WHO

World Health Organization

High School General Assembly

Background Guide

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VIMUNC XI



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UNDERSECRETARY-GENERAL OF CRISIS Esteemed delegates and sponsors of VIMUNC XI,

Welcome to the eleventh annual Virginia Invitational Model United Nations Conference. As the MUN year winds down, we hope to provide the best experience yet, with paramount service and attention to detail that creates the greatest conference. From broad UN organizations to regional bodies, from corporations to criminal organizations, VIMUNC has committees that truly serve every interest. With experienced chairs, czars, and staff, we will ensure that every delegate truly has a positive experience, and we hope that you can enjoy your experience with us.

VIMUNC's 21 committees and over 850 delegates make this year's conference one of the largest editions ever, and we look forward to expanding our outreach across the DMV region to continue to provide a wonderful experience for all delegates. With a large MUN team that has years of experience, we hope that every single minute of the committee is filled with substantive debate that will create learning experiences that last for years to come.

So much hard work has been put into every single crisis update, background guide, and dossier, and we sincerely hope that the work and care placed in each aspect of this conference is displayed in its quality. If at any time you feel something about the conference is unsatisfactory, please don't hesitate to talk to your chairs, a staffer, or a member of the Secretariat.

Thank you so much for your commitment to VIMUNC XI, and best of luck in your committee, future conferences, and ambitions.

Sincerely, Mei Torrey Secretary-General, VIMUNC XI



(World Health Organization) TOPIC A: *Human Genome Editing* TOPIC B: *The Mental Health Crisis*

TOPIC A: Human Genome Editing

Introduction and History

Human genome editing blurs the line between possibility and ethics, as it invites both revolutionary advancements and overwhelming danger. The first genome editing technologies were introduced in the late 1900s, and some are currently used to modify crops to enhance favored characteristics. For example, in China and Mexico, modified maize and rice crops produced 8% and 10% more grain per yield, respectively, as they were gene-edited to become more resistant to extreme weather. In 1987, CRISPR-Cas 9, an enzyme used to edit DNA through the splicing or addition of genes, introduced the concept of human genome editing to the scientific community. Gene editing has the ability to treat grave medical conditions, such as sickle cell anemia, cystic fibrosis, HIV, Huntington's disease, cancer, and many other genetic

disorders. On a different note, gene editing enables the possibility of enhancing physical traits, such as hair, eye color, muscle mass, and even preventing the aging process.

In 2016, Dr. He, a Chinese scientist, conducted the first experiment with the tool, as he used CRISPR to edit two twin embryos in hopes of making them resistant to HIV. While China's gene modification laws were not clearly defined, scientists all over the world reacted strongly to Dr. He's research, and due to strong ethical implications, Dr. He was eventually sentenced to three years in prison for "illegal medical practice". In addition, his research publications were immediately retracted, preventing the public and other scientists from gaining access to it. Following this, China and other countries strengthened their regulations and banned genetic modification.

Ethical Implications

Human genome editing is the subject of intense debate over its consequences for future generations and society in general. While it uncovers significant medical advancements, and can even completely eradicate illnesses, such as deafness and blindness, the question of whether these affected communities will be concerned that people like them will be edited out of existence. In addition, gene editing adds fuel to eugenics, the study of how to increase the occurrence of heritable characteristics regarded as desirable, and scientists want to "save civilization by creating genetically superior children." Considering this potential misuse, the benefits may not significantly outweigh the risks.

The Economic Effects of Human Genome Editing

Moreover, the economic effects of human genome editing spark controversy among scholars. Some researchers, such as Agustina Whelan, suggest gene editing will promote economic development and productivity in the career fields influenced by it. Similarly, the Economic Impact of the Human Genome Project reports human genome editing can indirectly produce over 310,000 jobs with an output of \$67,146,000 in the economy. However, many others are hesitant to embrace the adverse repercussions that could transpire. The National Economic Burden of Rare Disease Study finds the total cost of using gene editing to aid 379 assessed diseases to be \$966 billion for 2019. The economic market price of gene editing worries researchers and scientists on the realistic sustainability of it, nevertheless, continued advancements are predicted to increase its availability, lowering its monstrous cost.

WHO's Response

In December 2018, the World Health Organization began its study on human genome editing, targeting all of the social, legal, economic, and scientific disputes. After nearly 3 years of continuous examination with the input of previous findings and newly found developments, WHO published a government framework addressing all of the possible altercations. Moreover, the committee published their recommendations and cautions for governments and nations on their future steps and processes. However, constantly evolving developments in the field introduce new considerations to gene editing that this committee must work to address.

Possible Solutions

Countries should work together to create comprehensive international guidelines for the use of gene editing technologies. Governments and organizations should collaborate to educate the public about gene editing, and its legitimate applications, benefits, and risks. Countries must also consider developing mechanisms to efficiently monitor and evaluate gene editing research to ensure conformity to ethical standards, as well as uncover emerging risks. Furthermore, countries should take into account the economic implications of gene editing, and how it will be accessible to less-developed communities. Countries should consider their own unique and individual stance on ethics versus the value of gene editing.

Questions to Consider

- 1. What efforts, if any, are being made within your country to deal with human genome editing?
- 2. What lessons can be learned from other gene editing examinations such as Dr. He's research?
- 3. What additional assistance can be given to countries with developing economies and poorly funded scientific infrastructure?

TOPIC B: The Mental Health Crisis Introduction

The mental health crisis has gained increased awareness over the past few years due to the rise in emphasis on personal wellness from younger generations. More specifically, mental health in and of itself describes the well-being of individuals through their social mentality, psyche, and emotional state. However, the recent past has been met with new fatalities as suicide rates have reached an all-time high with today's youth and younger generation becoming more vulnerable to negativity on social media and even in their real lives.

While there is no single cause to pinpoint the severity of the mental health crisis, the COVID-19 pandemic has greatly contributed to a decline in students' and other young people's mental well-being. Because children are modernly being exposed to media at a quicker rate and at younger ages, health experts, have begun to place greater emphasis on the importance of addressing the ethical usage of technology. In fact, new age restrictions and parental controls have been mandated on certain apps such as Instagram that require users under a certain age to request access by their parents. Ultimately, these measures, though potentially not as effective as the implementers had originally hoped for, are examples of frantic responses to greater media access and as a result, a decline in the youth's mental health across the globe.

Past UN Action

The United Nations recognizes the importance of the mental health crisis and attributes the cause of an increase in suicide rates to untreated depression and other mental illnesses. In addition to this, the UN has worked to raise awareness about genetic alcohol and drug abuse, hereditary mental disorders, and other disabilities that may impair certain individuals from living life to its fullest potential. Of course, the UN has acknowledged other factors that result from the mental health crisis, namely discrimination, social pressures, a need for education, and the call for reforming mental health treatments.

To begin with, the United Nations recognizes the stigma and discrimination that mentally disabled individuals often face or experience within society and has thus worked towards ending said stigma around such illnesses through an expansion of education. For this reason, mental health awareness has increasingly been added to the curriculum in some schools around the world, yet the lack of proper awareness still continues to plague children and even adults across the globe today.

On the same note, education is not solely meant to rid society of discrimination, but rather to educate people on their options to consider help. By providing a variety of resources to mentally ill individuals, the UN hopes to create a community in which more people have the ability to gain the help they need to limit such a crisis in society. Cultural practices and traditional beliefs often limit younger generations from gaining help, creating a vicious cycle of illness and ignorance. Finally, the UN and WHO have worked in the past to expand upon reform movements to allow for greater mental health awareness in society. The establishment of government-funded hospitals and clinics that provide temporarily anonymous services to people has allowed numerous individuals to seek health without fearing shame or stigma from those around them. Nonetheless, more work is required for ill individuals to truly solve the mental health crisis they experience and put an end to this plague on society.

Possible Solutions

Nations should consider various factors and construct solutions specific to their country that promote the well-being of their civilians. Yet, countries should also take into account the overall well-being of the global population and find solutions that meet each nation's individual needs but still compromise to create an international consensus. These solutions must address the multifaceted issues that come with this problem, from providing resources both in the workplace and to the community as a whole as well as implementing legislation and regulation to provide governmental reform. When thinking of solutions, nations should look beyond the surface to create intricate and comprehensive solutions with unique approaches, addressing both short-term and long-term considerations.

Questions to Consider

- 1. What measures can countries take to ensure equitable access to mental health services for diverse populations?
- 2. How should the committee work to tackle social stigmas against the incidence of mental illnesses?
- 3. What role should education systems play in promoting mental health literacy?
- 4. How can technology and innovations be used to improve access to mental health resources and services?

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