 2018, Xianglin Shi and his mother were attacked by his brother, who had a mental illness, in Jiangsu Province. Both of them were injured and sent to the ICU. Shi was cured in two months; however, his mother died after five days in the hospital. When Shi was discharged, the police asked him to go to the police station for an injury evaluation. At the station, the legal examiner asked Shi how much money he received by donating his mother's organs. Only then did he learn that his mother's organs had been donated the same day she died, and 200,000 yuan of so-called state subsidies were sent to one of his cousin's bank accounts.

Shi asked for a copy of his mother's donation form but found no official seal. He then went to the local Red Cross Society to ask if there was a donation in February 2018. The staff informed him that there was no organ donation that year. If there were, the staff would arrange for an expert to be present.

Shi took his mother's donation form to the Chinese Management Center for Organ Donation Management in Beijing, informing them that this donation was an individual act of a local hospital and was unrelated to the OPO.

Shi reported this strange situation to the Anhui Provincial Public Security Department. According to the investigation, under the guidance of Wang Hailiang and Yang Suxun, Shi's mother was located as a suitable donor. They completed the organ removal operation in an ambulance and delivered the organs to the recipient in Beijing four hours after the operation. The terrifying thing is that there is no way to confirm whether Shi's mother was alive when the organs were taken.

To prevent other forces from interfering in organ donation, China uses a non-transparent and non-public system. However, this has increased people's concerns. Moreover, through the case mentioned above, it is evident that China has not established relevant regulatory authorities, which leads to the possibility of the emergence of an evil industrial chain [2].

2.2. Concern about the Current System

Based on the Shi Xianglin case, it is evident that the organ donation system currently in China is not overt and transparent. As a result, the public knows little about the donors' situation and donation operation mechanism. The advantage of this method is that other forces cannot interfere with national policies, but due to the opaque mechanism and the increasing difficulty of supervision,

people cannot know whether the effective organs have gone where they need to comply, which creates a sense of insecurity in public. Another discussion has also been triggered from Shi Xianglin's case: the lack of a regulatory department in the whole case. For a potential high-profit project without regulatory intervention, it gives the public a greater sense of unease.

2.3. Donors Are Mistreated

According to a report by China Wangyi News media, a female college student with a rare blood type donated blood but found that an extra 200cc of blood had been taken without her permission. When she asked the staff about it, they responded negatively and said that there was nothing they could do. This incident has caused public dissatisfaction in China as such occurrences are frequent and indicate the difficulties faced by organ donation in the country [3].

Western countries have a well-implemented organ donation system that China can learn from.

3. The System of Organ Donation in Various Countries

Meanwhile, some Western countries have successfully implemented organ donation systems, and there are many valuable lessons that China can learn from them.

3.1. Spain

Over the last 29 years, Spain's organ donation rate has been increasing annually, from 14.3% in 1989 to 46.9% in 2017 (data only available up to 2017, according to official data from ONT). In 2017, Spain recorded 2,183 organ donors (shown in the figure below), which facilitated 5,261 organ transplants, including 3,269 kidney transplants, 1,247 liver transplants, 304 heart transplants, 363 lung transplants, 70 pancreas transplants, and eight intestine transplants. Spain's organ donation rate had been the highest worldwide for many years before that. According to EU statistics, at least seven out of every 100 organ donors worldwide are Spanish.

Approximately half of the EU member states, such as the Netherlands, Germany, and Sweden, follow an "opt-in" policy for organ donation, where individuals must express their willingness to donate their organs after death. In contrast, countries such as Spain follow an "opt-out" policy, where individuals must explicitly refuse, or it is assumed that they consent to organ donation after death. In countries like Spain that have been implementing the "opt-out" policy for a long time, patients requiring organ transplants do not have to wait long. Under Spanish law, all citizens are considered organ donors unless they express their opposition, and this law is known to be the "most radical" in the world. This is one of the reasons why Spain has the highest proportion of donors and less organ trafficking.

Spain's approach, known as the "most radical way in the world," is a blessing for many patients waiting for a functional organ [4].

3.2. The United States

The U.S. driver's license has a blood type and indicates whether drivers are willing to donate organs. After brain death, drivers can donate organ for transplant them to others without family members. This policy has dramatically improved the efficiency of organ donation [5].

Moreover, Judith Gracia and Carlos Gonzale are the two Democratic Houses of Representatives in Massachusetts, and they jointly introduced a new bill in February 2023 in which prisoners can voluntarily choose to donate organs or bone marrow in exchange for commutation. If the proposal passes, the prison will allow eligible prisoners to receive a commutation of more than 60 days but less than 365 days.

The controversy of this proposal is very obvious. This measure is very similar to the “organ trading” behavior, which is strictly prohibited by U.S. federal law. According to the Associated Press, U.S. federal law prohibits the sale of human organs or the acquisition of human organs at a valuable cost. As a result, the freedom of prisoners to obtain organs in prisons and judicial systems have caused great controversy at the level of whether it violates federal law. This controversy raises thought-provoking questions: whether freedom can be defined as a valuable price. In addition, many prisons in the United States are private prisons, which are not under the jurisdiction of the U.S. government but are controlled by private enterprises. Do these private enterprises have the right to handle organ donation?

A similar proposal was introduced in South Carolina in 2007, but it only established a voluntary organization for prisoners and provided organ donation projects without commutation of sentence. Nowadays, if prisoners in U.S. prisons want to donate organs, the recipients can only be their immediate relatives. In addition, the United States does not allow the use of death row prisoners’ organs for donation.

Although this proposal faces many problems, if it is implemented, it can undoubtedly solve the problem of insufficient organ supply to a large extent [6].

3.3. Singapore and Brazil

Opt-out policies for organ donation have been implemented in several countries, with the aim of increasing the number of available organs for transplantation. Spain is often cited as a success story, with their opt-out policy resulting in a significant increase in the number of donors and transplants. This success has inspired many countries to follow suit, opting for an opt-out system rather than the traditional opt-in approach.

However, the implementation of opt-out policies can vary significantly across different countries, with some experiencing smoother transitions than others. For example, Singapore’s implementation of an opt-out system for kidney transplantation in 1987 was initially only targeted at non-Muslims due to religious beliefs. The policy only applied to accidental death cases and was aimed at addressing the high incidence of kidney disease in the country. Over time, the policy was expanded to cover other organs and types of death, including natural death, and was eventually extended to include Muslims. This gradual adaptation highlights the flexibility of Singapore’s policies and the high level of government involvement in promoting organ donation [7].

In contrast, Brazil’s implementation of an opt-out policy in 1997 was met with significant public backlash. Under this policy, families were not consulted in the final decision to donate organs, leading to a feeling of disempowerment and a lack of control for individuals and their families. The policy was also met with opposition from doctors who felt torn between their professional obligations and personal values. In practice, many doctors ended up referring to their families’ opinions, resulting in confusion and disorganization in the implementation of the policy. As a result of these challenges, Brazil reverted to an opt-in system in less than a year [8].

The experiences of these two countries highlight the importance of considering national context, cultural values, and effective implementation strategies when implementing opt-out policies for organ donation. While opt-out policies have shown promise in increasing the number of available organs for transplantation, they must be implemented thoughtfully and with sensitivity to ensure public support and effective outcomes [9].

4. What China Can Learn from Countries Demonstrated Ahead

4.1. Importance of Effective Regulatory System in China's Organ Donation System

With so many examples of countries, it has made a good start in China's implementation of the organ donation system. Firstly, the regulatory system should follow the example of Western countries and set up relevant regulatory departments, which should have the right to trace the source and the destination of each organ donation. Besides, work with the judicial department to prevent any wrongdoing. Once violations are found, informing the public after solving them is an act beneficial to organ donation. For example, after the murder of female passengers by a driver of Didi (Chinese taxi software similar to Uber) was exposed in 2018, Didi software was heavily criticized. However, after the incident, Didi increased its standardized safety management, including audio and video recording, route offset immediate alarm, and other measures. As a result, Didi has now become the first choice for female users to late-return-home. The emergence of malignant events is not the most terrible; the horrible thing is that after the occurrence of malignant incidents, there are no relevant measures to put an end, which leads to the further breeding of vicious incidents and harming the masses.

4.2. Use of ID Cards and Driver's Licenses to Indicate Consent to Organ Donation in China

China's ID card or driver's license can indicate whether the corresponding driver consents to organ donation. Marking the blood type on the driver's license and whether it is a donor is theoretically a win-win situation. In an accident, medical staff will not have to spend time and effort determining the injured person's blood type and physical condition. Moreover, when the injured agree to donate, they can save the donated organs as soon as possible when they cannot be saved. This measure will significantly improve the source of organ donation and help the medical department preserve the donated organ in time and test the organ.

For the opt-out system used in European countries such as Spain, we should follow Singapore's step-by-step approach and not Brazil's one-size-fits-all approach. At this point, the government's implementation is inseparable from the media's publicity. Most Chinese people are unfamiliar with organ donation policies, rules, and regulations. If the media can report more successful cases and popularize relevant knowledge, it will only make people no longer unfamiliar with organ donation. Many fears come from uncertainty and strangeness. In this way, people can be given enough time to familiarize themselves with the relevant policies. Perhaps it can also start with donations such as kidney transplantation. After all, the probability of nephropathy in China is also very high. In addition, kidney donation among relatives is very common in China. From the beginning of kidney transplantation, the opt-out policy has been used and gradually expanded to other organs. During this period, if the government attaches great importance to it and the media participates, this policy is highly implementable in China.

4.3. Importance of Step-by-step Approach and Media Involvement in Promoting Organ Donation in China

The most challenging policy is to use commutation to encourage prison prisoners to donate organs. Once this policy is implemented, it will significantly solve the problem of organ queuing. This policy should not be regarded as a deal but as a redemption-people who do wrong can give back to society in other ways and encourage prisoners to voluntarily atone for their sins, which is also one of the meanings of prison existence. This behavior cannot be defined as exchanging self-organs for freedom. Can prisoners in prison who are serving their sentences for commutation of sentences also be defined as disguised as exchanging time and physical strength for freedom? Of course, not.

Prisoners pay physical strength, time, and freedom to atone for their sins. From this perspective, voluntarily signing an organ donation agreement is also a way to atone for their sins.

4.4. Commutation Policy as a Means of Encouraging Organ Donation in Chinese Prisons

When it comes to this policy, compared with the United States, China has a specific advantage. Many prisons in the United States are private prisons, and China's prisons are directly under the supervision of the government, so there is no possibility of private forces interfering in national policies. In addition, it may be more difficult for donors to accept organ transplants from prisoners in China than to implement this policy. A study shows that if the adopted children's biological parents have a criminal history, the crime rate of these children is more than twice as high as that of their biological parents, who have no criminal history. This research shows that the relationship between crime and genes is somewhat inseparable [10]. In China, there is also a saying that "Father pilfers, the son will commit murder", which can be translated to "if the father steals melons and fruits, the son may kill and set fire." Chinese people believe that genes determine many things, so the public is repulsive about transplanting the organs of criminals. However, this is only for the public; for patients, it is believed that many queuing patients will take their lives more seriously. At the same time, the policy of agreeing to donation before physical examination should be adopted to prevent other forces' intervention. At the same time, as mentioned above, the regulatory authorities need to protect the rights and interests of all donors, including prisoners in prisons.

5. Conclusion

On top of these regulations, the regulatory department is the authority that ensures the smooth implementation of the policy. Once this department is established and given specific rights and responsibilities, China's organ donation policy will be on its way to success. Considering China's national conditions, all measures should be implemented gradually. The implementation of the organ donation system in China is still optimistic because of China's unified regime. The system's implementation will be more effective and will not be interfered with by other forces. Implementing the system requires the cooperation of the government and the media. The government conveys information to the public through the media, and the public conveys opinions and suggestions to the government through the media. Therefore, the implementation of the system, under this delicate operation, will be smooth. As long as we take step-by-step measures, starting with the simplest labeling of the blood type on the driver's license and whether it is a donor, slowly letting the public understand and accept organ donation and follow the opt-out system of Western countries, which guarantees that human rights will not be infringed, China's organ donation system will be improved in the near future. Regarding the most controversial issue of encouraging prisoners to donate organs, the authorities should give all those who have committed crimes a chance to atone for their sins, and organ donation provides this opportunity. It is also necessary to encourage prisoners to donate and give appropriate rewards. This behavior should not be considered a deal.

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