



World Health Organization

WHO

*Topic A: Dangers of Assisted
Reproduction in Developing
Countries*

ALEXMUN 2017

Dear Delegates,

It's our pleasure to welcome you to Alexander Bain's 2017 United Nations Model. Each member of this committee is part of the success of this event, and so, we gladly invite you to help us make this model a fun and learning experience.

My name is Ana Sofia Ferrari, your committee's president. I hope you enjoy being a part of Alexmun's World Health Organization committee. I'm currently attending my 3rd semester of high school at the Bachillerato Alexander Bain. Throughout middle school I was a member of Alexander Bain's debate club, which helped me develop different skills such as communication, investigation, and teamwork.

This year's chair will be formed by Margot Jirash as the Moderator, Ana Paola Amor Arredondo as the Conference Officer and Daniela Manzanarez as the Political Advisor. Every member of our staff encourages you to make this event a learning experience that will truly help you strengthen your abilities.

Our committee plays an important role as part of the United Nations given that the World Health Organization has a major responsibility over the improvement and development of global health in many aspects.

This year's World Health Organization topics will be:

- *Assisted Reproduction in developing countries.*
- *Reproductive cloning of human beings: status of international debate.*

A productive debate is awaiting, in which realistic plans, ideas and solutions will be created in order to have a reasonable negotiation that will lead us to the pursuit of peace. We expect nothing less than a remarkable performance, and so we hope you prepare yourself for the model accordingly.

This background guide is only the first step in preparation for this event, as we also expect you to read Alexmun's policies regarding plagiarism, dresscode, and evaluation in order to enjoy a successful event. We are looking forward to seeing you work with enthusiasm and wish you the best of luck!

if you have any questions or doubts please do not hesitate to contact us.

Sincerely,

The chair of the World Health Organization committee.

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2. Committee's Brief

When diplomats gathered in 1945 to establish the United Nations, one of the topics discussed was that of creating a global health organization. Three years later, in 1948, The World Health Organization was created. Prior to its establishment, 61 countries signed its constitution, and as of 2015 it consists of 194 member states, (all Member States from the United Nations with the exceptions of Cook Islands and Niue).

As its name suggests, the organization's role has been to serve as the authority of health within the United Nations and lead global health matters. Some of its first priorities were to prevent the spread of malaria, tuberculosis, sexually transmitted infections, improve maternal and child health, nutrition, and environmental hygiene. Years after the formation of these first goals, child deaths almost halved, going from an estimated of 90 deaths per 1000 live births, to 46 deaths per 1000 live births in 2013, as well as the number of women that died due to complications during pregnancy, which almost halved as well. The spread of HIV has reversed, going from 3.4 millions in 2001 to 2.1 millions in 2013. Likewise, the global target of increasing access to safe, drinking water was reached by 2010. These are just a few examples of many successful cases the World Health Organization has achieved.

However as new problematics arise, the Organization has had to adapt and change to keep up with them.

World Health Organization remains committed to the principles established in the preamble of its constitution, which states the following:

*"Health is a state of **complete physical, mental and social well-being** and not merely the absence of disease or infirmity; The enjoyment of the highest attainable standard of health is **one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition**; The **health of all people is fundamental** to the attainment of peace and security **and is dependent on the fullest cooperation of individuals and States**; The achievement of any State in the promotion and protection of health **is of value to all**; Unequal development in different countries in the promotion of health and control of diseases, especially communicable disease, **is a common danger**; Healthy development of the child **is of basic importance**; the ability to live harmoniously in a changing total environment **is essential to such development**; The extension to all peoples of the benefits of medical, psychological and related knowledge **is essential to the fullest attainment of health**; Informed opinion and active co-operation on the part of the public are of the **utmost importance in the improvement of the health of the people**; **Governments have a responsibility for the health of their peoples** which can be **fulfilled only by the provision of adequate health and social measures.**"*

3. Historical Background

At the end of the 19th century, scientists started thinking of the *in vitro fertilization* as a viable option to fight infertility. In 1890, British zoologist and embryologist doctor named Walter Heape, figured out a way to successfully transfer rabbit embryos into a Belgian rabbit. The product of this pregnancy was 6 healthy rabbit babies, but most scientists doubted his methods.

More than half a century later, in 1959, Doctor Chang proved them wrong experimenting with rabbits once more. Thanks to Heape's studies, scientists started believing that they could create life in a laboratory, as most of those experiments were created with blood plasma serum or other fluids.

In 1949 a complex method in which a 7 cell rabbit survived until it was a Blastocyst, later on proved that there were easier methods that provided the same result.

On the first term of the 20th century, a huge medical improvement was discovered: scientists already knew the development phase by phase of most mammals and therefore started studying the human embryo development instead. This helped the study of the fertilization step by step, but it wasn't until 1954 that scientists started to study the fecundation of the Ovum on the first 7 days (Pre-implantation period).

The experimentation on humans has gone through several steps; many years ago scientists believed they only had to join a sperm and an egg for fecundation to happen, but later on concluded there were different conditions needed for it to happen. In 1951 Chang and Austin discovered the phenomenon of spermatic training which was a series of changes the sperm goes through so they can be a part of fecundation. After this discovery, scientists figured out the main reason conceptions weren't possible. In 1959 Chang managed to give birth to some rabbits using a different method than the one Heape had used.

In the late 1960s scientists started to use the Laparoscopy and the Steptoe to get a clear view of the pelvic organs. This was the best technique to get the oocytes.

In 1978 the first in vitro conception was possible thanks to the gynecologist Patrick C. Steptoe and the biologist Robert G. Edwards on England, this team had previously conceived a pregnancy but ended up in a miscarriage.

The following in vitro pregnancies were conceived in 1984 on the United States of America followed up by Spain on the same year and later on Chile managed to conceive an in vitro pregnancy as well, being the first on South America.

4. Actions and Agreements

The World Health Organization has already taken action on this topic. As a matter of fact, in the 52nd World Health Assembly in 1999, it was requested that the World Health Organization reviewed recent developments in the field of Assisted Reproduction Technologies (ART's) as well as their social and ethical implications.

In response to this request, the WHO Department of Reproductive Health and Research gathered a meeting on the medical, ethical and social aspects of assisted reproduction from the 17th to the 21st of September of 2001. In 2002 there was a meeting that resembled to the previous one.

In September of 2001, WHO organized a forum for interdisciplinary discussions towards as many interested parties as possible. More than 40 participants from 22 countries took part in the meeting; they included clinicians, embryologists, social scientists, ethicists and consumer representatives. The objectives of the meeting were:

- (a) To review and assess recent developments in ART
- (b) To identify unresolved issues in the field
- (c) To provide recommendations for future research

WHO has received several requests from developing countries for advice on how to handle the introduction of ART in their often resource-poor settings. The number of ART clinics in such settings is increasing and infertility consumer groups have become a force in several developing countries.

The situation on cloning was not analyzed and discussed as it has been the subject of previous meetings held by WHO. Also, artificial insemination was not considered because it was covered by the WHO Technical Report published in 1992 and an update was not deemed necessary the most recent WHO meeting in this area, provided one opportunity for such debate.

5. Development of the conflict

There are many couples around the world that suffer from the inability to have children. This fact has provoked the Assisted Reproductive Technology (ART) to become more demanding and growing with time in all regions. Nevertheless, this technology is too expensive, and there's a low percentage of successful results (being this 30%), in which developing countries with poorly developed health services are still struggling with infectious and chronic diseases.

In 2001 WHO convened a meeting on "Medical, Ethical and Social Aspects of Assisted Reproduction" to examine issues surrounding the treatment of infertility. The meeting objectives were:

1. To review and assess recent developments in ART
2. To identify unresolved issues in the field
3. To provide recommendations for future research

In the meeting the topic of progress, that began with the overview of the situation in developing countries, where the percentage of infertility is higher and "private ART services are being set up in response to the needs and demands of individuals".

The uses of ART depend on the influences of the specific cultural and social context in which the people with infertility were born or raised, because of the manipulation of sperm, oocytes and embryos raises numerous questions of which the answers are not certain, and involve strong emotions.

"In the 25 years since the birth of the first baby resulting from *in vitro* fertilization, there have been advances in scientific techniques and medical applications of ART", but there are many areas that must still be investigated. There have been some concerns raised about the child that is produced, and there are limited experiences, especially for the newer techniques. Because of the effort, ART's have become available in more countries.

Infertility in most developing countries are a product of infections, which can create problems specially for women, in terms of social stigma, economic, hardship, social isolation, and even violence, as studies have found that the childless women in developing countries are often abandoned by their husband, subjected to violence or treated as servant by the husband's family, as it is an old tradition to produce an heir.

"Many people would not consider infertility a disease itself, however it can certainly be said to be a social and public health issue as well as an individual problem. It is not surprising that there is a growing demand for services that can help infertile couples to conceive. This however makes (among other aspects) ART services expensive and controversial, but this have not prevented their appearance in developing countries.

ART's in developing countries however, lack the proper legislation and care, putting women's life at risk in the process. These countries have poor health services, and are still battling diseases such as malaria and tuberculosis. The combination of poor attention from the government and poor sanitary conditions has caused the use of ART's to become an issue of importance. Although some countries have started imitating developed countries by implementing legislation and restrictions, ART's in developing countries are still a threat to life and so should be addressed promptly.

ART, country's perspective

"The view that the provision of ART services is inappropriate in developing countries takes no account of the great heterogeneity of the developing world. Countries classified as developing vary enormously in their level and pace of development, as well as in their cultural, moral and religious values. Some countries already have the laboratory facilities and personnel to deliver sophisticated medical services, as well as an emerging middle class that has the financial capacity to pay for such services. On the other hand, in a number of countries, strong religious opposition to ART on ethical grounds has meant that there has been little or no development of services. The WHO meeting on assisted reproduction heard reports on the current situation in a number of developing regions and countries."

India

"There is a huge stigma attached to childlessness in Indian society, particularly for women, and couples who can afford to do so will go to great lengths to obtain treatment for their infertility. Anjali Widge of the Population Council, New Delhi, reported that, in 1999, there were about 60 centers offering ART in India, almost all in the private sector. An evaluation of the few existing public sector centers is currently being considered, with the expectation that it may lead to their strengthening. There is, unfortunately, no monitoring or regulation of ART centers, and little discussion of the moral, ethical and social issues raised by the technologies. The first case of surrogate motherhood in the country in 1997 brought to the fore the need for clear ethical guidelines on ART; such guidelines have recently been developed by the Indian Council of Medical Research, although they have not yet been implemented."

Latin America

"Florencia Luna, from the University of Buenos Aires, Argentina, reported on the situation in Latin America. Stressing that the countries of the region are in fact very diverse, she noted nevertheless the widespread influence of the Catholic Church, and the large gaps in most of the countries between the rich and the poor. In general, ART is not provided in public hospitals, and the poor generally have no access to these services. This has engendered a feeling of discrimination and resentment, especially in countries, such as Argentina, that have a tradition of strong public health systems. Very few countries in the region have legislation or formal regulations on ART. In some cases, legislation is deliberately not sought because of a fear that it would be overly restrictive, given the influence of the Catholic Church. There appears, however, to be a scientific consensus that ART should be provided only to infertile, heterosexual couples, and that every cryopreservation programme should be linked to a programme of donation or adoption of embryos. These issues are, in fact, highly controversial, but there is surprisingly little dialogue between the various concerned parties."

Middle East

"Prevention and treatment of infertility are of particular significance in the Middle East, because a woman's social status, dignity and self-esteem are closely related to her ability to have children. It might therefore be expected that ART would have been welcomed in the area. However, as noted by Gamal Serour of the International Islamic Center for Population Studies and Research, Cairo, Egypt, the techniques raise various religious and cultural issues, and it was not until the mid-1980s that ART centers started to be established in the region. One of the stumbling blocks to acceptance of the techniques was the unacceptability to the main religious groups of the involvement of a third party in the act of procreation. Thus, in most countries of the region nowadays, artificial insemination using the husband's sperm is allowed, but not techniques that use gametes from outside the couple. Another factor delaying the establishment of ART centers was their cost. Most centers are in the private sector and the cost to the patient is still quite high in relation to average income."

Ethical and legal issues

"ART, whether it is fairly simple artificial insemination or intracytoplasmic sperm injection separates reproduction from sexual intercourse, but still involves a man and a woman. Nevertheless, some people reject ART as intrinsically morally unacceptable. Such objections are typically based on either religious belief or traditional assumptions about the nature of relationships and the role of the family.

Even those who accept the idea of in vitro fertilization as treatment for an infertile heterosexual couple in a stable relationship might have reservations about making such treatment available to other individuals.

The objections are often based on preconceived ideas of what should constitute a family unit. However, the reality in many countries is that families vary enormously in their composition, and there is no convincing evidence that children from conventional families do significantly better than others.

The techniques themselves raise a number of problematic issues. For example, when embryos are formed outside the body. Embryos can now be screened in vitro for a wide range of genetic disorders, and those found to be affected discarded.

While most people would accept this as a way of avoiding the transmission of serious sex-linked impairments, many would regard it as ethically unacceptable if done simply for parental preference. Nevertheless, it is acknowledged that, in some countries, sex selection in this manner takes place"

"In many countries, questions of parentage and legitimacy of children born as a result of ART involving a donor are unresolved. Indeed, many couples who have had a child as a result of ART would prefer to keep it secret, and may not even tell the child."

Source: United Nations. "Progress in Reproductive Health Research". United Nations: United States, 2003. Found online at: <http://www.who.int/reproductivehealth/publications/infertility/progress63.pdf>

6. Questions

1. *How much has assisted reproduction helped reproduction in general?*
2. *How do the current problems of the world affect assisted reproduction (especially in developing countries)?*
3. *What are the advantages and disadvantages of assisted reproduction?*
4. *What are the main risks of using ART's in developing countries?*
5. *How are the prospects of assisted reproduction in developing countries?*
6. *Why is assisted reproduction relevant at the moment?*
7. *How can current issues on assisted reproduction be fixed?*
8. *Is assisted reproduction an individual need or a social priority?*
9. *How can developed countries assist developing countries in the implementation of the ART's?*
10. *What kind of restriction and agreements exist or should exist regarding ART's?*

7. Glossary

-Assisted reproductive technology (ART): all treatments or procedures that include the in vitro handling of both human oocytes and sperm or of embryos for the purpose of establishing a pregnancy.. ART does not include assisted insemination

-Delivery: the expulsion or extraction of one or more fetuses from the mother after 20 completed weeks of gestational age.

-Delivery rate after ART treatment per patient: the number of deliveries with at least one live born baby per patient after a specified number of ART treatments.

-Fertilization: the penetration of the ovum by the spermatozoon and combination of their genetic material resulting in the formation of a zygote.

-Fetal death (stillbirth): death before the complete expulsion or extraction from its mother of a product of fertilization, at or after 20 completed weeks of gestational age.

-Fetus: the product of fertilization from completion of embryonic development, at 8 completed weeks after fertilization, until abortion or birth.

-Full-term birth: a live birth or stillbirth that takes place between 37 and 42 completed weeks of gestational age.

-In vitro fertilization (IVF): an ART procedure that involves extracorporeal fertilization. Induced abortion: the termination of a clinical pregnancy by deliberate interference that takes place before 20 completed weeks of gestational age (18 weeks after fertilization) or, if gestational age is unknown, of an embryo/fetus of less than 400 g.

-Infertility (clinical definition): a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse.

-Neonatal death: death of a live born baby within 28 days of birth.

-Post-term birth: a live birth or stillbirth that takes place after 42 completed weeks of gestational age.

-Preterm birth: a live birth or stillbirth that takes place after at least 20 but before 37 completed weeks of gestational age.

-Zygote: a diploid cell resulting from the fertilization of an oocyte by a spermatozoon, which subsequently divides to form an embryo.

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