

- <sup>31</sup> Joseph A. Selling. "Evolution and Continuity in Conjugal Morality," 257-58.
- <sup>32</sup> Ibid., 259.
- <sup>33</sup> The personalist model of conjugal life has not yet achieved acceptance in the Church. The person is not accepted as central to moral reflection and the personalist norms are not taken seriously in the Church.
- <sup>34</sup> Joseph A. Selling. "Evolution and Continuity in Conjugal Morality," 259.
- <sup>35</sup> Ibid., 258.

## Chapter 20

# Embryos: Humans or Biomaterials? Ethics and Law

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### ABSTRACT:

A human organism begins with fertilization. From the moment of fertilization onwards, human embryo has the ontological status of a human individual and thus also the moral status, i.e. the inviolable human dignity. Therefore, we should never destroy human embryos as a mere means to any end how noble it might be. Defending inviolability and protection-worthiness of human embryos from the moment of fertilization/conception, this article speaks against the embryo-destructive human embryonic stem cell (hESC) research.

### 1. Introduction

The new term pre-embryo<sup>1</sup> sprang up in the mid-eighties of the 20<sup>th</sup> century. Literally it indicates that "a creature that precedes the embryo itself is not an embryo."<sup>2</sup> Many argued that pre-embryos are not individuals until they are implanted into the uterus or until the primitive streak takes place,<sup>3</sup> and thus it would be ethically permissible to use the IVF<sup>4</sup> surplus embryos up to this stage for research purposes in order to produce stem cells.

What are stem cells? Stem cells are the earliest cells which retain the capacities of their original stage and are not yet assigned to specific tasks and can thus in principle become all or any or at least some cell types that collectively can form an organism. For example, a fertilized egg can divide into cells of all types inclusive of forming of an embryo. A fertilized egg cell is thus totipotent. Embryonic stem cells, which are taken from the inner cell mass of an embryo, are pluripotent, since they can grow into all cell types of the body except forming an embryo. Adult stem cells (e.g. nerve cells) compared to embryonic stem cells are multipotent, that is, they can form no longer all, but only certain types of cells. The latest iPS cell research however shows that certain adult stem cells can be induced into developing pluripotent cells.

Why do we need stem cell research at all? Scientists postulated to achieve new insights with the use of stem cells not only for basic research in discovering (mal)developments of cells, but also for unearthing new opportunities in drug testing or cell therapies for previously incurable diseases, such as, Alzheimer's and Parkinson's. While non-embryonic stem cell researches are ethically non-controversial and are encouraged to take place to find cures for patients, human embryonic stem cell research brings an ethical problem along with it.

The fundamental ethical problem with the hESC research lies in destruction of human embryos. In vitro fertilized supernumerary or surplus human embryos – which were once created with the purpose of implanting into an uterus for artificial pregnancies as solutions to infertile couples – are destroyed while extracting their inner cell mass contain embryonic stem cells. Scientists consider these stem cells to be superior to adult stem cells in their flexibility and capacity to culture any cell of the body, and that these cultured healthy new cells can be used to regenerate or replace the damaged old cells in the body.

Stem cell scientists argue that they can use death-destined surplus embryos for research because there are high-ranking noble goals. Opponents argue that embryos are humans who cannot be instrumentalized as a mere means or used as biomaterials or things to any end. The article discusses this dilemma on three points and proposes legislative statements.

First, the decisive philosophical argument about the ontological as well as moral status of the human embryo is discussed. Secondly, the views of world religions on moral status of the human embryo and their positions on embryonic stem cell research are presented. Thirdly, the article focuses on India, where there is enormous research with human embryonic stem cells on the one hand, on the other hand there are only legally non-binding guidelines to regulate this research with hardly any public debate on ethics of the issue. The legislative statements and concluding remarks are largely based on humans as humans without much relying on external criteria.

## 2. The Ontological and Moral Status of the Human Embryo

The views on ontological and moral status of human embryos change with different assumptions on the question: when does a human begin to be a human? There are answers with a very large variability extending from the moment of fertilization to the time of being a fetus or even up to birth. Some philosophers thus assume that “the protection-worthiness of the embryo grows gradually and follows the stages of embryonic development.”<sup>5</sup>

Some philosophers, physicians and theologians consider that a human begins to exist only after the implantation into the uterus, when the maternal organism begins interacting with him and providing him with additional properties for development. However, we should not forget that all humans and not just the embryos need interaction, environment and food.<sup>6</sup> The mother does not add anything new to the ontological and moral status of the embryo.

A few thinkers consider implantation to be also decisive, because the largest number of the naturally fertilized embryos dies within the first 14 days and only a maximum of 10 percent of all embryos implant into the uterus,<sup>7</sup> and therefore a lower or no protection-worthiness of the embryo can be justified at least up to this point. Survivability is thus for some philosophers a decisive argument.<sup>8</sup> We can nevertheless find a fallacy in this argument: if a nature ends up with cruel calamities (e.g. tsunami, earthquake, etc.), it does not justify us to attribute a low value to any human life.

Others consider the formation of the primitive-streak to be a criterion, when the possibility of multiplication and the formation of individuality end.<sup>9</sup> It can be however argued against this criterion that the embryo is an undivided individual before as well as after the emergence of the primitive streak. That twins can emerge from an embryo does not follow that the embryo was not an individual previously. An amoeba splits into two amoebas, but splitting does not deny the individuality of the parent amoeba.

Another argument has to do with the development of nervous system. Some argue that even a newborn human is less worthy of protection, because the brain of the newborn is not yet mature to act. This argument is close to the position of the Australian philosopher Peter Singer, who attributes the dignity of a person only to fully-conscious and freely-decision making humans. The term personhood is mistakenly juxtaposed to the skills of consciousness, self-reflection and ability for communication. Embryos, mentally disabled and coma patients, may not exercise these abilities, but possess the system for these features. Abilities or disabilities, capabilities or qualifications, or lacking them do not add or deny anything to the intrinsic moral status of humans.

If there exists a developmental stage that we have passed through when embryos turn to be humans, then the question arises: Were we as embryos not yet humans? How could we ever become

humans if we were not humans from the beginning? Is it not an internal contradiction that we say to our existence as an adult "we" today on the one hand and therefore (must and should) maintain continuity with our embryonic existence; on the other hand deny the humanity and moral status to our embryonic existence?<sup>10</sup>

The claim of philosophers to determine the moral status of the embryo on norms is justified. The moral status is certainly defended independently of the ontological status, but it practically results always in the recourse to biological facts for its inevitability of knowing when the moral status begins to exist. For example, the surest point of beginning is the conception. Thus, the recognition of the moral status of the embryo is only then possible and meaningful if it takes the ontological status of the embryo into account. Hence, the careful establishment of the ontological status of the embryo gains a great significance.<sup>11</sup>

We come back to the ontological question: when does the human begin to be a human? My answer is: the human begins to be a human with the fertilization. But the German biologist and philosopher Johannes Seidel comes up with a provocative statement: "The human does not begin with the fertilization,"<sup>12</sup> but only from the four cell stage. According to him, the human germline genome begins to express only at the four cell stage and only after this stage the mother identifies the embryo as an independent organism. It is nevertheless questionable whether this stage marks the beginning of a new individual or rather it concerns only about a characteristic variation in an already existing organism. His position is thus not tenable.

Undoubtedly, biology<sup>13</sup> by itself is not enough for ontological or moral claims, thus the facts about embryos are further substantiated by the SCIP (Species-Continuity-Identity-Potentiality) arguments: The human embryo is human from the moment of fertilization. He grows always as a member of the human *species*

and nothing else.<sup>14</sup> The faces of human embryos are not only human; but they also express human individual specific features.<sup>15</sup> He will never become a member of a non-human species.

The human development does not have any break up in-between but follows *continuity*. There isn't any ethically-relevant difference in his ongoing development and between his various developmental phases like childhood, adulthood, etc.<sup>16</sup> Therefore, the development of a human being is to be always understood as a continuous process.<sup>17</sup>

Genetics clearly shows that the genome of each individual is a human genome.<sup>18</sup> This human genome is also always unique or individual specific from the moment of fertilization. This unique *identity* is never lost. The embryo remains the same and identical with himself during the whole development.<sup>19</sup>

The embryo has the inbuilt potentiality to become an adult human. This potentiality is inherent from the moment of fertilization for a complete human development. Under normal circumstances, the fertilized embryo would grow only into an adult human. It is certain. This potential is not passive but active, real and inherent.

Against each of the SCIP arguments there are a number of objections mostly based on either naturalistic fallacies or falsely understood concept of person. For example, it is argued what I am today has only similarity with what I was yesterday; therefore it is not identical or continuous. Such or similar arguments are based on personal qualities, not to the very being of the individual.

My defense is that all human embryos are humans and also persons. All humans, by virtue of their humanity, have the same moral status and human dignity irrespective of any specific level of development. Any demarcation is equivalent to an arbitrary selection.<sup>20</sup>

The embryo, as every human, is an end in himself and therefore should never be used as a mere means to any end. The exception would only occur when a life would stand against another life, for example, when the continuation of the life of the embryo would turn to be a threat to the life of the mother or both.<sup>21</sup>

This principle should apply for all embryos in the same way. There is an argument worldwide that the artificially-fertilized (IVF) embryos – who are orphaned or destined to death because they would die anyway – may be used at least for research in service of high ranking noble goals. The prominent German moral theologian Eberhard Schockenhoff refutes such arguments. He says that the extracorporeal supernumerary embryos are innocent creatures. Non-implantation has already deprived them of opportunities for development. This itself is a moral wrong. This persisting injustice cannot serve to justify further harm. Absence of need for implantation does not reduce embryos into objects. All embryos are equally bearers of moral rights and claims for protection.<sup>22</sup> We do not accept any experiment on adult or aged dying patients either, because they are going to die anyway, although there may be good reasons from the point of view of the research.

### 3. The Standpoints of Religions

The position of the Catholic Church is clear and unambiguous. She holds that every human is sacred and has the full moral status and dignity from the moment of conception and thus rejects categorically the hESC research. She also opposes the research with embryonic stem cell lines which are illicitly obtained from human embryos by any third quarters,<sup>23</sup> because it would involve a complicity in an evil act.

The Eastern Orthodox Church shares a similar position and promotes alternative researches with adult stem cells and umbilical cord stem cell.

Not so clear is the position of the Protestant Churches. Most of them tend to support hESC research, since they see a potential in the research to alleviate human suffering. They share an opinion that the embryos at this stage do not have the same moral status as a fully developed human. However, some of them do oppose the research with embryonic stem cells, because the embryos are the weakest members of humanity and therefore embryos should not be sacrificed in favour of others.<sup>24</sup>

The Conservative and Orthodox Jews teach that human life begins forty days after fertilization, when the embryo begins to move. So there is no objection from their side against the use of embryonic stem cells, especially when it comes within the meaning of *pikausch nefesh*, that is, to heal or to save lives.

In Islam, the protection-worthiness of the embryo starts with the time of the ensoulment by Allah. This event takes place according to various traditions at 40<sup>th</sup> or 80<sup>th</sup> or 120<sup>th</sup> day. There are also many Muslims who believe that the ensoulment occurs already at conception.<sup>25</sup> However, for a majority of Muslims the embryonic stem cell research does not conflict with their faith. According to the opinion of the 1991 International Conference of the Islamic world, the supernumerary fertilized eggs can be used for research purposes.<sup>26</sup>

The contemporary Hinduism does not have clear theological statements on medical and ethical issues. However, according to most Scriptures of Hinduism,<sup>27</sup> the human is an inhabitant of the *Âtman* that reflects the Brahman Himself regardless of the caste into which one is born. This basic idea is present in all Hindu Scriptures and philosophical systems of the thousand year history of Hinduism. From the beginning to death and even beyond death, the human is a sacred image of the Brahman. This is the theological reason why Hinduism prohibits any form of abortion. Violence against humans, so and abortion, is contrary to the true spirit of Hinduism. All foetuses, irrespective of caste or social status, are sacred and worthy of

protection. The embryo is a complete human person from the beginning with the union of soul with the body at conception. The new being emerges with the coming of the soul together with the karmic heritage that determines his past and individuality.<sup>28</sup> The pregnant woman enjoys special protection in traditional Hinduism: whoever harms the pregnant woman damages the embryo, too. The high esteem for the pregnant women reflects also in the fact that they were excluded from the popular traditional ritual of *sati* (burning of widows).

In Indian culture, the principle of *ahimsa*, i.e. non-violence in life, also regards a high value of the embryo. *Ahimsa* is a cardinal and highly practiced virtue in Indian religions of Jainism, Buddhism and Hinduism. Since the form of a human life is the golden opportunity to free oneself from the accumulated karma and rebirth, nobody including parents has the right to take away the life of a human before the natural time of death. In ancient India, abortion was tolerated only in a hopeless situation and indeed when the life of the mother was at stake. According to the Scriptures of Hinduism and medical practices of ancient India, abortion and embryonic stem cell research should not be permissible, since they destroy human embryos that are sacred and divine persons, who have a full moral status from the moment of conception.

Religions have a common view that humans are sacred and begin to exist at conception, though there are differences of opinions with regard to the question of ensoulment. With the current increased knowledge of developmental biology, religions would tend to accept a simultaneous animation at conception. Human body is a prerequisite for soul to enter in, thus even in delayed animations the human is already present from the beginning through the bodily existence.

Religions have an important task to propose ethical principles for State legislation and form a good conscience among its followers. No single religion can thrust its position into the State legislation,

while the State has to respect and protect the freedom of all religions. The State cannot impose a law on religious followers against their fundamental faith, beliefs and practices. However, a law that respects fundamental human rights of all people regardless of creed or class or culture would not only be acceptable in pluralistic societies, but can also help create a valuable, moral, just, harmonious and peaceful society. A society would doom without moral principles. A society would doom sooner than later if she considers some of citizens less human than others. All are equal moral beings whether born or unborn, young or old, rich or poor, adult or embryonic.

#### 4. Stem cell research in India

Stem cell research, all types including with embryonic stem cell lines, booms in India. Embryos are sacrificed at the altar of research. The great tradition of Hinduism, which has a high value on protection of human life, appears to have very little influence on the question of the moral and legal permissibility of embryo consuming research.

The environment, in which the embryonic stem cell research is being practiced and promoted, has the political and socially tolerated consciousness toward the abortion law in India since 1971. The new law is exploited as a means of fertility regulation and gender selection. The preference for sons in the patriarchal Hindu tradition has rapidly increased the number of illegal abortions of female foetuses.

A majority of today's Indian scientists, medical professionals and philosophers, and also ordinary people express that the research using supernumerary embryos would be a form of legitimate sacrifice in favour of common good. Artificial insemination and in vitro fertilization (IVF) are today morally accepted in Hinduism. The economically poor infertile Indian couples are given a free IVF, if they would be ready to *donate* their surplus embryos for research purposes. Many followers of Hinduism share the view that the

supernumerary embryos may be sacrificed for research purposes, if they are going to alleviate the suffering of others.

The statistical results of a survey conducted in Poona shows that a clear majority (49.6%) of the respondents believe that human life begins already at the moment of conception. Striking was the response of men and women with a significant difference on the question of when human life begins: while 35 men selected the answer "the birth," apparently none of the 104 surveyed women selected this answer. 35.2% among 290 respondents supported the embryonic stem cell research, while 36.2% opposed it and 28.6% took no stand. There is a plurality of opinions. It was worth noting that 76% of the surveyed women reject stem cell research, while the rejection rate is only 24% among men. Women value the life of embryos more than men.<sup>29</sup>

While the Western philosophers, theologians, medical experts, scientists and ethicists, show great interest and responsibility in dealing with ethical questions relating to abortion, in vitro fertilization and stem cell research, etc. these issues are hardly discussed and debated in India. Public awareness is vastly lacking. At the aftermath of the legalization of abortion, one might assume that the Indians or Hindus have a liberal attitude towards abortion and embryonic stem cell research indicating that the modern India of Kaliyuga is a break away from the ancient Hindu tradition.<sup>30</sup> A statistic proves however the opposite: 80% of the Hindu women condemn abortion and 56% of them considered it to be a heinous crime.<sup>31</sup> In principle, there is a very strong rejection of abortion and embryonic stem cell research from the part of traditional Hindus and deeply religious people and ardent followers of religions.

#### 5. Guidelines for Legislative Statements

Based on scientific facts and systematic research, I would recommend the following ethical guidelines to protect the life of human embryos from interdisciplinary perspectives for legislative

considerations in India. These guidelines are not exclusive to any country.<sup>32</sup>

i. From a biological point of view

Every human life begins with fertilization. Every fertilized human egg is a human embryo with inbuilt natural provisions for development. Every totipotent cell is capable of becoming a human embryo that will grow as human and not unto human or anything else.

ii. From a philosophical point of view

A new human organism that begins at fertilization is a human individual. Even in monozygotic divisions, there is already an undivided human individual before the formation of two or more individuals. An adult human individual is a rational, free and moral being, and an end in himself. The same rationale applies to the embryo by virtue of his affiliation to human species. Further, in terms of identity, continuity and potentiality, the adult human individual is the same creature that began its existence as embryo at conception. Thus, all humans including embryos are bearers of moral status and have the inviolable right to life and command absolute protection against any harm.

iii. From a theological point of view

God creates human beings and humans only procreate. Humans are image and likeness of God Himself. They are sacred with the presence of divinity in them. The sanctity of human life commands inviolability, respect and protection. Human body is prerequisite for spiritual, physical and social aspects of human life.

iv. From a legal and human rights' point of view

Every human being has constitutional rights to life and dignity. In other words, every human being has the right not to be killed, the dignity not to suffer violence, and human rights not to be deprived

of. They are guaranteed under the national Constitutions to all citizens without any discriminations of age, creed, class or colour. The State has thus the obligation to ensure that embryos are treated equally in accordance with the Constitution.

v. From a point of view of medical science

The medical profession should act according to the principles of medical ethics, i.e. *primum nil nocere* (first do no harm) before curing and saving lives. Nonmaleficence has precedence over beneficence in medical ethics. Scientific or medical progress without ethical boundaries can be a disaster.

vi. From the point of view of surplus embryos

The prohibition of killing of the embryo is applicable, even if he is surplus due to the non-implantation into the uterus. The impending death due to denial of implantation should not make him an object for research. Absence of need does not reduce him to an object.

vii. On the use of public funding

The hESC research is immoral per se. The financial support for it is a greater evil. Government funding for embryo-destructive research is a breach of constitutional duty to defend human life. Public money should never be used for a project that invariably kills innocent human lives. Killing is contrary to fundamental right to life and is incompatible with the Constitution.

viii. From the point of view of ethics of healing

Patients as well as embryos are human beings in the same way. One should not be sacrificed to save the other. A physically suffering patient should not be burdened with guilt of being saved at the expense of killing an innocent human life.

ix. Proposal for an Embryo Protection Law

A human embryo, whether in vivo or in vitro, is always human and a human. He is an individual and a member of human species. He grows as human and as a human and as a human individual and not unto human or unto a human or unto a member of any other species other than *homo sapiens*. No human embryo should ever be used as a mere means even for a noble cause.

## 6. Concluding Remarks

Embryological findings and philosophical considerations prove that the embryo begins at fertilization as an individual human being.<sup>33</sup> He is from the beginning a unified, complete and self-organizing system. He develops himself as human and not unto human and exhibits growth out of his inbuilt human potentialities during his development.<sup>34</sup>

A gradual protection of embryos at various developmental stages and between naturally or artificially fertilized embryos would be ontologically not justified and ethically unacceptable. Embryonic stem cells are neither the safe nor the only possible way for the treatment of incurable diseases. The embryonic stem cell research is an insecure procedure and unethical.

We should on the contrary focus on ethically unproblematic and safer researches. There are greater possibilities and opportunities to explore on adult stem cells including the induced pluripotent stem cells (iPS cells)<sup>35</sup> and on the stem cells from the umbilical cord and the umbilical cord blood. They do not create any serious ethical problems.

Groundbreaking is the discovery of iPS-cells by Shinya Yamanaka of Japan who together with the British John Gurdon was awarded with the Nobel Prize for Medicine 2012. Both researchers received the award for the discovery that mature specialized cells can be reprogrammed back to genuine original all-rounder cells. Until the middle of the 20<sup>th</sup> century, it was believed otherwise that

the development of bodily cells is irreversible. Many researchers worldwide raise critical and skeptical voices and warn against hype of immediate expectations of iPS cell research. Yet, it is a standard alternative ethically and medically for embryo-destructive research. It is also highly encouraging and enlightening that the Nobel Prize awardee Shinya Yamanaka, the father of two daughters, is categorically against embryo-destruction for research.

The glimpse at the human embryo through a microscope at a friend's fertility clinic changed the scientific career of Yamanaka: "When I saw the embryo, I suddenly realized there was such a small difference between it and my daughters," said Yamanaka. ... "I thought, we can't keep destroying embryos for our research. There must be another way... There is no way now to get around some use of embryos... But my goal is to avoid using them."<sup>36</sup> Certainly, he deserves a Nobel Prize for Ethics, too.

In brief, human embryos are human individuals from the first moment of conception and have full moral status like any adult human being like you and me. They would become babies if transplanted. They are not biomaterials or a collection of stem cells for research! They are humans already. Thus, the embryo-destructive stem cell research must be legally banned and ethically non-controversial alternatives should be promoted and supported.



## Endnotes

- <sup>1</sup> Günter Rager, *Die Person: Wege zu ihrem Verständnis*, Studien zur theologischen Ethik 115 (Fribourg i. Ue: Academic Press Fribourg/Freiburg i. Br.: Verlag Herder, 2006), 197. Hereafter: Rager, *Die Person*. Cf. K. V. Hinrichsen (ed.), *Humanembryologie* (Berlin: 1990), 128. I do not accept the concept of „pre-embryo,“ for it is an imaginary and illusionary concept.
- <sup>2</sup> Rager, *Die Person*, 197.
- <sup>3</sup> Cf. John A. Robertson, What we may do with preembryos: A response to Richard A. McCormick, in: *Kennedy Institute of Ethics Journal* 1 (1991): 293-305.
- <sup>4</sup> IVF (In-Vitro-Fertilization) as a possibility to fulfil the wish of infertile couples for children appears to be socially acceptable. However, it raises ethical questions not only because embryos are artificially produced but also because the so-called IVF surplus embryos are frozen in the laboratory like things and embryonic stem cells are extracted out of surplus embryos who are killed in the process.
- <sup>5</sup> Cf. Rager, *Die Person*, 206.
- <sup>6</sup> Cf. Christian Kummer, Stammzellkulturen – ein brisantes Entwicklungspotential, in: *Stimmen der Zeit* 218 (2000), 547-554, 551. Ch. Kummer, the advocate of theory of axis-formation (Achsenbildung), found himself in need of a sensitive correction of his original position due to the biological facts.
- <sup>7</sup> Rager, *Die Person*, 204-205.
- <sup>8</sup> W. Vossenkuhl, Der ethische Status von Embryonen, in: *Neue Zürcher Zeitung* (17. Sept. 2001): Nr. 215, 27.
- <sup>9</sup> Cf. Norman M. Ford, *When did I begin? Conception of the human individual in history, philosophy and science* (Cambridge, 1988); K. V. Hinrichsen (Hg.), *Humanembryologie* (Berlin: 1990), 128; R. McCormick, Who or what is the preembryo? In: *Kennedy Institute of Ethics Journal* 1 (1991): 1-15.
- <sup>10</sup> Cf. Rager, *Die Person*, 192.
- <sup>11</sup> On the one hand philosophers demand that embryologists should answer the question on when the embryo is to be regarded as an

- individual human, for only in terms of embryological facts can you find a reliable basis for ethical judgment; on the other hand the embryologists who report on the ontological status of the embryo are accused of the naturalistic fallacy that they transfer the ontological (Sein) status of being onto the moral (Sollen) status (dignity of the embryo). It is indeed true that the moral status should be based on a value judgment and value judgments bring about norms. Therefore, there are not merely biologically elusive phenomena but norms which we must depend on to speak of the moral status of the embryo. Cf. Rager, *Die Person*, 192f. Zum Vorwurf des naturalistischen Fehlschlusses siehe auch O. Höffe, Wessen Menschenwürde? Der Streit um das therapeutische Klonen: Das Programm für die Entwicklung des Menschen ist von Anfang an gegeben, in: *Die Zeit* Nr. 6 (01.02.2001).
- <sup>12</sup> Johannes Seidel, *Schon Mensch oder noch nicht? Zum ontologischen Status humanbiologischer Keime* (Stuttgart: Kohlhammer, 2010), 402.
  - <sup>13</sup> Biology alone cannot make value statements on ontological as well as moral status of human embryos.
  - <sup>14</sup> Michael Devitt defends the doctrine, in his article Resurrecting Biological Essentialism, in: *Philosophy of Science* 75 (July 2008): 344-382, that species, have essences that are, at least partly, underlying intrinsic, mostly genetic, properties, despite physiological differences thus accommodating features of Darwinism associated with variation and change. Devitt concludes that structural explanations in biology demand that kinds have essential intrinsic properties, thus defends biological essentialism. That an organism is a member of a certain species is not informative, but explanatory of biological essential traits. This is how, a member of a group that happens to be a species shares the essential intrinsic nature of that species. Similarly, a German philosopher, Hans-Dieter Mutschler, defends that nature unlike technology has an inner worth.
  - <sup>15</sup> Cf. Rager, *Die Person*, 201, 203.
  - <sup>16</sup> All new forming and differentiating molecular-biological structures are continuously happening from the existing structures.
  - <sup>17</sup> Cf. Rager, *Die Person*, 202, 203.

- <sup>18</sup> In general, every cell of a human body contains the entire genome of the organism. It does not however mean that every cell is a human. Only a fertilized egg is totipotent and thus has active potentiality to develop as a human.
- <sup>19</sup> My identity today is exactly the same from the beginning. I am today same that I was.
- <sup>20</sup> C. Starck, Der moralische Status des Embryos, in: *NZZ* 14./15. April 2001, Nr. 87, 89.
- <sup>21</sup> E. Schockenhoff, Die Ethik des Heilens und die Menschenwürde, in: *Zeitschrift für medizinische Ethik* 47 (2001): 235-257.
- <sup>22</sup> E. Schockenhoff, *Ethik des Lebens: Grundlagen und neue Herausforderungen* (Freiburg i. Br./Basel/Wien: Herder, 2009), 455.
- <sup>23</sup> The position of the Catholic Church is in clear terms explained by the Pontifical Academy for Life, "Declaration on the Production and the Scientific and Therapeutic Use of Human Embryonic Stem Cells," Vatican City, August 25, 2000 and by the Congregation for the Doctrine of the Faith "Instruction *Dignitas Personae* on Certain Bioethical Questions," *Acta Apostolicae Sedis* 100 (2008): 858-887.
- <sup>24</sup> The Board for Public Responsibility of the Evangelical Church in Germany holds a uniform view that the human embryo is a developing human being. The Board has always been of the opinion that one should not do everything that one can do. However, opinions vary in the field of stem cells and bioethics, where human embryos are involved, a value assessment may be allowed, while others insist that it should not be the case but that absolute protection should be granted to human embryos. The majority of American Protestants advocated the use of non-implanted embryos (surplus embryos) in stem cell research.
- <sup>25</sup> Cf. İlhan İlkilic, Biomedizin aus der Sicht des Islam, in: Silke Schicktanz, Christof Tannert, Peter Wiedemann (eds.), *Kulturelle Aspekte der Bioethik und Biomedizin* (Frankfurt, New York: Campus Verlag, 2003), 66.
- <sup>26</sup> Gamal I. Serour/Abdal-Rahim Omran (eds.), *Ethical Guidelines for Human Reproduction Research in the Muslim World*, Cairo 1992, 30f.
- <sup>27</sup> According to the Hindu anthropology, a human has to go through four life stages: the stage of the student (brahmacarin), the householder

- (grahasthin), the forest-dweller (vanaprashthin) and the hermit (sanyasi). The human has four goals in life: artha (wealth), kâma (happiness), dharma (righteousness) and moksha (liberation). The marriage is considered sacred for the householder whose goal is not children per se but primarily the conception of a male descendant.
- <sup>28</sup> As for the timing of the animation in Hinduism, there is an undisputed majority that believes that the soul is present from the moment of conception. A minority holds that the animation occurs sometime after conception at beginning of acquiring personhood. However, for the question of the moral evaluation of abortion, this time interval does not matter.
- <sup>29</sup> J. Charles Davis, *Public Opinion on Human Embryonic Stem Cell Research in India: Beiheft zur Dissertation on Ethics of Human Embryonic Stem Cell Research – Proposals for a Legal Framework for India* (Frankfurt am Main: Sankt Georgen, Dissertation 2012).
- <sup>30</sup> William A. Young, *The World's Religions and Contemporary Issues* (NJ: Prentice Hall, 1995), 128.
- <sup>31</sup> Cf. Katherine K. Young, Medical Ethics through the Life in Hindu India, in: Robert B. Baker und Laurence B. McCullough (eds.), *The Cambridge World History of Medical Ethics* (New York et al.: Cambridge University Press, 2009), 101-112, here 103-104.
- <sup>32</sup> Cf. J. Charles Davis, *The Ethics of Human Embryonic Stem Cell Research: Proposals for a Legal Framework for India* (New Delhi: Atlantic Publishers and Distributors Ltd., 2014), 405-428.
- <sup>33</sup> Rager, *Die Person*, 194.
- <sup>34</sup> Ibid. 201-203.
- <sup>35</sup> Shinya Yamanaka und Kazutoshi Takahashi presented already in 2006 a promising alternative – induced Pluripotent Stem Cells (Alleskönner-iPS-Zellen) – that a body cell can be reprogrammed to an art of stem cell of embryonic stage. Cf. Anne Brüning, Zwei große Zellzauberer: Geklonte Frösche, verwandelte Gewebe – die diesjährigen Laureaten schafften Durchbrüche für die Biomedizin, in: *Frankfurter Rundschau* Jahrgang 68. Nr. 235 (Dienstag, 9. Oktober 2012): 22-23; Cf. Lilo Berg, Wir brauchen noch etwas Zeit: Zu Besuch bei Shinya Yamanaka, auf dessen Schultern

die Hoffnungen der Patienten lasten, in: *Frankfurter Rundschau*, Jahrgang 68. Nr. 235 (Dienstag, 9. Oktober 2012): 23.

<sup>36</sup> Martin Fackler, Risk Taking is in His Genes, *The New York Times* (December 11, 2007). See online edition: [http://www.nytimes.com/2007/12/11/science/11prof.html?\\_r=0&pagewanted=all](http://www.nytimes.com/2007/12/11/science/11prof.html?_r=0&pagewanted=all).

## Chapter 21

### Justice and the Common Good in Public Health: A Contextual Reflection for India

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John Karuvelil, SJ

#### Introduction

Abysmal disparities in health care have been rejected not only by ethicists, but also by organizations and governments. Often, as the People's Charter for Health says,

Illness and death everyday anger us. Not because there are people who get sick or because there are people who die. We are angry because many illnesses and deaths have their roots in the economic and social policies that are imposed on us.<sup>1</sup>

Today health has come to be considered a human right, beyond being a social, political or economic issue. Poverty, inequality, exploitation, oppression, violence and injustice are the root causes of ill-health and shortened lives of many all over the world, especially in poorer countries. Studies clearly show that disparities in socio-political and economic statuses also produce disparities in health. The higher the disparities in socio-economic and political spheres in society, the higher also the disparities in health.<sup>2</sup> While there is