

## Ethical dilemmas in medicine. The interruption of pregnancy in woman

Carlos Gual-Castro\*

National Academy of Medicine and National Academy of Science Former President; Biology of Reproduction Department, Family Planning Clinic, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico

### Abstract

*Pregnancy interruption or abortion may be spontaneous or induced for medical, legal, demographic, and personal reasons. Different events that are present during the woman's gravid period were described, paying attention to the differences in between fertilization and conception. These issues are very important because people or institutions mix these concepts and determined that pregnancy or conception starts at fertilization in opposition to the actual medical and scientific knowledge. In Mexico there are several millions of spontaneous and induced abortions without medical care, responsible for the high maternal-infant mortality rates. To avoid this undesirable situation, it has been proposed to follow the established WHO guidelines and adopt national health policies to re-orientate population goals on life quality, gender equity, universal public health services, and to promote the new holistic concepts of reproductive and sexual health such as: family planning, use of anti-fertility methods, adolescent reproductive health, sexually transmitted diseases, maternal and newborn health, peri- and post-menopausal women's health, and prevention, diagnosis, and opportune treatment of mammary, cervical-uterine, and ovarian cancers. Finally, it is recommended to revise our national health policies and existing laws on abortion de-penalization.*(Gac Med Mex. 2016;152:475-9)

**Corresponding author:** Carlos Gual-Castro, cgual@prodigy.net.mx

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Pregnancy interruption in women, traditionally referred to with the term "abortion" and without making any distinction of the causes or reasons conditioning this interruption, has been practiced since ancient times in numerous countries of the world as one of the most effective birth control methods, although it should be made clear that in Mexico it has never been used for such purposes. However, the word abortion is currently indistinctly used for natural or spontaneous miscarriage, as it might be, among other causes, owing to congenital dilatation of the female uterine cervix where, at between 3 and 5 months of pregnancy, the growing

fetus dilates the cervix and causes a premature delivery (or abortion), at a period where the fetus is not sufficiently developed to survive outside the uterine cavity. Of course, there are other causes for abortion within the first days, weeks or months of pregnancy and, to abbreviate, I will restrict myself to mention that in which the doctor intervenes to save one life, which he/she is obliged to: the life of the pregnant mother. That is the case of ectopic pregnancies and, in particular, pregnancy in one of the Fallopian tubes (Fig. 1). This situation requires surgical extraction of the embryo or fetus within the first weeks or months of pregnancy

#### Correspondence:

\*Carlos Gual-Castro  
San Buenaventura 620  
Club de Golf México  
C.P. 14620, Ciudad de México, México  
E-mail: cgual@prodigy.net.mx

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**Figure 1.** This extraordinary picture of an embryo inside its intact amniotic sac was taken, after a surgery that was required owing to an ectopic pregnancy (in the fallopian tube), by the doctor and photographer Robert Wolfe at the University of Minnesota, USA, in 1972.

before natural growth of the embryo or fetus tears the tube walls and produces abundant bleeding and death of the fetus and probably also of the mother if she does not receive attention immediately in a hospital unit.

As it can be deduced, this and many other situations require a detailed definition on how and when pregnancy starts and, in general, differentiate the phases of the female pregnancy cycle, in order to be able to establish what is spontaneous or physiological pregnancy interruption, or when this interruption is induced for specific reasons, either of medical, legal, political or personal nature.

Incredible as it may seem, today, well into the 20<sup>th</sup> century, there are still conflicting opinions on this issue, and it is for this reason that I will offer a brief definition about which, in my opinion, are the events occurring during the female pregnancy cycle:

- Childbearing age women. From the beginning of puberty until the onset of menopause.
- Ovulation. It is the phenomenon by virtue of which the Graafian follicle, once mature, breaks open and releases the ovum or germ cell from its cavity.
- Fertilization or insemination. In its obstetric sense, it is the binding of the female (ovum) and male (spermatozoid) gametes, generally in the female fallopian tube, 5 to 7 days after ovulation.
- Pre-embryo. Starting from fertilization or insemination and subsequent cell division until the blastocyst formation.

- Implantation or conception. It refers to blastocyst implantation onto the uterine endometrium approximately 8 or 9 days after ovulation and that is the result of ovum fertilization and ensuing cell division since, when implanted, it allows for pregnancy initiation or conception to be accurately determined.
- Embryo. It is the product of the blastocyte and its syncytiotrophoblast implantation on the uterine endometrium, about 4 to 6 days after fertilization, until the end of the twelfth week after implantation or conception.
- Fetus. It is the product of the uterus-implanted embryo from the thirteenth week of conception until its expulsion or extraction.
- Pregnancy. It is the period comprised between blastocyte implantation or conception initiation, 8 or 9 days after ovulation, until expulsion or extraction of the fetus and its annexes (placenta and umbilical cord).

If we analyze these definitions, the first objection that in the past has been expressed is that the terms fertilization and conception are synonyms and that, therefore, pregnancy starts the moment female and male gametes are fused and that, from that moment, they constitute a new being and, according to the Constitution of the State of Jalisco, legal protection of the life of every human being is established since the moment of fecundation. This issue has already been addressed more than 4 years ago at the National Academy of Medicine, in a seminar about Law Implications in Medicine with the participation of members of the Academy, one Minister and civil servants of the Supreme Court of Justice of the Nation, the National Commission for Medical Arbitration and the Mexican Bar, *Colegio de Abogados A.C.*; they arrived to the conclusion and ruled in a document that it wouldn't be possible expounding in such a brief presentation, that fertilization and conception are completely different terms and that pregnancy starts at the moment of implantation, just as previously stated, where it is also established that the embryo is the result of the blastocyst implantation on the maternal uterine endometrium.

Now, having explained all this, it is necessary to remember the first lines of this presentation, where the fact that abortions occur either spontaneously or by congenital defects or due to conditions altering the female reproductive system is established, and that in a high percentage they go unnoticed by women, as in cases where fertilization occurs but the pre-embryo is never implanted on the endometrium and is lost during menstrual bleeding without the woman noticing.

However, pregnancy interruption can also be carried out for medical reasons that force specialists to perform surgical procedures to save the woman's life, or else to be deliberately practiced not only for medical reasons but for other population-related, legal, ethical and social reasons, or even for reasons of familial or personal nature for the woman.

This is not the moment to individually discuss these situations, since they have been addressed for many decades or centuries, and the resulting opinions have been published in books that, filed together, might occupy an entire library. For this reason, I will only restrict myself to recommend the reading of the International Discussion that took place in Hot Springs, Virginia, in the USA from November 17 to 20, 1968, published under the auspices of the Association for the Study of Abortion, Inc in 1970, with the original title in English "Abortion in a Changing World"<sup>1</sup> and translated into Spanish in 1972 as "*El Aborto en un Mundo Cambiante*"<sup>2</sup>. Even when the only thing that I can suggest is that it would be very valuable reading this book and learning the opinions of 114 participants and observers from 19 countries, including two specialists from Latin America and women interested on the subject from their respective professional positions, who gathered in a conference where the welcoming words were pronounced by John D. Rockefeller III, with the title "Reforms to the Law of Abortion. The Moral Basis".

From that brilliant presentation, I want to highlight the following paragraphs: "One fundamental difficulty is that in the discussion on abortion there is a tendency to restrict the moral issue to the question of the rights of the fetus. Many sincere and devote people believe that since the moment of conception there is human life and that, therefore, it is morally wrong to abort. Others are of the opinion that until the life of the fetus is viable outside the uterus, it is not human life. While we all would like having a definitive answer to this question, it occurs to me that we will never have it. Any decision for the common good will be arbitrary to others".

The question we all ask ourselves is: the voluntary act of a woman of putting an end to an unwanted pregnancy, will continue to be considered as a crime (from the legal point of view) or as a sin (from the religious point of view)? In a world and an era of deep changes on population explosion and family planning, in the middle of the struggle of women for their emancipation, is it possible to continue facing pregnancy interruption in the light of the same criteria of the past?

I also think that this problem will go on for many years without reaching an agreement, but what I do

believe possible is using the scientific advances achieved on the last decades of the 20<sup>th</sup> century to palliate this unfortunate situation. Currently, the only way to avoid an unwanted pregnancy interruption is precisely by following medical practice's basic rule, i.e., "preventing diseases rather than having to cure them". These preventive procedures are not new to the history of human reproduction. Already in 1882, Dr. Aletta H. Jacobs, the first female doctor in medicine at the University of Groningen, established in Amsterdam a family planning clinic, and a few years later, Margaret Sanger opened on October 16, 1916, the first family planning clinic in Brooklyn NY, in the USA. However, several decades went by for these programs to be used with the purpose to avoid the rapid population growth observed over the course of the 20<sup>th</sup> century. It was in 1952 when the government of India established the first National Family Planning Program with demographic purposes and, later, in the decade of the 60's, the psychological barrier of 3 thousand million inhabitants was broken (in 2015, a figure of more than 7,000 million was reached). Seven countries adopted family planning national programs, and already by the beginning of the decade of the 80's, more than 120 countries, including Mexico (1977-1980 under the leadership of Dr. Jorge Martínez Manautou<sup>3</sup>), supported these programs, out of which 55 had demographic goals as main objectives, and in 65 of them, particularly in developing countries, governments that sponsored these programs were focused on supporting human rights and the development of reproductive health. The decisive step to generalize the latter posture occurred in September 1994 during the International Conference on Population and Development, in Cairo, Egypt, under the auspices of the United Nations Organization, with approximately 11,000 participants, including 180 countries' official representations, specialized agencies, as well as non-governmental organizations, where population-related goals were reoriented in national health policies towards the quality of life imperative. There, a consensus was reached that states shall adopt all measures to guarantee, based on men and women equality, universal access to health services and promote the new holistic concept of Sexual and Reproductive Health. With this regard, the WHO defined reproductive health and its care as:

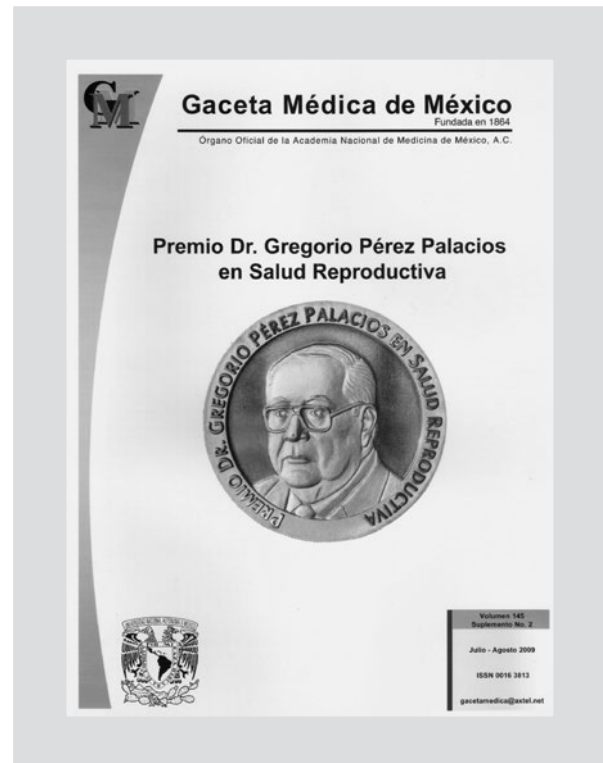
"Reproductive health is a state of physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health, therefore, implies that people are

able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the rights of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as to other methods of their choice for regulation of fertility which are not against the law, and the right of access to the most appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. In the same line of the reproductive health definition, its care is defined as the large variety of methods, techniques and services that contribute to reproductive health well-being to solve its problems. Sexual health is also included, the purpose of which is the enhancement of quality of life and personal relationships, and not merely counseling and care related to reproduction and sexually transmitted diseases.”

A few months after the Cairo Conference in Egypt, the Mexican government considered reproductive health as one of social development strategic axes and, thus, in February 1995, Dr. Juan Ramón de la Fuente, then Minister of Health, created a Reproductive Health Inter-institutional Group, comprised by 12 institutions of the public sector and 6 non-governmental organizations, coordinated by the Ministry of Health itself, through a new Reproductive Health Directorate General in charge of Dr. Gregorio Pérez Palacios, where a national program, possibly the first one in Mexico and Latin America, was established and promoted, with the new holistic vision of reproductive health, and where actions were established in the areas of family planning, maternal-child care and female health, with an emphasis on adolescent sexual and reproductive care, care of women during pregnancy, childbirth and puerperium, prevention and management of birth defects, care of women during peri- and postmenopause, and prevention and control of cervical and breast cancer.

Although many of these programs have continued over the past 20 years in some high-specialty institutions, currently there are no programs or publications about the holistic concept of sexual and reproductive health in the main health sector and middle and higher education institutions.

In the National Academy of Medicine, with the purpose to stimulate diffusion and research in these areas, an Annual Award for Research in the field of Reproductive Health was established in 2001, which disappeared in 2005; however, a group of academicians, National Academy of Medicine former presidents, Ministers of the Ministry of Health



**Figure 2.** Tribute of the National Academy of Medicine to Dr. Gregorio Pérez Palacios for having established in Mexico in 1995 the new holistic concept of Sexual and Reproductive Health.

and National Autonomous University of Mexico Rectors decided to propose, for the years 2008 to 2010, a new award contemplating some new areas of the original reproductive health holistic concept, and that would carry the name of the prematurely deceased Dr. Gregorio Pérez Palacios (1940-2009), as a tribute to his work in this new sexual and reproductive health orientation (Fig. 2)<sup>4</sup>.

The eight areas, already updated, comprised by this award were the following:

- Family planning and development of contraceptive methods
- Adolescent sexual and reproductive health
- Sexually transmitted infections
- Perinatal health, including pregnancy, childbirth and puerperium
- Female health during peri- and postmenopause
- Infertility and assisted reproduction
- Birth defects and human reproduction genomics
- Prevention, diagnosis and opportune management of breast, cervical and ovarian cancer

Finally, it is important mentioning that in Mexico there are also institutions where, legally and with very well established criteria, such as in the Distrito Federal (D.F.) Government medical services and several private organizations in the D.F. and some states of the

Republic, abortion is practiced before 12 weeks of pregnancy, i.e., at the embryonic phase. The results are satisfactory: of more than 170,000 cases attended to in the last 2 years, maternal death cases have been minimal, if at all one or two patients, a fact that is in contrast with the elevated maternal-child mortality occurring in the entire country since many decades ago, with at least 500,000 spontaneous or induced abortions estimated to occur in the Republic, where health institutions do not intervene. However, in the last 3 years, the Ministry of Health informed that, in the Health Sector Program, and particularly in the Maternal and Perinatal Health program, a 6.6-point reduction is required to achieve, by 2018, a maternal mortality decrease in Mexico from 90% occurring in 1990, to 30% in 2018, which in spite of being highly significant, there are still some years left to meet the goals established for the millennium by the WHO.

## Conclusions

It is advisable reviewing, in all health institutions of the country, the policies related to the holistic concept of Sexual and Reproductive Health, as well as the laws decriminalizing abortion, since these are not accepted in most States of the Republic, with exception of those already approved by the D.F. Government.

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