

When does human life begin?

by Dr Brigid Vout

The question of when human life begins has occupied the minds of people throughout human history, and perhaps today more so than ever.

Fortunately, developments in science have provided us with a certain answer to this question. Today any reputable medical or biological textbook will state that *human life begins at fertilisation*, the process by which the sperm from a human male and the ovum from a human female unite to give rise to a new organism, a human zygote. This is also referred to as the moment of *conception*.

After fertilisation, nothing other than nutrition, protection and time is needed for a human zygote to become an embryo, and then a fetus, infant, child, and eventually adult human being. Medical science uses different names to describe the different phases of growth and development of this new, genetically unique, individual living human being. But it is the same unique individual living human being who is present during the respective stages of embryhood, childhood, and adulthood.

From the outset, the human zygote is distinctly different from an ovum or sperm. Ovum and sperm are living human cells, but while they remain distinct cells they are unable to grow and develop into a new human being. It is only after fertilisation that a genetically unique *new* organism with the natural ability to direct its own development and growth comes into being. It makes no sense at all to say “I was once a sperm cell”, or “I was once an ovum”. But it makes perfect sense for each of us to say “I was once an embryo”, in the same way that we can say “I was once a newborn baby”.

A mistaken view

Some people argue that human life begins only when an embryo comes to rest and ‘implant’ in the lining of a woman’s womb, the process that is called implantation. People try to add weight to this argument by using misleading names for the embryo – names like ‘fertilised egg’, ‘fertilised ovum’ or a ‘pre-embryo’.

But there are no good reasons for supposing that human life begins at implantation.

From the time of fertilisation, the single-cell human zygote already has all the genetic material and power to direct its *own* growth and development *as a living human being*. Other events, including implantation in the wall of the womb, are necessary for an embryo’s survival, but they do not change ‘what’ it is.

‘He’ or ‘she’ already is and will remain human.

Why is there such confusion about the scientific fact that life begins at conception?

The answer to this question may lie in the fact that some people have recognised that blurring the definition about when human life begins can be useful – particularly if it helps to foster acceptance of the creation and destruction of human embryos for quality-control exercises, experimentation, drug testing or stem cells. Or if it allows drugs like the ‘morning-after pill’ to be marketed as ‘emergency contraceptives’

despite the fact that they often work, not by preventing conception, but by interfering with the implantation of an existing embryo and causing an early abortion.

Because of this confusion we need to be clear about the scientific facts and able to explain them to others.

When does a human being become a *person*?

Even if everyone agreed about when human life begins, some people would still deny that human embryos are 'persons'. This is a related but quite different question.

To say that someone is a 'person' is to recognise that they have dignity and moral worth. Persons are respected as having the highest value in our moral and legal world and, as such, they are never to be intentionally harmed or exploited.

Well, what does a living human being have to have, or look like, or be able to do in order to be respected and treated as a person?

The matter of human personhood is not a scientific question, but a philosophical one. And again, there is considerable disagreement over the answer. Once we begin to look at some of these different answers, though, we should be able to see that Catholic teaching adopts the most reasonable answer to this crucial question.

Differing views on human personhood

1. Personhood is a status which we grant to each other.

People who adopt this view basically believe that a living human being should be treated as a person if other people, such as the individual's parents or society, decide that they want him or her to be recognised as a person. By this understanding, 'you're a human person because we want you to be one.'

But this notion of personhood is based on personal opinion, laws and customs or even individual whim rather than reason. By this account an unborn child in one country could be recognised *as a person* and have his or her right to life protected, while a similar unborn child in another country would be denied the status of person and aborted with the full backing of the law.

This approach ignores the understanding of innate human equality and dignity which informs our notion of basic human rights and international and common law. The whole framework for a just and peaceful society becomes very shaky if we adopt this definition of personhood.

2. Personhood requires the possession of certain characteristics.

The Australian philosopher Peter Singer is a famous proponent of this position. He argues that human beings have the status of persons only if they have 'ethically relevant characteristics' such as consciousness, the capacity for physical, social and mental interaction, conscious preferences or enjoyable experiences. Basically, to be a person a human being has to have awareness, understanding and control of himself and the world around him.

But this is just Singer's list. Other people propose different lists – longer lists which might include some more human beings or shorter lists which would exclude more of them.

And herein lies one of the most problematic aspects of this approach to personhood – any such list is entirely arbitrary. There is no agreement about which qualities and characteristics matter, let alone about what number or combinations of qualities and characteristics matter.

And without agreement, exactly who is entitled to draw up such a list? Only intelligent, healthy, independent people? This approach is highly susceptible to elitism and self-interest.

If we were to adopt Peter Singer's list, all sorts of living human beings would be deemed non-persons. All children up to about three years of age would be non-persons. Anyone who is in a coma, or anaesthetised or drunk would be a non-person. Anyone who is severely intellectually disabled would be a non-person.

But isn't it just as wrong to kill someone who is severely intellectually disabled, or very drunk, or unconscious, or demented, as it is to kill a young and successful businessman or a philosopher?

This argument does not recognise the significance of 'potentiality' – the ability of a thing, given the *kind* of thing that it is, to have certain properties. Later we will look at an approach to personhood that does include potentiality.

3. Personhood requires the ability to survive outside the womb.

Some people argue that an unborn child cannot be considered a 'person' and have his or her 'right to life' acknowledged until they are viable, that is, able to survive outside the mother's womb.

But this notion cannot be consistently applied across different ages and cultures. Because viability is partly dependent upon access to technological medicine, its timing is a shifting line. By this account a baby born prematurely at 28 weeks after conception in Australia would be a person, but if it had been born in rural Africa it would not be a person. Or a baby born at 28 weeks after conception 50 years ago would not have been a person, but today it would.

The very moral significance of 'independence' is also highly questionable. Are we ever truly independent of other human beings for our survival and wellbeing? No. Our dependence upon others persists well beyond our birth, extending into childhood and adulthood. At various stages and in various states of life – especially during illness, injury, early or old age – we depend upon each other to varying degrees. Our dependence on other human beings is merely a sign of the fact that we share a common humanity.

Along similar lines, some people argue that it is unreasonable to suggest that all human embryos are persons because so many of them do not survive. However, while it is true that many embryos die naturally, we don't really know how many of these early losses are complete fertilisations resulting in a member of the human species in

the first place. For many, perhaps most, the egg and sperm may never have actually joined in such a way as to create a unified, developing human being. In any case, it simply doesn't make sense to say that because a being's future survival is uncertain we may treat him or her as having no claim on life here and now. Logically, that would be like saying that since half of African children die before adulthood, an African child is not a human person.

4. Personhood requires a certain degree of brain function.

People who take this view usually select a point around the second or third month of life in the womb, when there is a certain degree of brain function, to mark the time at which a human being becomes a person. But once again there is no real consensus, or possibility of consensus, about when this in fact occurs. How much brain does the unborn child need to have? How much brain function? Who is to decide how much matters?

If we were to take this approach, consistency would require the judgment that humans with an intellectual disability – irrespective of whether this is a life-long or an acquired state – would not be persons. If this were true we would not have a duty to provide them with love and care, or perhaps even let them be born in the first place.

But do we really want to live in a society which abandons anyone who is intellectually disabled?

There are other problems with this approach as well. It ignores the fact that someone could only grow or develop a human brain if he or she were human already! And, even at later stages of human development, the very idea that personhood depends upon brain function is inconsistent with our experience and understanding of who we are. It suggests that 'I am my brain and only my brain'. Yet few of us would accept that our value and being are exclusively contained in our minds. Our experience of being a human person is so much more than this.

5. Personhood requires that the human being is and will remain an individual.

Some people, rightly pointing out that one of the significant aspects of being a person is our existence as an individual, argue that the embryo is not a human person until about two weeks after fertilisation, because up until roughly this time it is possible for the embryo to 'split' into identical twins.

Again, there are no good reasons for adopting this position. To begin with, there are lots of unanswered questions about exactly what happens in the formation of identical twins. Many plants and animals reproduce by splitting; perhaps a few embryonic humans do as well. Perhaps there are two individuals present from conception, joined together like Siamese twins, which eventually separate.

Whatever the case may be, it does not follow that an embryo is not a person before two weeks of age, simply because it might become two! What we can say for certain is that there is at least one individual human person before twinning occurs.

6. Personhood requires the possession of human nature – membership of the species 'homo sapiens'.

Here, ‘human nature’ is generally understood to mean that of a being who is rational and free, has a body, is an individual, and has a divinely infused soul or what most people would at least acknowledge as a ‘spiritual dimension’.

This account of personhood acknowledges that some of the characteristics which we associate with personhood, such as the ability to know and love, self-reflect and have preferences, are present only as *capacities* or *potentialities* at the outset of a human being’s existence.

It argues that because a human embryo has these capacities, it should be respected as a person because of the *kind of being* that it is, not for what it is able to achieve here and now. This account says that human embryos are persons with potential, not potential persons. They are persons because they have the capacities which are characteristic of personhood.

Certainly, an embryo must develop before it is able to exercise these capacities. But because of the kind of thing that a human embryo is – a very young, living human being – this approach argues that the embryo has a basic right to fulfil its nature.

7. The mere possibility that a living human being is a person is enough to presume his or her personhood.

This approach is usually presented alongside the previous position. It argues that even if we don’t know when or whether a particular living human being is a person, if there is enough reason to suspect personhood, we should presume personhood. What is at stake is so important that if there is any doubt about personhood, we should take a cautious approach and treat that being as a person – that is, with love and respect. After all, we apply the same approach even in sport – if there is any doubt, the player is not out.

Catholic teaching on personhood.

In light of statements and practices throughout the Catholic tradition, and during the pontificate of Pope John Paul II in particular, the Catholic Church teaches that *every living human being should be regarded and treated as a person from the moment of conception*. Catholic teaching accepts, therefore, the arguments which are outlined above in numbers 6 and 7.

Pope John Paul II has clearly taught this in the encyclical *Evangelium Vitae* (“The Gospel of Life”). See box.

Pope John Paul II on human life

“...from the time that the ovum is fertilised, a life is begun which is neither that of the father nor the mother; it is rather the life of a new human being with his own growth. It would never be made human if it were not human already. This has always been clear, and...modern genetic science offers clear confirmation. It has demonstrated that from the first instant there is established the program of what this living being will be: a person, this individual person with his characteristic aspects already well determined. Right from fertilisation the adventure of a human life begins, and each of its capacities requires time – a rather lengthy time – to find its place and to be in a position to act.” (CDF, *Declaration on Procured Abortion*, nn.12-13) Even if the

presence of a spiritual soul cannot be ascertained by empirical data, the results themselves of scientific research on the human embryo provide a “valuable indication for discerning by use of reason a personal presence at the moment of the first appearance of a human life: how could a human individual not be a human person?” (CDF, *Donum vitae*, I, n.1)

...what is at stake is so important that, from the standpoint of moral obligation, the mere probability that a human person is involved would suffice to justify an absolutely clear prohibition of any intervention aimed at killing a human embryo. Precisely for this reason... the Church has always taught and continues to teach that the result of human procreation, from the first moment of its existence, must be guaranteed that unconditional respect which is morally due to the human being in his or her totality and unity as body and spirit: “*The human being is to be respected and treated as a person from the moment of conception*; and therefore from that same moment his rights as a person must be recognised, among which in the first place is the inviolable right of every innocent human being to life.” (*Donum vitae*, I, n. 1)

Pope John Paul II, Encyclical *Evangelium vitae*, n. 60

When people deny that life begins at fertilisation, they are usually making a moral claim rather than a scientific one. They are saying: “Yes, all right, this is a living human being, but some human beings are not persons with a right to life.”

But, as we have seen, there are no convincing scientific or philosophical reasons for overlooking the significance of the fact that fertilisation produces a new, unprecedented being with his or her own built-in potential for further development – a being which is not a part of either father or mother, but a living organism in his or her own right. And there is no convincing reason to think otherwise than that this being’s membership in the *human* species is determined right then, at fertilisation, and not at some other point.

There are already many shameful examples in human history of different groups of people deciding who is and who is not a human being or a ‘person’. Such decisions have led to the mistreatment, murder and sometimes even genocide of different groups – Australian Aborigines, African Americans, Jews, homosexuals and gypsies. Today they lead, amongst other crimes against humanity, to such practices as destructive embryo research, abortion, infanticide and euthanasia.

We simply have to get the answers to questions about the beginning of life and personhood right.

Those of us who can remember reading Dr. Seuss as a child might recall that even Horton the elephant understood that “A person’s a person, no matter how small.” There are good reasons – scientific, philosophical and theological – for believing this to be true.

Glossary

Ovum – a female reproductive cell, also referred to as the oocyte, egg or female gamete

Sperm – a male reproductive cell, also referred to as the spermatozoon or male gamete

Fertilisation – the process whereby the sperm unites with the ovum to form a new human being, marking the beginning of a pregnancy (also referred to as conception)

Implantation – the embedding of the embryo in the lining of the womb (the endometrium)

Human zygote – a human being at the single-cell stage, following the fusion of the genetic material from the sperm and the ovum

Human embryo – a human being from the time that the single-cell zygote divides into a two-cell complex up to the eighth week of development

Human fetus – the developing human being from after the eighth week until birth

Viability – the ability of a fetus to survive outside the mother's womb

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