

# United Nations World Health Organization

Topic: The use of genetic engineering

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## I Committee

Health, according to the World Health Organization, is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”<sup>1</sup> The World Health Organization establishment was discussed during the formation of the United Nations in 1945, but it was not until April 7, 1948 that it was completely settled.<sup>2</sup> WHO (World Health Organization) has complete power for the health issues in the United Nations system.<sup>2</sup> “It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.”<sup>2</sup>

## II Introduction and Description of the Issue

Genetic engineering is a technique used by scientists to alter or modify the DNA or blueprint of living organisms. Every organism depends on its DNA and the segments of specific functions in an organism are the genes. Now days, molecular biologists and scientists have discovered enzymes that change the DNA and thus sometimes can cause viruses that infect a cell and insert themselves into the DNA.<sup>3</sup>

Even though scientists have identified a gene in different organisms that can be inserted to many other various organisms, this can cause dangerous and serious reactions. For example, the isolation of the cells responsible for a single trait is extremely hard.<sup>3</sup> Genetic engineering can also obstruct diversity in human beings. Additionally, cloning, a form of genetic engineering can be harmful to individuality.

Furthermore, many countries such as the United States are restricting the use of genetic engineering, especially stem cells.<sup>3</sup> Other countries are going bankrupt due to the many high quality research put into genetic engineering.<sup>4</sup>

## III History of the Topic

The use of genetic engineering started since the 1900's. Although it started a long time ago, there have been many arguments against genetic engineering. Many of those arguments are against the human genetic engineering. All include the “established safety issues, the loss of identity and individuality, and human diversity. With therapeutic cloning, issues related to the wilful killing of human

embryos.”<sup>5</sup> The greatest concern of all is a man becoming another man-made thing. One preoccupation is that the cloned child will be dehumanized.<sup>5</sup>

#### **IV Points of View**

This issue has possibly two points of view. In one side, countries argue that genetic engineering helps society as a whole. They argue that the use of it creates gene therapy or the medical treatment of repairing or replacing a defective gene.<sup>6</sup> Also that a pregnant woman could choose to have their “foetuses screened for genetic defects.”<sup>6</sup>

The other side argues that the use of genetic engineering does not help society. They believe that it causes “the loss of identity and individuality, and human diversity. With therapeutic cloning, issues related to the wilful killing of human embryos.”<sup>5</sup>

#### **V Case Studies**

**United States:** The House Representatives passed a bill banning human cloning, not only for reproduction, but for medical purposes too. “The Human Cloning Prohibition Act, makes it unlawful to: “1) perform or attempt to perform human cloning, 2) participate in an attempt to perform cloning, or 3) ship or receive the product of human cloning for any purpose.”<sup>5</sup> The Act has penalties of up to 10 years imprisonment and \$1,000,000 or more for breaking the law.<sup>5</sup> The White House also opposes “any and all attempts to clone a human being; [they] oppose the use of human somatic cell nuclear transfer cloning techniques either to assist human reproduction or to develop cell or tissue-based therapies.”<sup>5</sup>

**European Union:** The European Union is totally in favour of the use of genetic engineering. Nonetheless, “each individual must receive approval before it can be sold as seed or used in food and feed.”<sup>7</sup> Approval is granted only under certain conditions.<sup>7</sup> One of the conditions includes: “the product must be safe and cannot pose threats to human or animal health. It also must be safe for the environment.”<sup>7</sup>

#### **VI Possible Solutions**

One of the possible solutions is to not use genetic engineering in any way possible. Additionally, if a country does not agree with what was mentioned above, the country can use genetic engineering in a way that it will not harm humans, animals, and the environment.

#### **VII Current Status**

The UN made research centres in developing countries to promote studies of the use of genetic engineering. Countries, such as Iceland, have gone bankrupt because the money is used in too much research of genetic engineering. Also, countries, such as Russia and the United States, are totally against any use of genetic engineering, in which President Obama does not want to participate in providing research for this.

## VIII Conclusions

The use of genetic engineering is growing more every day. There are a lot of positive and negative consequences. Overall, many of the effects are turning out to be positive. Although, the use of genetic engineering reduces individuality and diversity and it kills "unborn" human beings (embryos). In conclusion, the use of genetic engineering should be banned and there should be a penalty for breaking the law.

## IX Important Questions

As a delegate, you must consider the following questions about your country: Is your country in favour or against genetic engineering? What can your country do to solve this problem? How much is country spending on genetic engineering projects? Has your country been part of a resolution or treaty that reduces the use of genetic engineering?

## X Bibliography

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