



Strengthening Human Security Through Biosecurity: A Road to Resilient Global Health Mechanism

Marriyam Siddique¹, Syed Waqas Haider Bukhari², Asif Amin³

¹PhD Scholar, School of International and Public Affairs, Jilin University, Changchun, China.

^{2*} Assistant Professor, School of International Relations, Minhaj University, Lahore, Punjab, Pakistan.

³ Assistant Professor, School of Integrated Social Sciences (SISS), University of Lahore, Punjab, Pakistan.

Corresponding author: drswbhukhari@gmail.com

Keywords: Pandemics, COVID-19, Human Security, Biosecurity, Global Health.

Article		History
Date	of	Submission:
02-12-2022		
Date	of	Acceptance:
30-12-2022		
Date	of	Publication:
31-12-2022		

How to cite?
Siddique M., Bukhari S., W., H., Amin A., (2022). Strengthening Human Security Through Biosecurity: A Road to Resilient Global Health Mechanism. Research Journal for Societal Issues. 4(1), 164-175.

DOI No: 10.56976/rjsi.v4i1.45

For global health, the COVID-19 situation presents unique difficulties and possibilities. The most disappointing aspect of the problem is that we do not have a global health apparatus to guarantee our people's safety. The global health system, predicated on the concept of human security, has, to a certain extent, failed to ensure the security of people's lives. When it comes to the threat that COVID-19 poses, there is a form of balance on a worldwide basis between under-developed and developed governments about the fact that no one is secure. The Covid-19 pandemic has completely transformed the concept of human security. The term "global health" refers to more than only the safety of one's health. This research helps to reveal the conceptual and analytical ambiguity of the human security paradigm, focusing on enhancing human security by using the biosecurity paradigm as a policy cover. Further, this research paves the way to understand the concept of human security with new dimensions.



Introduction

A frightening pandemic is spreading throughout the world. Global health professionals and practitioners are immensely preoccupied with the fast spread of COVID-19. The pandemic threatens human health and has significant repercussions in various nations. The world's reliance on effective therapies to stop the spread of COVID-19 will strengthen and amplify the importance of global health. Nonetheless, the crisis highlights the continuing issues of global health, which may be viewed as the continuation of public health in today's globalised world (Holst, 2020). There is still a great deal of uncertainty regarding the long-term impact of the COVID-19 epidemic on public health. In addition, the Covid-19 outbreak has provided additional support for the human security paradigm. For security assessments and policies to be successful and trustworthy, they need to focus on the everyday challenges that individuals and communities face. Conventional, state-centric ideas of national security that support a robust military perspective of the state are an allegedly unavoidable component of politics. These beliefs have been around for a long time and are hard to shake.

On the other hand, they do not ensure even the barest minimum of human well-being. The pandemic served to reaffirm for societies that were already economically disadvantaged what they had suspected for a long time, namely, that preventable diseases, pollution, malnutrition, and extreme poverty are the primary existential worries, even more so than traditional security challenges. This paper explores the idea of human security, first proposed by Mahbub-ul-Haq in 1994 and later endorsed by the United Nations (UN). According to this theory, state governments can ensure the well-being of their citizens by adopting and pursuing the theory of human security. (King, 2001; HDR, 1994). Specifically, Japan, Norway, Canada, the United States of America, and the United Kingdom all recognised and pursued the idea of human security and invested billions of dollars on the concept of "human security." However, the COVID-19 episode demonstrated that nations could not ensure their citizens' safety and security (Newman E. , 2021).

Research Methodology

The study employs a qualitative research design, using interpretive methodologies to gain a thorough and holistic knowledge of the phenomena. Data are compiled using information obtained from secondary sources. A thematic analysis of COVID-19 and its impact on human security has been conducted by using the qualitative method.

The first part of the study focuses on human security. The framework of human security contains certain definitional and analytical ambiguities, weaknesses, or ambivalence. This aspect of the study explores human security. In addition, the politicisation of nations centred on protecting people and the international norm of sovereignty or nationalism act as further barriers to international cooperation. If there had been more structural coherence between theory and practice, it would have been possible to prevent the issues in human security.

The study raises the question that what loopholes have emerged in the concept of human security due to the COVID-19 Pandemic? and why the previous concept of human security was



insufficient to guarantee humanity's safety during the COVID-19 period. The authors suggest the idea of 'biosecurity' to lend robustness to the concept of 'human security' in order to fill the conceptual loophole that was left behind. It is a method of approaching health that considers the well-being of humans, animals, plants, and the environment as a whole. This method acknowledges that political and legislative factors and public notions of health influence the outcome.

The inception of Human Security as a Policy Initiative

During the 1990s, a plausible alternative to non-traditional security theories that looked to be gaining political influence was the idea of human security, which arose as an option during this same period. Because security studies were beginning to move away from the military and state paradigms that had dominated the discipline throughout the Cold War, there was a lot of interest from the academic community in this subject. The concept of human security has served as a model for state and non-governmental actors that are interested in human-centred policies and in making people less vulnerable. This contribution has been significant yet frequently questioned. The concept of "human security" as a specialised policy idea can be traced back to the speeches given by President Franklin D. Roosevelt in the 1940s. In those speeches, he called for "freedom from want" and "freedom from fear." Later, in 1994's Human Development Report, the term "human security" was used for the first time (UNDP) (Malik, 2021).

Human security is first and foremost protection against things like hunger, diseases, and repression, per the UN report. Protecting people's everyday routines, whether at home, at work, or in communities, is also a primary goal. Most people's fear of the future is rooted in their concerns about the day-to-day grind rather than the prospect of a global catastrophe. Will they be able to feed themselves and their loved ones? What will happen to them? They are concerned about the safety of their streets and neighbourhoods. Will a repressive state subject them to torture? Will their gender factor in whether or not they become a victim of violence? Concerning personal security, the report outlines seven forms of security: personal, economic, health, food, community, environmental, and political.

When the 1994 UNDP report was undertaken, such problems were unheard of in UN circles. The United Nations Development Program (UNDP) published a report in 1994 that had an impact on international policy discussions regarding issues of security and development; as a result, Japan, Norway, and Canada, among other nations, used the concept as a foundation for their respective foreign policies (Remacle, 2008). The International Commission on Intervention and State Sovereignty (ICISS), established in 2001, is one example of the many programmes governments have supported to strengthen human security. The Commission on Human Security was established in 2003 (Newman, 2021).

The Human Security Network, comprising 13 states aiming to place people at the centre of development and security, also has made human security significant and kept it on the diplomatic agenda. These two goals were accomplished thanks to the Human Security Network's efforts. International organisations are increasingly prioritising human security. The United Nations Development Programme (UNDP) has undertaken several initiatives in developing and conflict-prone nations to enhance the quality of life of individuals and



communities. The United Nations High Commissioner for Refugees has emphasised human security as part of its duty to give special consideration to the rights and requirements of people who have been forcibly displaced. Since its establishment in 1999, the United Nations Trust Fund for Human Security (UNTFHS) has been of assistance to the UN's many human security initiatives (Newman, 2021). To provide "real and sustained benefits to vulnerable individuals and communities at risk of their existence, livelihoods, or dignity," this fund supports initiatives that put the human security idea into action.

Since its founding in 2004, the United Nations Human Security Unit has made efforts to ensure that the concept of human security remains at the centre of international diplomacy. During the 2005 United Nations World Summit, the human security agenda received a major boost. The United Nations has reaffirmed that all people have the right to live in freedom and dignity, free from poverty and hopelessness, and free from fear and want. This right is referred to as human security. The UNG's resolution (66/290) of October 2012 further backed human security in the wake of the World Summit, and the UN Secretary General's report operationalized this concept (Newman, 2021). Regional organisations such as the EU and ASEAN have used the notion as a campaign strategy.

Human security has been a high priority on the global agenda for the past 25 years, even though it threatens the traditional, state-centric security practices that have been in place for decades. The UNDP's 1994 vision of human security noted a contradiction between human security and the conventional security agenda, but the UN no longer reflects this challenge to national security thinking. Despite this, the UN's human security plan does not yet consider the possibility that states provide the biggest threat to human security. According to UN Resolution, governments have the main responsibility and obligation of safeguarding their citizens' survival, livelihood, and dignity, even when nations are unwilling or unable to satisfy individuals' fundamental security needs. The UN's unwillingness to recognise state threats is acceptable, but it highlights a fault in the intergovernmental approach to human security. The United Nations (UN) status as an operational stakeholder and normative leader is a controversy in human security themes and a focus for opponents.

A rise in nationalism based on sovereignty and a resurgence of conventional security concerns and players has slowed the progress of the human security movement (Lama, 2018). Policymakers' engagement with human security is subjective, and the commitment demands an objective stance. As a result, nations have made promises to reform norms in several sectors, both unilaterally and through international organisations. Examples include the work done by UN organisations with help from states and the pledges made by the Human Security Network. The concept of human security as a theory has not been accepted by elites in the field of foreign policy, as evidenced by widening gaps in social, economic, and health outcomes and human rights norms in several countries. The majority of policy institutes have a conventional mindset towards national security. Human security is not an alternative paradigm but a parallel set of policy programmes; hence, numerous national military institutions include human security sections or operations.



COVID-19 Pandemic; Implications for Human Security Concept

In recent decades, there has been increased pressure on security analysts to evaluate threats to human life regardless of the origin. It resulted in an expansion of the security agenda and, at times, an aggressive tendency to securitise problems unrelated to the military. Climate change's impact on individual livelihoods and conflict has been studied extensively using this notion. The objective of this strategy is to produce a security model that is more comprehensive, as well as to draw more attention and, in some cases, resources to the issue of climate change by framing it as a "security" issue (Trombetta, 2008). The issue of climate change may be seen as a component of an overarching strategy for achieving security, and this approach aims to attract more attention and resources to the problem.

If climate change presents an existential risk to all forms of life on earth, the conventional approach to security cannot sufficiently protect us from that risk. Human security has long been a favourite topic of social scientists studying public health for similar reasons. HIV/AIDS is portrayed as a security hazard because it threatens more lives than traditional security risks and poses an existential danger to some civilisations. Health problems can have a compounding effect when they are combined with other non-traditional hazards. The most important point is that public healthcare demands more sensitivity, investment and political attention. The Covid-19 outbreak verified and enhanced various pre-existing human security concepts as it applies to global public health, which had previously been shown in the Global South and East Asia (SARS, Ebola, H1N1).

Since the 1980s, HIV has killed over 32 million people. While antiviral medication has considerably decreased death rates, in 2018 approximately, 770,000 individuals were killed from HIV-related conditions in developing nations with limited access to treatment. Other contagious diseases, such as respiratory infections (3 million deaths in 2016), diarrhoeal diseases (1.4 million deaths in 2016), and TB, also have a substantial impact (death toll of 1.3 million in 2016). In 2016, almost half of all deaths in underdeveloped nations were caused by contagious diseases, pregnancy-related ailments, and nutritional inadequacies, relative to lesser than 7% in developed nations. In under-developed societies, deprivation has a big effect on public health. Every year, about 3.1 million children die from not getting enough food (Newman, 2021).

The vast majority of these deaths happen in the Global South. HIV/AIDS was the one that got the most attention internationally because it was seen as a global problem until effective treatments were found. Another example of a public health disaster in undeveloped and underdeveloped nations that are perceived as less of a worldwide concern is malaria, which claimed the lives of more than 400,000 people in 2018 (Al-Awadhi, 2021). The majority of those who died were children under the age of 5. Even before the discovery of the novel coronavirus, people's ideas about human safety placed emphasis on the importance of maintaining good public health, and pandemics have traditionally been seen as potential security risks. Because of the pandemic's rapid spread and worldwide reach, Covid-19 has had a significant global impact, although this is not unique in human disease history.

The pandemic reveals the limits of conventional security thinking from a human security standpoint. Two basic examples highlight this point. Covid-19 was a major threat to the



security of individuals and society in many militarily sophisticated countries, even though they could not cope with it effectively because they relied on the traditional security philosophy. The Covid-19 epidemic was not properly handled by governments considered powerful enough from a traditional security standpoint, which places a premium on military might. States with a more comprehensive approach to national defence, where military funding is matched with social needs, have done better in mitigating the effects of Covid-19 like Taiwan, South Korea and Japan. But the proportion of security threats is valid yet (Suhrike, 1999). However, anecdotal data is sufficient to support these general conclusions. In their response to Covid-19, many political leaders have used terminology and images from traditional security thinking. In terms of traditional military security capabilities, several of the most advanced regimes were unprepared to meet the task.

In reality, anecdotal evidence suggests a link between increased military spending and a lack of readiness. The US, the UK, France, Brazil, and Russia, all of which spend the majority of their GDP on military capabilities, have experienced difficulties with basic healthcare and the societal impact of the high death rates caused by the Covid-19 virus. These kinds of nations, like the US, have a long history of the military-centric view of the state but a limited budget for social services, which results in an interesting paradox. A \$649 billion yearly defence budget in 2018 (3.2 % of GDP) was not enough for the US to respond adequately to Covid-19. Despite spending the most per person on healthcare, a large chunk is paid by private insurance, not government revenue. In 2018, 8.5% of individuals (27.5 million) were uninsured, up from 7.9% (25.6 million) in 2017 (Newman, 2021).

The US healthcare system is more at risk, which helps us understand how Covid-19 will affect that country. Even if Covid-19 did not spread from country to country, the fact that superior military strength, which has long been considered a vital indication of national security, was unable to ensure a successful response raises issues about how security is politically prioritised. Governments are not yet making health a high enough priority, as assessed by the share of all government spending committed to the health sector, according to a report from the WHO (Terwindt, 2016). Global military spending increased at its highest yearly rate in a decade, hitting \$1917 billion (2.2 % of global GDP) in 2019, according to SIPRI research (Tian, 2020). Despite substantial material investment in the hard security apparatus, the most militarily advanced countries could not keep up with the demand for medical facilities and personal protection equipment during the pandemic. It was the case, although they had the greatest potential. They could not afford military involvement in many troubled zones.

The US health crisis revealed a mismatch between military spending and health issues. Covid-19 killed more Americans than all US wars since 1900, including WWII (Stone, 2021). It is noteworthy since the US has been considered a powerful state. Despite being called an "existential" danger, terrorism kills much more people. The UK's lack of readiness and infection and death rates (absolute and relative to population) are other examples. In both nations, military power, and the ability to establish high security are contrasted with poor Covid-19 performance. Pandemics have been on the policy spectrum for at least a decade in both nations, so the outbreak was not a complete surprise. Public health concerns have been included in national strategic planning, and the Global Health Security Agenda has been working for some time to advance a world safe and secure from infectious disease threats. That



the UK's National Security Strategy and Strategic Defence and Security Review from 2015 suggested that the UK invest in new, large-scale research and development to tackle the world's worst illnesses is instructive (HM Government, 2019).

Malaria and other neglected tropical diseases, as well as diseases that threaten the lives and livelihoods of millions in underdeveloped nations, are among the health threats that will be addressed. While military readiness and relative strength have traditionally been seen as crucial indicators of state capability for security, there was no correlation between the two regarding the Covid-19 coronavirus. Although many countries in the world in which issues related to public health pose a significantly greater threat to life and the ability to make a living than traditional security challenges, the spending priorities of governments and the political centre of gravity do not reflect this logic (Arcaya, 2015). Public health inequities are the most obvious illustration of this; in the US, for example, the life expectancy of the wealthiest people is 10–15 years higher than that of the poorest (Braveman, 2010).

The uninsured' basic healthcare requirements are not being met by their country's national security concerns and dedication to military supremacy. The Covid-19 epidemic has hit the most advanced military and, consequently, the most 'secure' states, unprepared and unable to respond to it. A catastrophic economic collapse has significantly influenced certain nations' economic strength and will have long-term ramifications in the future. When success is judged in terms of the basic well-being of individuals and the communities in which they live, the Covid-19 experience demonstrates the limitations of the national security paradigm. It is the case when human security is being considered. Because national security and the overall health of the people cannot be considered in isolation from one another, the division between domestic and foreign issues becomes meaningless in this context.

Underpinning Human Security through Biosecurity

The conundrum of Covid-19 sheds light on the gap between conventional security measures and the well-being of society, as measured by human welfare, as seen from the perspective of mainstream human security concepts. That is to say, there was no connection between the capabilities of standard security measures and the effectiveness of pandemic response efforts. Although there is no reason why a state's superior physical security capabilities should make it more difficult for it to deal with Covid-19, history demonstrates that many militarily powerful countries were unable to deal with the problem effectively. It has been demonstrated that countries whose military spending accounts for a large percentage of their GDP are either less resilient or are not any more resilient than those whose military expenditure accounts for a smaller percentage (Nowroozpoor, 2020). It is a reason for worry due to the tendency of nations to place a disproportionate amount of emphasis on the significance of military might in the delivery of security.

Although developed nations that had embraced and pursued a human security viewpoint to deal with such threats were unsuccessful to contain COVID-19. The idea of biosecurity as a unified policy framework is something that is urgently required in the context of human security concerns. *Biosecurity* is a phenomenon that combines several aspects of the prevention of bioterrorism and biosafety measures, the concept is frequently grouped along with bioterrorism and biosafety (Albert, 2021). The ability of a nation to properly respond to biological threats



and the factors associated with them is referred to as biosafety and biosecurity. Biosecurity and biosafety include protecting against, and mitigating the effects of emerging infectious diseases, protecting against biological warfare and bioterrorism, preventing malicious biotechnology misuse, assuring the biosafety of laboratories, defending, and securitizing special biological resources, and preventing the invasion of foreign organisms (Hulme, 2020).

The biosecurity concept has to be interdisciplinary by combining both the social sciences and the natural sciences, building on the connections that already exist across the health, agricultural, and environmental sectors. It is more likely that there will be a significant shift in how invasive alien species are managed if the word "biosecurity" is defined using more inclusive concepts. A biosecurity agenda driven by politics, legislation, and public perceptions requires collaboration among taxonomists, population biologists, modellers, economists, chemists, engineers, and social scientists (Albert, 2021; Koblentz, 2010). The biosecurity paradigm may be met with the same resistance as the "Health for all" phrase, which is that it is merely a slogan, and there are other fields of study. How might we possibly prevent this situation?

First, the biosecurity paradigm has to be made a higher priority in both international and national policy. The need for stability is quite natural in an unequal, unstable, and even hazardous setting. There is often a lack of clarity about security regarding who defines it and how it is established. As long as global health problems such as the outbreak of pandemics do not place a higher priority on social balance and integration across national boundaries, security-oriented policies will continue to prioritise maintaining the status quo, regardless of how unequal and unfair it may be. Suppose these vital aspects of health are disregarded. In that case, there is a risk that those aspects of politics that need to be prioritised may be undermined, including the WHO constitution and human rights. The promotion of universality is not the role of security; human rights play that role. Current security strategies aren't always geared at protecting the poor and marginalised, but resolving issues of poverty, unfairness, and social injustice is crucial for strengthening social cohesion and global health. Instead of concentrating on the social, economic, and political determinants of health, the discussion centres on managing the condition without addressing the core reasons.

When addressing global health, it is common to avoid discussing how to eradicate threats at their source. Instead, the focus is on preventing potential future hazards from challenging the established order or jeopardising long-standing interests by ensuring that they are effectively contained. As a continuation of public health, global health should be primarily concerned with identifying and controlling health risks caused by living and environmental situations as soon and effectively as possible. It should be the primary focus of global health. It needs to be the principal concentration of efforts related to global health. On the other hand, political aims, power dynamics, and the influence of stakeholders are not now at the forefront of the health agenda. Neither are these upstream determinants of health. The field of global health is not immune to being utilised for economic and political objectives; efforts connected to health need to acknowledge power dynamics to be successful openly. (Singer, 65).

The influence of existing power interests on our knowledge of global health is far more than is commonly believed or articulated. The concept of global health governance does not include an analysis of power and the dynamics of power. It is not globalisation itself that is the primary



cause of the COVID-19 epidemic; rather, it is the ability of multinational firms to enforce their business model, which has elevated microeconomic efficiency to the position of primary dogma in the global market economy. The existing economic system is the product of human ingenuity, and global public policies prioritise the profit interests of multinational corporations over macroeconomic efficiency or sustainable economic activity. Because of the current economic structure, it is impossible to avoid problems such as unemployment, vulnerability, socioeconomic inequality, and the degradation of public services, particularly health care.

Addressing power dynamics is necessary for achieving more equality. Since it touches the heart of today's global economy, unrestrained growth and resource distribution, every attempt to alter the predominant economic model over the past 40 years has run into opposition from strong players and entrenched interests. It is because of the nature of the issue. Recent COVID-19 responses have shown an unanticipated shift in policy, which can be summarized as a return to the strong state. Even the Financial Times, considered one of the world's most prestigious business publications but is neither progressive nor critical, has stated that state governments need to play a more significant role in the economy. The publication places a strong focus on the importance of enacting policies that were earlier deemed unorthodox, such as wealth taxes and basic income. The newspaper read by the world's wealthiest and most influential persons concludes that "redistribution will once again be on the agenda" Because global health is inherently political, it cannot avoid becoming involved in important social and societal issues (IPI, 2009). Distribution of resources, equality of opportunity, political power relations, social justice, entrenched interests, and human rights affect people's health. Inequality and socioeconomic injustice are frequently reproduced as a result of global health policy (Holst, 2020).

It is certainly relevant to previous pandemics, which exacerbated economic gaps and made unemployment more severe, with the degree of severity depending on a person's level of education. People who have lower levels of education are more likely to have long-term repercussions as a result of the loss of a job, economic shocks, a decline in remittances, and impoverishment, in contrast to people who have greater levels of education, who are rarely harmed. Many people whose jobs were already insecure were impacted when lockdowns occurred because they worked in the informal sector. Given that this would exacerbate existing socioeconomic disparities in all nations and communities, it highlights the critical requirement for universal health protection, which must include access to medical treatment as well as paid time off for disease. The COVID-19 epidemic has brought to light the need for a worldwide social protection fund or other similar financial mechanisms to protect the people of low-income nations from current and future pandemics. These institutions might take the form of a global social protection fund.



Conclusion

When confronted with widespread crises, COVID reveals the limits of power and authority, illuminating human security's contingent and precarious nature. Even in the face of an imminent threat, an appropriate response from the government will be uneven and difficult to maintain. The implication raises some serious red flags. COVID-19 reveals considerable ambiguities and obscurities in the concept of human security. In this context, these ambiguities and obscurities are significant. It is feasible to alleviate worries regarding human security by utilising the biosecurity policy framework in this particular scenario. Even though policies tend to be rather narrowly focused, biosecurity is still predominantly a localised subject. It is the case despite threats to human health, agricultural production, and the environment becoming more linked. Biosecurity may give improved foresight into managing invasive alien viruses, animals, plants, and infections by bridging the gaps across several different sectors—these factors all impact the environment, animal health, and human health.



References:

Al-Awadhi, M. A. (2021). Current Status and the Epidemiology of Malaria in the Middle East Region and Beyond. *Microorganisms* , 9(338), 1-20.

Albert, C. B. (2021). Human Security as Biosecurity: Reconceptualizing national security threats in the time of COVID-19. *Politics and the Life Sciences*, 40(1), 83-105.

Arcaya, M. A. (2015). Inequalities in Health: Definitions, Concepts, and Theories. *Global Health Action* , 8(27106).

Braveman, P. A. (2010). Socioeconomic Disparities in Health in the United States: What the Patterns Tell Us. *Journal of Public Health* , 100, 186-196.

HDR. (1994). Human Development Report 1994. Retrieved April 11, 2022, from Human Development Report: Retrieved from https://hdr.undp.org/sites/default/files/reports/255/hdr_1994_en_complete_nostats.pdf

HM Government . (2019, July). National Security Strategy and Strategic Defence and Security Review 2015 Third Annual Report. Retrieved from HM Government : https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819613/NSS_and_SDSR_2015_Third_Annual_Report_-_FINAL__2_.pdf

Holst, J. (2020). The World Expects Effective Global Health Interventions: Can Global Health Deliver? *Global Public Health* , 15(9), 1396–1403.

Hulme, P. E. (2020). One Biosecurity: A Unified Concept to Integrate Human, Animal, Plant, and Environmental Health. *Emerging Topics in Life Sciences*, 4, 539-549.

IPI. (2009). Biosecurity. Retrieved from International Peace Institute : https://www.ipinst.org/wp-content/uploads/publications/biosecurity_epub.pdf

King, G. &. (2001). Rethinking Human Security. *Political Science Quarterly*, 116(4), 585–610.

Koblentz, G. (2010). Biosecurity Reconsidered. *International Security*, 34(4), 96-132.

Lama, M. P. (2018, April 17). Human vs. National Security . *global-e journal*, `&&(22), 1-4.

Malik, S. M. (2021). Reconceptualising Health Security in post-COVID-19 World. *BMJ Global Health*, 6(e006520), 1-7.

Newman, E. (2021). Covid-19: A Human Security Analysis. *Global Society*, 1-25.

Newman, E. (2021). Covid-19: A Human Security Analysis. *Global Security*, 431-454.

Nowroozpoor, A. C. (2020). Why the United States failed to contain COVID-19. *Journal of the American College of Emerging Physicians* , 1(4), 686-688.



Remacle, E. (2008). Approaches to Human Security: Japan, Canada, and Europe in Comparative Perspective . *The Journal of Social Science* , 66, 5-34.

Singer, P. A. (65, 2). How Biodevelopment can Enhance Biosecurity. *Bulletin of the Atomic Scientists*, 23-30.

Stone, W. F. (2021, February 3). The U.S. 'Battles' Coronavirus, But Is It Fair To Compare Pandemic To A War? Retrieved from npr: <https://www.npr.org/sections/health-shots/2021/02/03/962811921/the-u-s-battles-coronavirus-but-is-it-fair-to-compare-pandemic-to-a-war>

Suhrke, A. (1999, September). Human Security and the Interests of States. *Security Dialogue*, 30(3), 265-276.

Terwindt, F. R. (2016). Priority-setting for national health policies, strategies and plans. Retrieved from World Health Organization : <https://apps.who.int/iris/bitstream/handle/10665/250221/9789241549745-chapter4-eng.pdf;jsessionid=A083842F88A15F4DC5C1366D702C9564?sequence=36>

Tian, N. e. (2020, April). Trends in World Military Expenditure, 2019. Retrieved from SIPRI : https://www.sipri.org/sites/default/files/2020-04/fs_2020_04_milex_0_0.pdf

Trombetta, M. J. (2008). Environmental Security and Climate Change: Analysing the Discourse. *Cambridge Review of International Affairs*, 21(4), 585-602.