

Strengthening International Legal and Institutional Systems to Govern Transnational Challenges: Climate Change and Pandemic Disease

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Abstract: This paper focuses on how international law can be improved to address increasingly complex international challenges, with climate change and pandemics as examples. A thorough analysis of the temperature rise, international migration and health problems caused by these international challenges will point out the gaps in the current system of international law. This paper will also make a detailed analysis of the agreements, regulations and constitutions that based on international law, point out the shortcomings and clearly put forward the improvement plan.

Keywords: International challenges, Climate change, Paris agreement, International health regulations, WHO

1. Introduction

Transnational challenges such as climate change and epidemic diseases have posed a non-negligible threat to the survival and development of mankind. But the existing international law cannot play its due role in the international society, while the global challenge affects many countries and the harm cannot be taken lightly. A single country often gets into difficulties when dealing with the global challenge. International cooperation is needed to cope with international challenges [1], while global common governance faces complex international relations under globalization. The rule of law is the basis for establishing fairness and justice [2], and it is necessary to strengthen and improve international law.

In terms of climate change, the rise of global temperature is the main issue attracting much attention, but the implementation of the Paris Agreement, a global commitment to solve the climate problem, is superficial. This paper will conduct a deeper analysis of the Paris Agreement in order to obtain potential solutions. Another problem is that international migration caused by climate change is becoming increasingly prevalent, but there is a gap in international law in relevant aspects. This

paper will also provide some suggestions for improving international law to mitigate the international problem of forced migration due to environmental change. In the follow-up management of climate change, the existing common but differentiated responsibilities (CBDR) has been rough, and the problems in the allocation of national responsibilities have become more obvious. The new framework that is more suitable for the current economic system is the key point of improvement.

Epidemic diseases are international health problems, and evolving viruses have a continuous impact on human security. Health, as one of the most important attributes of a person, is of unparalleled importance because people are the foundation of society. However, several epidemics since 2014 have laid bare the current global health problems. As an important part of international law, the International Health Regulations (IHR) in the international health legal system should keep pace with the Times and improve the current structure as the health system evolves. As an important international organization in the international health system, WHO's responsibilities increase with the expansion of global health challenges. However, even with the support of many countries, WHO is still unable to cope with transnational challenges efficiently [3]. In particular, Ebola and COVID-19 have taught the WHO a hard lesson. Reforming the WHO would give a better account of the world's health system.

2. Enhancing CBDR in Climate Change

2.1. Introduction

Climate change has been a pending issue for centuries, but now in the modern era international law-making faces the obstacles of political economies working together. One way to address this concern is through Common But Differentiated Responsibilities (CBDR). CBDR acknowledges that pollution transcends political boundaries and that environmental protection should be achieved through means of cooperation. However, CBDR is ineffective as it still depends on dividing the world into developed and developing economies. While it is widely acknowledged that developing countries are adversely affected by climate change, under CBDR principles these countries are denied equal responsibility in combating climate change. To address this concern and enhance CBDR principles, it is important to look at the fairness and justice principles of John Rawl. By analyzing these principles, it leads to the proposal that CBDR must consider other factors, such as a country's Total GDP, GDP Per-Capita to each country's climate change responsibility, and the category of developed versus developing country. Moreover, a new organization must be formed that encompasses a broad range of organizations to further push the CBDR goals.

2.2. CBDR Background

CBDR is a principle that was formalized in the United Nations Framework Convention on Climate Change (UNFCCC) of Earth Summit in Rio de Janeiro, 1992. CBDR acknowledges that all states have a shared obligation to address environmental destruction but requires developed countries to take the initiative. Its three objectives for this vision are to bring substantive equality in a framework for justice, to foster cooperation among states, and to provide incentives for states to implement their obligations [4].

Useful as an abstract principle, the historical evolution of CBDR reflects how, unlike other environmental initiatives, it is adaptive to modern settings. This notion of sustaining humanity's prosperity inevitably led to preventive measures like principles such as polluter pay, ability to pay principle, Kyoto Protocol, and the Rio Declaration. These were stringent principles where common concern did not equal common responsibility. CBDR therefore successfully transitioned from the rigid binary Kyoto Protocol standards of developed countries to the more flexible categories of developed and developing countries. Additionally, concerning the Paris Agreement, the Nationally

Determined contributions work in tandem with CBDR to make sovereign promises voluntary instead of unfairly mandated. This means that each nation can determine what it is justly capable of doing to address the international and relevant climate change [5].

2.3. CBDR Analysis

One reason that CBDR is ineffective is because smaller and less developed states, which are rapidly impacted by climate change effects, are not as highly valued in the conversation as their responsibilities are less committed compared to what larger states contribute. CBDR blankets many countries for that responsibility even though the concerns of existential risk remain far more extreme for vulnerable areas. Moreover, low-income countries cannot afford the consequences of climate change as their economies are directly affected by negative outcomes [6]. For example, an individual in Paris would feel differently about climate change than an individual living on an island. Larger economies inevitably with their greater contribution to greenhouse gasses can more easily influence the Western standards of 2 degrees Celsius being met, rather than stooping to meet the 1.5 degrees Celsius standard set by small island states who are more at risk of tidal waves [7].

Another example regarding unequal economies and CBDR principles relates to Latin America. Latin America is motivated by industrialization to enter the global market, which is detrimental to the climate. Unlike in the past, heightened carbon emissions are treated in polarizing ways in legislation. This means that now developing countries, such as those in Latin America, must jump through hoops that industrialized nations did not [7]. Additionally, the developed world prioritizes its ranking in the global marketplace, has different economic tie-ins to carbon footprints, and in fact benefits from other countries' weaknesses. These two factors ensure that Latin America never has a fair chance to be equal to the other more developed nations at this rate, further perpetuating inequality and justice never being achieved [8].

Due to the fact that CBDR is unable to fairly balance the developing and developed world, the justice principles of John Rawl's Theory of Justice must be examined. Rawl believes that fairness is the essence of justice. To achieve this, CBDR should look at additional factors when considering responsibility. Such factors can compare a country's Total GDP and GDP Per-Capita to each country's climate change responsibility. It is important to look at this because the GDP presents a country's economic power to help the climate change and in the meantime the contribution to the carbon emissions that causes the climate change issue. Moreover, the categories of developing versus developed countries can be examined. The breakdown could potentially be as follows: 50% for categories of developed and developing countries, 25% for the Total GDP, and 25% for the GDP Per-Capita. Most importantly, each state should have the same voting right to climate change policies no matter how big or how small they are. The United Nations (UN) can use these enhanced CBDR principles to make future climate change policies. It is important to note that this however would be difficult because the UN has less power and influence to execute fair policies on the global stage given the fact that both new and old international organizations are fighting for their own power and territories separately.

Another option to enhance CBDR principles is to create an adaptive structure, as a large international system needs to work together, otherwise there are weak areas. The goal is to keep equity amongst all states. For example, The ICJ, World Bank, OHR, G-20, NATO, BRI and WHO should join forces to create one new organization in fighting transnational threats. The new organization would be built on regional communication. The ICJ is vital as it is a viable checks and balance system. The World Bank is important since it funds shared incentives more easily, for example, as opposed to the IMF that only benefits emerging economies. WHO, while meant to respond to transnational threats, is weak when it stands alone. Lastly, G-20 would essentially be the treasurer. When these

organizations come together, there will be three branches created within the new organization - Economical, Political, and Societal.

The Economic branch is beneficial because it creates an IMF that benefits climate change directly. The easiest way to achieve this is to have a 40% tax for preventing climate change, 40% tax for universal health care and vaccinations, and 20% for towards the least developed world, such as Africa or emergency funding for any states that applied for it. G-20 would get a 25% cut. Essentially it is a social welfare tax that incentives states to engage in the above. The second branch, Political, would be run by NATO and BRI, as the organizations are two ideological heads. Moreover, the two are well-funded with their advanced governments. NATO is driven by socialist ideals, while BRI leads the capitalist ideals. This is beneficial for transnational threats because it gives balance. The third branch, Societal, would be run by ASEAN, EU and AU etc.

This will be a new United Nations framework but focused on regions. With the powers from all the major international organizations working together, we will be able to execute the new CBDR principles enhanced by John Rawl's Theory of Justice more effectively in addressing the pressing climate change and Covid 19 etc. challenges and put them into international laws to enforce these methodologies by all nations.

2.4. Conclusion

CBDR supports the common heritage of mankind, as it benefits everyone to prevent the loss of natural resources. However, responsibility is ambiguous, and therefore duty, obligation, or who is to blame is never addressed. To achieve fairness and justice principles between the developing and developed world John Rawl's Theory of Justice is best suited.

3. Species Diversity in Light of Climate Change: Is the Paris Agreement Effective Enough?

The main manifestation of climate change is an increase in global temperatures. The Paris Agreement, which seeks to limit global warming to well below 2°C—and make every attempt to go above 1.5°C [4]—is the first really global commitment to combat the climate catastrophe. The content of the agreement emphasizes “the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth” [4], but only briefly touched on what states should do to protect threatened species in the face of warming temperatures. This is despite the fact that climate change affects humans, plants and animals. We appear to require a larger perspective on the international law of climate change, which deals with species variety, by highlighting the gravity of this issue, the reasons why the Paris Agreement is insufficient to address it, and potential solutions.

3.1. The Gravity of This Problem

According to the IPBES Global Assessment Report on Biodiversity and Ecosystem Services, more animal and plant species than ever before in human history are in danger of going extinct, many within the next few decades. Most often since 1900, the average native species abundance in the largest land-based environments has decreased by at least 20%. Over 40% of amphibian species, approximately 33% of corals that compose reefs, and more than 35% of all marine mammals are under danger [9].

Coral reefs, one of the most biologically diverse ecosystems on the globe where marine animals inhabit, is now influenced by ocean acidification, which, like global warming, is brought on by carbon dioxide emissions, makes it harder for corals to form and maintain their skeletons, while stronger storms spurred by climate change can destroy reefs. Hotter waters result in more instances of coral

bleaching. There would still be major issues for many coral reefs even if the temperature rise could be kept under 1.5°C [10].

On land, cloud forests that have a similar function as coral reefs are likely to disappear if methods that allow them to migrate as fast as they need aren't devised [10].

Besides these problematic effects on ecosystems, an increase in the severity and frequency of storms, fires, and dry spells can also indirectly influence biodiversity. For instance, the brushfire crisis in Australia between the end of 2019 and the beginning of 2020 devastated 97,000km² of forest and other habitats. It is now known that these fires were exacerbated by climate change. Based on estimates, the fires may have caused a 14% increase in the population of the area's vulnerable species [11].

3.2. The Insufficiency of The Paris Agreement

Although the Paris Agreement might be effective in finding out ways to minimize global warming in order to improve human life since it currently places it as its primary emphasis, it pays insufficient attention to the issue of species variety as it relates to climate change. Aside from the Agreement's opening statements that people should "note the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth and noting the importance for some of the concepts of "climate justice" when taking action to address climate change" [4], it neither mentions biodiversity ever again throughout the whole Agreement, nor give any practical suggestions of how countries could address this issue.

Additionally, it is to keep the temperature rise below 1.5°C one of the most important contents in the agreement, not to mention that this is only an attempt, it is still not effective in improving the condition of biodiversity loss even if this goal can be accomplished. With a 1.5°C increase, 6% of insects, 8% of plants, and 4% of vertebrates are projected to lose more than half of their climatically determining geographic range [12]. An IPCC report(IPCC) summarized the expected effects upon the global temperature warms by 1.5°C, including heat waves, droughts and floods, rising seas, ocean changes and arctic ice thaws that would all directly or indirectly influence biodiversity and cause severe problems [13].

3.3. Possible Solutions to This Problem

Since it has been proved that eliminating global warming within 1.5°C is still inefficient, one possible solution to this problem is to continue eliminating the temperature rise, for example, to 1.2°C. It would make the situation better since data has shown that a reduction from 2°C to 1.5°C would largely reduce species loss [13]. This seems ideal for solving the problem, but it is almost impossible to achieve this 1.2°C goal within a short period of time since even a 1.5°C reduction now is only an unpromising attempt. By the time when the reduction goal can be accomplished, many species might have already died out.

Because this solution cannot possibly work out, there needs to be some adaptations. Specific species can be preserved using different methods. For instance, the Global Conservation Central America team kicked off a systematic project to protect La Amistad International Park recently, which is an incredible biodiversity resource for both the region and the world, harboring about 20% of Central America's species diversity [14]. Since 1994, the UN Biodiversity Conference [15] has started to set strategic goals and targets on biodiversity. It can be expected that the situation will improve in the future, as long as more attention is given to the effect on biodiversity by climate change.

3.4. Mitigating the Effects of Climate-Induced Displacement: Improving Legal Regime and International Organizations

While the nations are struggling to fulfill their commitments in the Paris Accord, we are already seeing the deadly effects of climate change. Climate change has forced many people to leave their homes to seek their livelihood in another region or another country. People are displaced in South Sudan due to flooding of the White Nile [16]. In the meantime, a large number of farmers in Central America left for the US due to continuous droughts [17]. In 2017, among the 68.5 million forcefully displaced population, approximately 22.5 million to 24 million people were displaced by “sudden onset” climate events with many more displaced were influenced by slower climate change factors [18]. There are estimates that 50 to 200 million people would be displaced by the middle of the century [19]. When climate-induced displacement has become a major part of international migration and would likely to increase even further, a close examination of the current international legal framework for refugees would find a gap in the protection of environmental migrants, so new treaties and mechanisms are needed to combat this coming crisis.

To see how we can address the issue of climate-induced migration, we need to first see how we can situate this group of people within international law, and we can find that the international legal framework does not sufficiently address the issue. The 1951 Convention Related to the Status of Refugees defined a refugee as a person who has “a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, unwilling to avail himself of the protection of that country” [20]. The definition of refugee did not mention anything about “refugees” induced by climate change. The Cartagena Declaration of Refugees expanded the definition of refugees to those fleeing because of events that seriously threaten public order [21]. This definition might apply to the “sudden-onset” climate events, but this declaration is non-binding, open to interpretations, and only protects a small portion of people who are forced to migrate because of climate change [22].

Scholars have argued that slow-onset climate crises, which is excluded from the existing legal framework, is going to be a huge part of the future climate crisis. Lustgarten’s article about climate change and challenges facing farmers in central America illustrate that these farmers did not leave because of fear of persecution from their government, and there appears to be no immediate threat to their life and safety. However, the impact of climate change would gradually make their land inhabitable and destroy their ways of living [17].

Besides granting climate migrants refuge, we also need to consider the long-term problem of resettlement. The current legal framework arranges for refugees to stay in a foreign country until situations back home improve. But climate change would likely cause irreversible damage to the climate. For some small nations like El Salvador, they might not have the financial capability to accommodate their climate displaced citizens; or for small island nations like the Maldives, which might soon be totally submerged, they would soon be faced with the difficulty of resettling their citizens in a different country [22]. So, there should be a serious consideration for measures of permanent resettlement of climate migrants. Research conducted by scientists has shown that migration is a crucial adaptive mechanism in dealing with climate change. As the climate continues to deteriorate in some regions of the world, the best environmental option is to relocate a portion of the population to a more inhabitable region [23].

In practice, the existence of different states, who might have their own environmental or economic issues or are unwilling to sacrifice their interests, makes it challenging to solve the problem of climate migrants. Since the creation of the Paris Agreement, the international community has been trying to devise a system for climate migrants. UNHCR, which has been cooperating with UNFCCC, has

published a plan for the next three years. This plan focuses on supporting the regions' local economy and development by building sustainable industry and building up the resilience of local communities to reduce the effects of climate change [24]. While this is a sign of progress in tackling this crisis, both the scale and methods we have currently are highly inadequate given the scale of the crisis and the remaining legal gap.

To solve the climate migration crisis, the international legal system needs to create a treaty that explicitly protects climate migrants. Besides legal protection, an organization that deals with the climate migrant crisis is needed. The Paris Agreement proposed the creation of a "Climate Change Displacement Coordination Facility" [25]. Many scholars have argued for the creation of a separate term called "climate migrants" and a separate organization so that climate migrants would not squeeze the limited resources allocated to traditional refugees and use new measures to address the issue of climate migrants [19]. While a separate organization is necessary to create a closer tie with the large climate issue, the complexity of climate-induced displacement that are related to economic, social, and political factors requires cooperation between different organizations. The current cooperation of UNHCR and UNFCCC is a good combination that includes expertise in handling refugees and knowledge about climate change [25]. The future work of the "Climate Change Displacement Coordination Facility" needs to be scientifically targeted. Another difficult problem to tackle is getting the support and cooperation of states. The most feasible option is still internal resettlement. If permanent cross migration is necessary, international organizations need to coordinate the creation of regional bilateral treaties and reduce the time and effort for a multilateral treaty and protect the rights of migrants by resettling them in a culturally similar nation.

To combat the coming crisis of climate-induced displacement, the international community needs to create a new law to effectively protect climate migrants. In addition, new international organizations need to facilitate cooperation between different sectors, help the creation of new treaties, and organize the resettling of migrants are urgently needed.

4. Keeping the International Health Regulation alive: Flaws and solutions

4.1. Introduction

The covid-19 has revealed some flaws in the international health legal system, especially the current effective International Health Regulation (2005). To better prevent and tackle pandemics in years to come, the IHR should be partly revised within the current structure.

4.2. The Creative and Comprehensive IHR

Revised in 2005, the third edition of IHR is the most creative and popular international health legislation at present. Firstly, it changed the way of thinking in public health legislation by adopting the all-hazards approach, literally regulating every potential public health risk by emphasizing the result and damage, no matter what the cause is or how it spreads [26]. Compared with the previous rules, which focus on limited diseases like cholera and plague, the current IHR surely expands its jurisdiction, given that modern pandemics like flu and pox variates rapidly and breaks out anytime, anywhere, and they can hardly be predicted or defined beforehand when rules were made. Secondly, signed by hundreds of states, the IHR is the most popular and widely-accepted international health legislation than ever before. For one thing, globalization contributes to the spread of disease, and every state can be the potential victim. For another thing, promoting public welfare is becoming an important responsibility of a modern state, while no state can overcome modern pandemics alone. These two factors motivate governments to participate in global cooperation under the IHR, making it the most popular international health legislation ever.

However, despite its creativity and popularity, there are still some flaws in the current IHR, as it did not manage to curb the breakout of covid-19 and caused millions to suffer. Some of these flaws lie in the rules, while others are institutional. This article would mainly discuss the previous problem, examining the ineffectiveness in the IHR, and try to offer possible solutions to these issues.

4.3. The Failure of IHR and Building Core Capacity

The core idea of dealing with pandemics in the IHR is prevention, and the failure of the IHR is, to some extent, the failure of prevention, the failure in building the core capacity to prevent a pandemic strike, and here are some possible reasons.

Firstly, the ineffective evaluation and surveillance system make it hard to implement the IHR. Although the core capacity to prevent, control, and respond is one of the most creative ideas in the IHR, it is not effectively carried out, and around two-thirds of the member states failed to implement relevant measures [27]. And the present surveillance system, which provides essential information for the WHO, mainly relies on self-evaluation of member states. According to article 6 and 7, it is practically up to states whether to notify the ongoing public health risk, which is hardly precise and easily affected by political factors. Without adequate information, the WHO can give no guidance for states to prevent or deal with possible risks.

Secondly, rigid rules also contribute to the ineffectiveness of the IHR. While the core capacities aim at setting up globally agreed minimum standards, they are sometimes too high for developing states. For example, according to article 6 and annex I, member states should evaluate any possible emergency within 48 hours, and timely report to the WHO whenever it meets the standard of PHEIC within 24 hours. But making a timely evaluation is quite a tough work for most developing states, considering their relatively low standard of healthcare and information system. Moreover, despite these high expectations, there are virtually no adverse consequences if states do not behave accordingly. Without punishments, these rigid rules can do harm to the enthusiasm of developing states, inducing them to simply breach the rules or falsify their self-evaluations.

Thirdly, the vagueness in the IHR is also to blame. While Annex I made a list of core capacity, it did not clearly explain the meaning of these requirements, which means the Annex I lacks quantitative and qualitative precision [27]. For example, article 1 in section B of Annex I regulates frontiers, including appropriate medical service, equipment, personnel and so on. However, the IHR did not provide a precise standard of appropriateness. Generally, some appropriate healthcare in developing states might be regarded as inappropriate by people from better-off states. These vague rules make it hard to enforce the IHR and result in the failure in prevention.

4.4. Possible Solutions to Revising the IHR

Even though there are flaws in the IHR, especially in building the core capacities, the current IHR is still basically effective and only following minor changes are needed.

Firstly, according to the 2015 report of the IHR Review Committee, the WHO is trying to build a more comprehensive valuation system, including peer review and external evaluations, which involve a combination of independent experts [28]. This approach points out the trend to build a multi-lateral, external, and neutral surveillance system that keeps political factors away. For instance, article 9 provides a more comprehensive source of information than the state's self-evaluation. But what resources worth being taken into consideration remain unclear. Therefore, article 9 can be revised by listing some possible resources like surveillance reports from international organizations, institutions and so on.

Secondly, the rigid requirements in the IHR can be fixed by introducing the Common but Differentiated Responsibility (CBDR) principle, which is widely-accepted in international

environmental legislation to deal with disparity between states. This approach does not necessarily diminish the responsibility for developing states. The point is, better-off states should do more, like offering more financial and medical support. Possible criticism is, this free-ride for developing states is unfair and inefficient. But how can we turn a blind eye to globalization that spreads diseases? In the perspective of modern pandemic prevention, there is no typical boundary, diseases in developing states may possibly spread to developed states soon. In this sense, pandemic prevention is a public and common responsibility in international society, and helping others in need is in fact helping the world. Moreover, to take an economic perspective, strengthening core capacity in developed states is generally more expensive than developing ones, given the differentiated healthcare standard [29]. And it is the latter healthcare standard that decides the basic level of global pandemic prevention. Thus, it is more efficient to support developing states preferentially.

Practically, the IHR has some different requirements for developing and developed states such as article 5, which can be interpreted as an adoption of CBDR. But this is far from enough, more differentiated requirements of core capacity are needed, such as setting up funds concerning medical facilities, allowing reasonable delays in evaluating and reporting ongoing disease from developing states.

As for the lack of punishments, although adverse consequences are needed, it is not necessary to include punishments in the IHR. In fact, there are no mandatory dispute settlements and punishments in the IHR, and the compliance of states basically rely on multilateral surveillance of member states according to article 54 [30]. It might contradict the purpose and scope in article 2 to include punishments in the IHR. Instead, this issue can be resolved by furthering cooperation between the WHO and the UN security council, which can rightfully impose punishments for security reasons.

Thirdly, the vague rules can be fixed by amendments or interpretation. On one hand, legislators can specify the meaning of rules in the IHR in both qualitative and quantitative ways, which means regular amendments are needed. On the other hand, it is also possible to clarify the meaning of the rules through interpretation from legislators and judges. For legislators, Article 56 entitles the World Health Assembly the right to interpret the IHR. For judges, the IHR is one of the legal sources for the world court to make a jurisdiction, and legal cases are principally more specific and certain in specifying the IHR rules.

4.5. Conclusion

The current International Health Regulation is still effective and widely-accepted, but there are some flaws in its rigid and vague rules, especially the requirements of core capacity. Therefore, partial revisions are needed in post-Covid age, including building multilateral surveillance systems, introducing CBDR principle, furthering cooperation with the UN security council, having regular amendments, and making legislative or jurisdictional interpretations. With these possible solutions, the IHR can continue serving as a legislative prevention for any public health risks.

5. What Reforms Are Needed at World Health Organization

As the world becomes more closed, many problems are found to be transnational challenges, such as infectious diseases, terrorism and climate change. To cope with transnational challenges, the United Nations, a comprehensive international organization that aims to have global countries as members and hopes to solve international problems extensively, finally emerged [31]. In order to solve global health problems more professionally, the United Nations has also extended to more specialized international organizations, such as the World Health Organization (WHO). The WHO urgently needs to respond to global health problems, but it must be reformed to make it more effective.

The purpose of the World Health Organization is to enable people everywhere to achieve the highest possible standard of health. In its 70-odd years of existence, the World Health Organization has indeed achieved many successes. For example, Vaccination programmes for children have made an outstanding contribution to health problems around the world. In addition, smallpox was declared eradicated on 9 December 1979 according to a vaccine programme developed by WHO [32]. These successes are strong evidence of WHO's critical role in improving global health systems and have helped build global confidence in WHO. So, in the face of COVID-19, the WHO bears the trust of the people.

WHO's mandate includes monitoring and coordinating activities on health-related issues and can declare an international public health emergency in times of emergency [33]. The WHO has inherent credibility with the United Nations, but past success seems to have held it back. For example, the WHO's response to the Ebola virus in 2014 was slow, poor and flawed. All of these reflect the poor management within WHO, which ultimately led to the death of more than 11,000 people (Huang). Furthermore, the Novel Coronavirus of 2019 has brought the WHO problem to the fore. When the WHO declared the start of the outbreak in March 2020, COVID-19 had already reached 113 countries [34].

It is clear that the WHO is in a bind. The most important of these is that although the International Health Regulations (IHR) adopted by the World Health Assembly in 1969 can be used by WHO as guidelines for action, many countries still violated the IHR in the first half of 2020 [35]. The WHO obviously lacks sufficient legal means and binding powers over member states.

There is currently no replacement for the role of the WHO [32]. Therefore, it is not realistic to form a new organization to replace the WHO, and a revision of the current constitution of the WHO is imminent. The current importance of the WHO is not commensurate with its authority, which means that many countries do not have many qualms about breaking its rules. The WHO should amend its constitution in accordance with international law to legally gain more practical rights, which will bring greater benefits to the world's health systems.

In particular Article 4, Article 5 and Article 7 of the WHO Constitution, which is too lax in terms of membership, requires member states to sign only a loose agreement and lose their voting rights if they fail to fulfill their obligations. Those have limited the development of the WHO. So, the new constitution should make targeted changes. First of all, WHO needs strong sanction measures. Countries that want to become members and enjoy benefits should pay enough deposit in a lump sum and promise to confiscate all deposits if they do not continue to fulfill their obligations.

The WHO should learn from previous lessons, take advantage of its strengths in the global health system, improve early response and focus on long-term oversight. Rational arrangement of medical staff to make more effective prevention and control of global health security, striving to make effective responses at the first time when health problems arise. A more efficient panel of experts should be set up, with influential countries taking turns to send emissaries to set up new committees, but national envoys should not have the right to make decisions but should consciously assume the responsibilities of big countries. By combining its own expertise in health systems with the international influence of member countries, WHO will be able to respond to global health challenges with a more rigorous attitude and more efficient way.

6. Conclusion

The global challenges posed by climate change and pandemics have exposed many problems with the current international legal system. On the one hand, the imbalance of the fairness of CBDR principle and the perfunctory solution of the Paris Agreement on protecting species diversity have brought negative effects to dealing with the climate issue. The forced immigration caused by the destruction of the ecological environment is a direct indicator of the lack of relevant international law.

On the other hand, the international health system, which plays an important role in international law, also has defects. The difficulty of implementing the IHR is strong evidence of this. At the same time, as the representative international organization in the international health system, the constitution of WHO is obviously lacking in binding force.

In order to solve these loopholes in the international law system, it is extremely important to reconstruct the CBDR framework from the economic level, make more detailed plans for the Paris Agreement. In addition, fundamentally supplementing and changing the defective parts of the law is necessary. Strengthening international law in response to transnational challenges such as climate change and pandemic diseases will have an objective positive effect on international cooperation, because environmental and health systems actually involve everyone, and isolated people always perform worse in disaster situations [36]. The improvement of international law will fundamentally promote international cooperation and make a significant contribution to global common governance.

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