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When does a fetus become a person?

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Abstract

One of the most controversial questions in modern medicine, bioethics and science is dilemma about the fetus being a person. To discuss that question one must first define personality. The list of necessary conditions for being a person includes features like intelligence, self-awareness, self control etc. The infrastructures of those abilities reside in the cortex that is well developed from the 30th week of gestation. From that point of view, every neonate or fetus during the third trimester of gestation is a person, in a moral and ethical context. On the other hand, legal capacity is the ability of a natural person to enjoy rights and obligations. The human being becomes a natural person at the moment of birth. If human life is worth being protected by law only after delivery, for what reason does perinatology exist and perinatologists fight for? Lots of medical treatments, interventions and even surgeries during pregnancy are done for the benefit of the unborn, and not due to the mother's health. From the legal perspective, it is better for a child to be born prematurely than at the right time, since from the moment of birth the child's life is protected by law. From the medical point of view, this must seem absurd, as the best environment for a child to develop is the mother's womb during all nine months of the pregnancy. All the known evidence support the human fetus being a true ontological human individual and consequently a human person in fact if not in law.

INTRODUCTION

This question relates to some of the most exciting and challenging tethical dilemmas facing scientists and medical researchers. We are witnesses of a growing amount of newspaper articles dealing with prenatal life. The problem of abortion is always discussed among all circles of society, but beside that issue, there are very delicate problems regarding forced Caesareans, prosecutions of woman for drug use during pregnancy, fetal protection policies, the use of fetal tissue for transplantation, embryo research, including research on embryonic stem cells and disposition of frozen embryos. All of these ethical dilemmas raise the question of the moral and legal status of the unborn resulting in many scientists, medical researchers, philosophers and politicians attempting to answer the everlasting dilemma of whether embryos and fetuses are part of the pregnant woman's body or are persons? If they are thought to be persons they are considered as unborn children. If they are considered as a part of the pregnant woman's body the question is imposed about their use as research tools and a source of tissue or stem cells.

Different definitions of the unborn are raised in a different context giving rise to the charge of inconsistency. For example, in some countries women have been criminally charged for abusing their fetuses by using drugs during pregnancy. In that situation it is obvious that the fetus is given (personal/human) rights. On the other hand, abortion which takes the elementary privilege of the human being and thus represents the ultimate child abuse is legal. The legalization of abortion itself was based in part on the unborn never having been recognized in law as a full legal person. Yet fetuses have been considered as persons for the purpose of insurance coverage, wrongful death suits, and vehicular homicide (1).

In the following text we will try to provide some answers on the moral and legal status of embryos and fetuses. The critical time point of when a fetus becomes a person will have our special attention.

DEFINITION OF LIFE

The answer to the question »How to define human life?« is complicated. Philosophy, theology, psychology, sociology, law and politics evaluate these topics from different points of view. We assume that integration of all would result in a proper/correct definition.

Some authors say that life as such does not exist – no one has ever seen it. Szent-Gyorgy says that the noun »life« has no significance because there is no such thing as »life«. Le Dantez holds that the expression »to live« is too general and that it is better to say a dog »dogs« or a fish »fishes« than a dog or a fish lives (2).

When defining life it should be considered not just life as it is today but as it might have been in its primordial form and as it will be in the future. All present forms of life appear as something completely new. Life, then, is transferred and not conceived in each new generation. Furthermore, the phenomenon of life has existed on Earth for approximately 3.5 billion years. Consequently, although the genome of a new embryo is unique, the make-up of the embryo is not new (3). If life is observed through the cell than every life (and human also) is considered as a continuum. Human cells and mankind have existed on the Earth continuously since the appearance of the first man. However, if definition refers to the single human being or present population, the statement »human life is a continuum« is not acceptable (4).

Individuality is the most essential characteristic of the human being consisting new life, but also all human life forms through evolution, characterized by phenotype, behavior and the capability to recognize and adapt. The human embryo and fetus gradually develop into these characteristics.

Although we should not forget that in the same way today's research is tomorrow's benefit (5) concerning human life conclusions should not be treated one-sidedly, from one perspective. This reality should be regarded in all its richness: the embryo gives the biologist, geneticist substance for consideration, but when talking about the beginning of human life, it requires philosophical – anthropological consideration, theology and social sciences as well. This approach leads to the conclusion that it is necessary to reject reductionism as well as integrals and to find the »golden middle« between these methodologies (6).

WHEN DOES HUMAN LIFE BEGIN?

To find some answers on fetal personality it is first necessary to gain some clarity about when human life begins. This is the central ethical question in many of the debates concerning the passage from conception to birth. This question has been answered in many ways, and depending upon the answer certain ethical problems arise or disappear. Of the many scientific perspectives used to answer this question in these ethical debates, one has been notably absent, i.e. the perspective of an evolutionary biologist. Given that evolution in the central theory of all modern biology, this absence is unfortunate.

The question of when life begins is an easy one to answer for an evolutionary biologist: life began over 3.5 billion years ago and has existed countinuosly ever since without a single microsecond of disruption. All beings alive today are linked to the root of this tree by an unbroken chain of life that extends billions of years into the past (7).

We believe that the beginning of human life is not one question, but three. The first question is, »When does human biological life begin?«, and is a scientific question that can be discussed within a »cluster concept«. A cluster concept is defined by a related set of criteria such as genetic uniqueness, physiologic autonomy, self-regulating, capable of reproduction, and awareness when applied to the human species. It is clear that there are living human beings to whom at least one of the criteria does not apply. For example, a post-menopausal woman or a man with aspermia is undoubtedly alive but both are incapable of reproduction. This example illustrates the disadvantage of the cluster concept: it is clinically useful when only some of the criteria constitute apply (8). If we deeply go into human embryology, we can find two answers, not one. First, we claim that distinct human life begins when there is a distinct entity, the pre-embryo which is the structure that exists from the end of the process of fertilization until the appearance of a single primitive streak. Life does not begin earlier at the fertilization stage because the sperm and egg are alive before fertilization and the zygote is alive after fertilization which led us to the conclusion that life is continuous throughout the entire process of fertilization. Second, we believe that individual human life begins later, with the emergence of the embryo. The pre-embryo, because it can divide into monozygotic twins is a distinct but not individual entity. The embryo, by contrast, can no longer divide into monozygotic twins and so it meets all criteria for being an individual (9).

The second question is, »When do obligations to protect human life begin?«, and is a question of general theological and philosophical ethics. The second question has no authoritative answer, because of irresolvable controversy in world religions and in the global history of philosophical ethics about acceptable methodology and conclusions. Expecting a definitive answer to the second question is an exercise in futility for physicians and professional medical ethics (10, 11).

The third question is, "How should physicians respond to disagreement about when obligations to protect human life begin?", and is a question for professional medical ethics. The answer to the third question, we argue, is that physicians should manage the controversy surrounding the second question by appealing to the ethical concept of the fetus as a patient. It is philosophically sound, respectful of all religious traditions and the person convictions of patients and physicians alike, and clinically applicable (12).

PERSONALITY

Defining personality is very complex. There is still a lack of clear definition of personality. It has often been claimed that the English term 'person' was derived from the Latin term 'persona', which meant a mask as used by an actor in a performance. One dictionary offers »what constitutes an individual as distinct person« but does not define what the »what« is. Another dictionary asserts »the state of existing as a thinking intelligent being«. This definition might lead to the inference that personality increases pro rata with intelligence, or that some people may not have a personality at all if we followed Bertrand Russell's dictum that »most people would rather die than think and many, in fact do«. Ken Stallworthy's Manual of Psychiatry is more helpful with the definition that »personality is the individual as a whole with everything about him which makes him different from other people« because we can distinguish fetuses from one another and from other people. With the next sentence which says that personality is determined by what is born in the individual in the first place and by everything which subsequently happens to him in the second, we are really in the field (13).

It makes sense to ask ourselves what are necessary or sufficient conditions that must be fullfield for being called a person, in a moral or an ethical context. The list included: minimum intelligence, self-awareness, self control, a sense of time, futurity and the past, capability of relating to others, concern for others, communication, control of existence, curiosity, change and changeability, balance of rationality and feeling, idiosincrasy and neocritical functioning. The infrastructures of the above mentioned necessary abilities reside in the cortex that is well developed from the 30th week of gestation and on. From that point of view, every neonate or fetus during the third trimester of gestation is a person, in a moral or an ethical context. The same applies to a grossly malformed fetus. It is still a human individual even if its human nature is not perfect or its functions are not normal. Nobody questions the humanity of a Down syndrome fetus or a child. The same should be said for the live anencephalic fetus or the infant with only brain stem function. It is a human individual even if it lacks a complete brain and usually survives birth by only a few hours (14).

There is no doubt that the embryo and fetus *in utero* ere human individuals prior the birth. The child that is born is the same developing human individual that was in the mother's womb. Birth alone cannot confirme natural personhood or human individuality. This is confirmed by preterm deliveries of babies who are as truly human and almost as viable as those whose gestation goes to full term (3).

Legal capacity, as provided for by civil law, is the ability of a natural person to enjoy rights and obligations. The human being becomes a natural person at the moment of birth. If human life is worth being protected by law only after delivery, for what reason does perinatology exist and develop and perinatologists fight for? Today, numerous medical treatments, interventions and even surgeries during pregnancy are done for the benefit of the unborn child, and not due to the mother's health. From a legal perspective, it is better for a child to be born prematurely than at the right time, since from the moment of birth the child's life is protected by law. From the medical point of view, this must seem an absurdity, as the best environment for a child to develop is his/her mother's womb during the period of the nine month pregnancy. All the known evidence support the human fetus as being a true ontological human individual and consequently a human person, in fact if not in law.

REFERENCES

- STEINBOCK B 1992 The interest view. In: Steinbock B (ed) Life before birth: The moral and legal status of embryos and fetuses. Oxford University press, New York.
- KURJAK A 1992 When does human life begin. Encyclopaedia Moederna 3: 384-90
- KURJAK A 2003 The beginning of human life and its modern scientific assessment *Clin Perinatol 30*: 27-44
- GILBERT S F 1991 Developmental biology. Sinauer Associates, Sunderland (MA).
- ACOG Committee Opinion 1994 Committee on ethics: preembryo research: history scientific background and ethical considerations. *Int J Gynecol Obstet 45*: 291-301.
- 6. SERRA A, COLOMBO R Identity and status of the human embryo: the contribution of biology. *In*: de Dios Vial Correa J, Sgreccia E (*ed*). Citty del Vaticano: Libreria editrice Vaticana, p 128-69
- TEMPLETON A R 2005 Haplotype trees and modern human origins. Yearb Phys Anthropol 48: 33–59
- KURJAK A, CARRERA J M, McCULLOGH L B, CHERVENAK F A 2007 Scientific and religious controversies abiut the beginning of human life: the relevance of the ethical concept of the fetus as a patient. J Perinat Med 37: 376-83
- JIRASEK J E 2001 An atlas of the human embryo and fetus. Parthenon Publishing, New York-London.
- McCULLOGH L B, CHERVENAK F A 1994 Ethics in obstetrics and gynecology. Oxford University press, New York.
- 11. HARRISON B W Abortion: religious perspectives. *In:* Reich W T (*ed*) Encyclopedia of Bioethics. 2nd ed. New York: Macmillian.

- 12. CHERVENAK F A, McCULLOGH L B, LEVENE M I 2007 An ethically justified, clinically comprehensive approach to periviabillity: gynaecological, obstetric, and perinatal dimensions. J Obstet Gynaecol 27: 3-7
- BEAZLY J M 1980 Fetal assessment from conception to birth. In: Kurjak A (ed) Recent advances in ultrasound diagnosis 2. Excerpta Medica, Amsterdam, p128-36
- STEINBOCK B 1992 Abortion. In: Steinbock B (ed) Life before birth: The moral and legal status of embryos and fetuses. Oxford University press, New York.