

The art of medicine

The beginning of the end of the embryo wars

It is hard to remember a time when more attention has been paid to the moral status of the human embryo. This is strange since human embryos have been known to scientists and, shortly thereafter, to theologians, philosophers, and everyone else since at least the 19th century. It is not at all strange in another sense, since scientists have been unwilling to venture into the domain of specifying what the moral status of a human embryo might be. Some of that reluctance is perhaps ill-advised, because empirical information is having a perspicuous effect on key dimensions of this moral quandary.

Whatever human embryos are, and whatever ethical stance adult humanity ought to adopt towards them, in recent years embryos have not wanted for publicity. Human embryos, the headlines blare, have been: cloned from adult skin cells, created from the genetic material of three people, key players in a lawsuit where preimplantation genetic testing failed to detect and thus prevent a terrible congenital form of cancer, and sorted to prevent the occurrence of an early form of breast cancer. Embryos have also been making headlines as the subjects of a worldwide effort to find ways to avoid destroying them to generate stem cells.

Lawmakers also have embryos on their minds. President Obama, with great fanfare and praise, as well as a bit of moral derision from some quarters, recently declared that public funds would, contrary to the policy of his predecessor, be available for embryonic stem cell research in the USA. Other solons have enacted or proposed legislation that would require the consent of donors before any research could be done on stem cells produced via nuclear transfer cloning; permit the creation of human–animal hybrid embryos for research; compel the listing of unwanted embryos as “adoptable” at in-vitro fertilisation clinics; and mandated that all embryos created in in-vitro fertilisation be implanted.

Recent efforts to create moral equality between human embryos and the rest of us have found support in various religious teachings. This concern is much in evidence, for example, in the important instruction offered by the Vatican’s Congregation for the Doctrine of the Faith, *Dignitas Personae* (2008). This teaching, issued with the explicit approval of the Pope, makes it very clear that the Roman Catholic Church remains unwavering in its moral commitment to include all human embryos as full members of the human community.

And it is not just theologians who have put the embryo at the centre of the ethical stage. A tide of publications, opinion pieces, and editorials have appeared over the past few years that try to secure a secular basis for the view that human embryos ought be accorded full moral standing. Ballot initiatives, governmental directives, and legislation that would grant embryos personhood have also popped into prominent view in the USA and Italy.

The war over the moral standing of the embryo is as heated and contentious as it ever has been. Yet, despite the appearance of much florid verbiage to the contrary, the era of the embryo “wars” may be coming to an end.

How can this be? In the USA alone political discourse in national, state, and local elections has been embryocentric for years. Similarly, battles over the morality of embryo destruction, the manipulation of embryos in research, the creation of chimeric embryos, and the cloning of embryos have dominated the headlines and occupied the attention of commissions, clergy, and committees in the UK, the European Union, South Korea, Italy, Japan, Canada, Australia, Germany, Spain, Israel, Brazil, Sweden, South Africa, Poland, and Singapore for just as long. There would seem to be nothing but a continued storm of controversy on the intellectual horizon when matters turn to how we ought to value and interact with human embryos.

If one looks a bit more closely though there are signs that the debate over the status, creation, use, and disposition of human embryos has peaked. Some points of ethical consensus have begun to emerge both about the moral standing of embryos and what can be done with them.

One point of consensus is that not all embryos are morally equal. Partly this is due to the increasing knowledge we have from medicine and science about human embryos. It has become increasingly clear that most embryos—more than 80%—produced in vitro and transferred into the uterus during assisted reproductive treatments lack any capacity for development under any circumstances due to chromosomal or genetic defects. An embryo obtained through assisted reproduction has a very small chance of leading to a live birth, with only 15% of embryos on average developing into an infant. The knowledge that an embryo developed in vitro has only a minimal potential for life has shed considerable and penetrating light on the claim that every embryo must be regarded as a person and on the ethical discussion involving the handling of unwanted or surplus embryos.

The extent to which embryo loss is a natural phenomenon of human sexual reproduction has also shifted opinion about the moral status of human embryos. Although it is true that every life begins with the conception of a human embryo, it is now understood to be far from true that every conception of an embryo initiates a human life. The facts of human embryonic development in nature and in the laboratory undercut the claims both that all embryos are created equally and as adult humanity’s moral equals.

Distinctions are also starting to emerge between the creation of human embryos for the purpose of research and for the purpose of reproduction. Many who would assign full moral standing to every embryo from the moment of

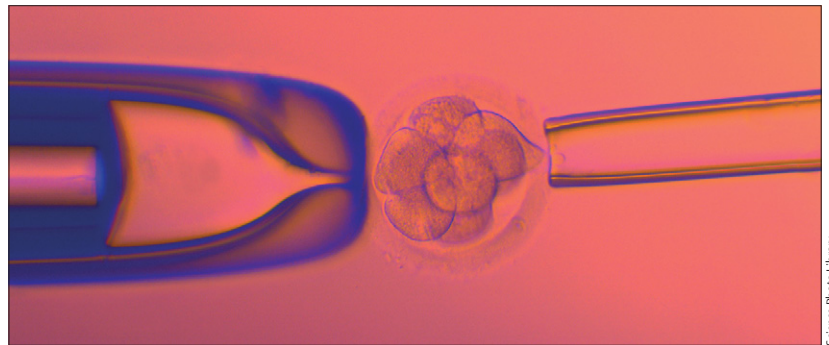
conception believe that the creation and destruction of embryos in the context of in-vitro fertilisation is ethically wrong. That view, however, remains a distinctly minority point of view.

Using in-vitro fertilisation to assist infertile people in the creation of children, despite the large number of human embryos lost, has elicited hardly any efforts at criminalisation or prohibition. And in looking at the policies adopted by many nations, it is clear that using "surplus" embryos that were initially created with the intent of turning them into babies at infertility clinics, but which could not be so used, for adoption or (far more likely) research has gained enormous ethical support. Embryos created with the goal of reproduction but that are no longer going to be used for that purpose face only one likely fate—destruction. This being so, making them available for research seems to many to be an act of moral redemption akin to procuring organs from a dead body. The fact that catastrophic circumstance caused the death does not as a matter of public policy pre-empt obtaining organs and tissues to help others.

Similarly, the permissibility of destroying unclaimed frozen embryos after a reasonable period of time has gained much worldwide acceptance. And the moral propriety of creating human embryos via cloning for research as well as the morality of preimplantation diagnosis of embryos in order to avoid fatal or severely disabling illness have also secured widespread acceptance. A handful of nations still restrict embryo destruction. But, even so countries such as Italy, which permits preimplantation genetic diagnosis but then requires that even if an embryo is found to carry a lethal or severely disabling disease that it must be transferred and cannot be discarded, nonetheless permit the termination of the pregnancy if the fetus is later found to have a severely disabling disease.

The push to grant embryos equivalent moral standing to adult human beings has not succeeded in most parts of the world. For example, legislative efforts to assign personhood to the embryo from the moment of conception have consistently gone down to defeat in the USA and elsewhere.

Why is this so? Interestingly enough, the reason that the embryo debate has peaked is that the public has heard the key claims made by proponents of embryo equality and, over time, has not been persuaded as to their validity. There is a growing understanding of empirical facts about differences among embryos and the rate at which they fail to develop in nature and in the laboratory leading to the rejection of claims about the universal moral status of all human embryos. The relevance these facts have played in shifting public opinion should give the lie to the view that science has nothing to contribute to normative discussions about the status and use of human embryos. But, it is not just a growing appreciation of the facts that has weakened the case for granting all human embryos moral equivalence with the rest of us.



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The public also has rejected normative claims that hold that since it is hard to draw a distinct demarcation in the process of development from an embryo to a baby or even to an adult then no line can be drawn anywhere in the process and whatever moral standing is assigned to babies or adults must be given to embryos. This position, although argued with great fervour by proponents of embryonic equality, makes little sense metaphysically or ethically.

We certainly do draw important distinctions both in kind and moral status between what a minor child can do and is responsible for and what an adult can do and the acts for which they are responsible. It may be hard to decide whether a man is bald but there are plainly bald men and hairy men. Arguing that an entity which may have the potential to become something else if conditions are exactly right is to falsely equate acorns with oak trees both as things and as objects of moral value. Someone who has plaque in their arteries may be a heart attack waiting to happen, but as the purveyors and consumers of statins and stents know it is far better to be a potential heart attack than an actual one.

Those who hold that consensus cannot be reached by rational argument and debate over the most contentious bioethical issues need to take notice of what is happening in the embryo wars. Although there are significant numbers of people who remain persuaded that the embryo must be treated as a person with full dignity and rights and others who still are not certain, this does not mean that huge areas of consensus concerning the creation and use of embryos in therapy and research have not been attained. And they have been attained through the entry into the debate of scientists offering facts about embryos, as well as by ethicists engaging claims of moral equality and refuting or at least casting doubt upon them. Bioethical debate may be acrimonious, opaque, religious, politically charged, and even personal but when science and logic are engaged it can lead to crucially important points of consensus.

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Further reading

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