

## ETHICAL CONSIDERATIONS ON USE OF EMBRYONIC STEM CELLS

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The use of early human embryos in stem cell research is a complex and controversial ethical issue as this research has been confronted with questions from medical professionals, the public, religious groups, and national and international organizations. Jurisprudence always had considered the aspect of Law and Ethics as they are quite interrelated. Different nations differ greatly in their laws relating stem cell research thereby reflecting the deep socio-ethical conflicts which exist about the nature of the human embryo and research involving human stem cells. Even though many applications of stem cells are under investigation, it has raised high hopes and promises along with warnings. With the increasing demand for quality treatment and solutions for various diseases the ethical protest against scientific interference over human life has taken a pace. Despite these demands the legal philosophers should give due regard to the issues affecting human life and its dignity.<sup>1</sup>

There are various issues need to be pondered upon like proving the effectiveness and minimising the risks associated with stem cell treatments, egg donation and consent, and social issues like whether everyone can afford the therapies and how much health service resources they would consume all in all. But what makes this area especially contentious is the source of the cells, and in particular the use of human embryos. Those who support research on human stem cells, either in religious or secular bioethics, support the advantages of such research to save human lives and the duty to relieve their bodily sufferings in accordance with pragmatic and duty-based approaches. Some even go so far as to state that such research is a “moral imperative”, considering the potential benefits of ameliorating human suffering.<sup>2</sup>

### **Ethical debate over stem cells:**

There is a conflict in between two fundamental moral principles that we highly value:

- i) the duty to prevent or alleviate suffering;
- ii) the duty to respect the value of human life.

The harvesting of human embryonic stem cells violates this second principle as it results in the destruction of embryo which is a possible human life. Here, in this case both principles cannot simultaneously be respected and then question arises as to which principle ought to be given precedence. If we follow first principle then we deny moral status to human embryo by discarding them and if second principle is followed by giving them respectful moral status we divert from the path of utilitarianism as the prospects to alleviate chronic suffering will lessen. Most of the stem cell research in the scientific world is acceptable, ethical, and laudable. Ethical issues like sources of stem cells, the moral status of human embryo, the slippery slope towards commercialisation and commoditisation of human life, concerns about safety, germ line intervention, animal human hybrid and the challenge of proportionality are aligned with stem cell research.

### **Moral status of embryo:**

At one end of the spectrum, is the view that embryos are balls of cells that have no more moral value than any other piece of human biological material. At the other end, some would consider

embryos to have the same moral status as any adult and some would take the intermediate path. Therefore, there are three viewpoints regarding the moral status of human embryos:

1. no moral status;
2. the same moral status as a baby;
3. Intermediate view between these two poles.

#### **No moral status:**

A person is generally referred to as someone who is rational, capable of free choices, and is a coherent, continuing and autonomous centre of sensations, experiences, emotions, volitions and actions, these are what may be called the characters of a person.<sup>3</sup> Even if it is not possible to point to an exact dividing line in human development at which personhood is acquired, it may be argued that whenever the transition occurs, in early pre-implantation stage embryos do not have the psychological, physiological, emotional or intellectual properties that we associate with personhood.<sup>4</sup> It, therefore, follows that if human embryo does not fulfill the criteria for personhood, it does not have any interests to be protected and thus may be used instrumentally for the benefit of those who are persons. It denies that this being is a new creation of God.<sup>5</sup> At the blastocyst stage, a human embryo created by In-Vitro Fertilisation (IVF) expresses no bodily characteristics, it is not conscious and it cannot feel anything.<sup>6</sup> Faced with the scientific case, a philosophical judgment is made that at this stage the embryo has no moral significance. At this point it is not a human person; it is just a ball of cells. Those who hold this view say that medical research on early human embryos is not only permissible but desirable, subject to the normal conditions of research.<sup>7</sup> Some even say it is a moral duty of humanity, if it provides a potential means to find treatments for otherwise serious and incurable suffering.

They further argue that for a being to have an “interest” this being must have beliefs, desires, expectations, aims, and purposes and that the embryo has none of these. In the view that embryonic life must be preserved from the moment fertilisation is complete, it is implied that embryos have an absolute right to life, which cannot be violated at any cost.

#### **Full moral status as a baby:**

As law protects everyone it should also protect the unborn. Proponents of embryo research may argue that because an embryo cannot develop in isolation when placed in a petri dish, it does not possess an internal code for self-actualization and is therefore not a human being.<sup>8</sup> To this, we respond that no organism (including adult human beings) can develop without a hospitable environment.<sup>9</sup> It implies that full moral status need to be given. As long as the embryo is reasonably healthy and is not denied or deprived of a suitable environment and adequate nutrition, it will actively develop itself along the species-specific trajectory of development.<sup>10</sup>

As there is uncertainty about the status of a developing embryo, we must give the embryo, as we would to any vulnerable person, the benefit of the doubt and protect it as one would a human life. Those that hold this view believe that no research should therefore be allowed that is not for the benefit of that particular embryo. No matter what the potential might be for life-saving treatments, medical research can never justify us taking the life of an embryo, denying it the chance of becoming a fully developed human. Once a human life has been created, even in an embryo, it is not for other humans to destroy it or cause it to be destroyed.<sup>11</sup> Those holding this position advocate only the use of stem cells derived from adult tissue or placental cord blood.<sup>12</sup> If it turned out that some cell therapies

could only be achieved using ES cells, those holding this view make the judgment that those therapies should not be used, since it would amount to destroying some human lives in order to save others. This is an “under no circumstances” position.<sup>13</sup>

### **Intermediate view:**

As per the view the upshot is that there would be limited circumstances under which research on human embryos might be allowed. The seriousness of certain medical conditions would justify the action. Embryos, even if not attributed full moral status, nonetheless, have intrinsic value and they are the beginnings of a possible human life and are, therefore, worthy of respect. As embryos are the first stage of a new human life, they are ordinarily created for the purpose of bringing a life into the world. Consequently, embryos can function as powerful symbols and can provide the opportunity for a society to express a view about the importance or value of human life. We know that the human embryo is a human being because it is a self-directed organism. As long as it is given an appropriate, nurturing environment (i.e., the womb of the mother), it actively develops to maturity. The acquisition of moral status is as continuous a process as biological development and that embryos gradually gain their moral value and can be referred as a *gradualist view of moral status*. Within this broad ethical position, some people do not think that there is a single point at which full moral status can clearly be attributed to the embryo. The relative moral value of the embryo should be considered in the context of the other values that can be realised through stem cell research in order to decide whether or not to proceed with it. This is the major issue that has to be balanced with the view that such research could lead to the discovery of new medical treatments that would alleviate the suffering of many individuals. The consensus enshrined in the Human Fertilisation and Embryology Act in 1990, is that “the embryo does have moral rights but not to the same extent as a living person”.<sup>14</sup> According to the scientific facts, there are significant points for delineation of human embryos, including: the moment of fertilization, the point of implantation in the uterus, the initial appearance of the primitive streak (19 days), the beginning of heartbeat (23 days), the development of brain waves (48 days), the point at which essential internal and external structures are complete (56 days), the point at which the fetus begins to move (12-13 weeks), and the point when the foetus would be viable outside the uterus.<sup>15</sup> There is an opinion that instead of the end of the process of fertilization of the egg, a human embryo becomes worthy of protection at around day 14 after the fertilization.<sup>16</sup> It may be argued that it is the implantation of the blastocyst in the uterine wall that is the best landmark for the definition of human life<sup>17</sup>. If we can remove organs from patients who have been declared brain dead but are still alive in some sense in order to save the lives of those who are alive, we can use two hundred-cell embryos as cell donors at the same moral status as brain dead individuals. Embryological studies now show that fertilization is itself a process. Therefore, it can be argued that an embryo in the earliest stages is not sufficiently individualized to have the moral weight of personhood. In this gradualist view, embryos will acquire full moral status at a later point during embryonic development.

It is generally agreed that research involving embryos should be related to an important goal, sometimes formulated as ‘an important health interest’ as the principle of proportionality.<sup>18</sup> As previously discussed, the Irish Council considers that embryos produced in the context of infertility treatment should be attributed moral value rather than full moral status and they should, therefore, be treated with a level of respect that is commensurate with this value.<sup>19</sup> According moral value rather than full moral status to embryos implies that it may be permissible to destroy these embryos in

certain cases. In the debate about embryonic stem cell research, it has been pointed out that, respect for human life must also take into account those who are suffering from serious disease and would benefit from any medical advances stem cell research may offer. In other words, we value embryos, but we also value the welfare of patients and, thereby, we value medical progress. So, in harvesting stem cells special respect needs to be given by limiting their use to important human purposes, establishing guidelines for the research, and developing procedures to ensure that these guidelines are followed. From this perspective, the respect due to embryos should be balanced against the value that may be derived for all humanity through medical advances. Balancing the value of embryos against the value of patient welfare implies that destroying embryos for research requires a strong justification in terms of its expected benefits to patients. This might entail that the therapeutic potential of the research has to be reasonably demonstrated, that all of the alternative research methods have been exhausted and that the disease or condition that the medical research targets is life threatening.<sup>20</sup> It would not be considered acceptable to use embryos for research aimed at developing cosmetics because this goal is not regarded to be of particular moral value.<sup>21</sup> The consensus, enshrined in the Human Fertilisation and Embryology Act in 1990, is that the embryo does have moral rights but not to the same extent as a living person<sup>22</sup>.

To summarize the previous discussion “Ethical Considerations”, one can say that while there is no dispute that the ability to treat serious disease is a great good, it must also be recognized that not all means of achieving a desired good are morally and ethically justifiable. So the culling of human embryos should be permissible only in cases or therapies which are proven and balance of justice must prevail even where minutest unit of life is involved.

#### (Endnotes)

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