Human dignity and human tissue: a meaningful ethical relationship?

David G Kirchhoffer, Kris Dierickx

Centre for Biomedical Ethics and Law, Katholieke Universiteit Leuven, Leuven, Belgium

Correspondence to

Kris Dierickx, Centre for Biomedical Ethics and Law, Katholieke Universiteit Leuven, Kapucijnenvoer 35 Blok D — bus 7001, Leuven 3000, Belgium; kris, dierickx@med, kuleuven, be

Received 24 November 2010 Revised 24 February 2011 Accepted 2 March 2011 Published Online First 8 April 2011

ABSTRACT

Human dignity has long been used as a foundational principle in policy documents and ethical guidelines intended to govern various forms of biomedical research. Despite the vast amount of literature concerning human dignity and embryonic tissues, the majority of biomedical research uses non-embryonic human tissue. Therefore, this contribution addresses a notable lacuna in the literature: the relationship, if any, between human dignity and human tissue. This paper first elaborates a multidimensional understanding of human dignity that overcomes many of the shortcomings associated with the use of human dignity in other ethical debates. Second, it discusses the relationship between such an understanding of human dignity and 'non-embryonic' human tissue. Finally, it considers the implications of this relationship for biomedical research and practice involving human tissue. The contribution demonstrates that while human tissue cannot be said to have human dignity, human dignity is nevertheless implicated by human tissue, making what is done with human tissue and how it is done worthy of moral consideration.

It is likely that everyone in an industrialised country has a sample of their tissue on file somewhere. This raises numerous ethical concerns in rights-based legal and ethical contexts, for example, respect for privacy, potential abuse and discrimination, ownership and commercialisation, or respect for cultural and religious beliefs.

These ethical concerns have led to a proliferation of guidelines and policy documents that refer to human dignity as a foundational principle, ¹¹ ¹² although precisely what human dignity is or why it is so important is seldom elaborated. ¹³

At the same time, certain kinds of human tissue—embryos or tissues derived from them such as embryonic stem cells—have sparked often heated debates in which the concept of human dignity is strongly associated with these kinds of human tissue, including claims that these tissues have human dignity. Yet, the vast majority of biomedical research involving human tissues does not employ 'embryonic' tissues.

Therefore, in light of the fact that our 'nonembryonic' tissue is probably being stored or used somewhere, that the concept of human dignity is often referred to and nonetheless poorly elaborated in ethics guidelines and policies, and that 'embryonic' tissue has stolen the limelight in ethical debates and discussions concerning human dignity, there is an urgent need to address the question of what the relationship is between human dignity and 'non-embryonic' human tissue, such as blood spot cards, adult mesenchymal stem cells, or pathology specimens. We shall approach the problem in three steps. First, we will offer some reflections on the meaning and relevance of the concept of human dignity itself. Then, we will consider the extent to which human tissue can be said to have human dignity or be related to it. Finally, we will conclude with a reflection on the ethical implications for this relationship between human dignity and human tissue for genetic research.

ON THE MEANING AND RELEVANCE OF THE CONCEPT OF HUMAN DIGNITY

The problem of human dignity in ethics

Not all references to human dignity are helpful in resolving ethical problems. It is not uncommon to encounter the concept of human dignity being appealed to as a sort of ethical trump card by two opposing sides of an argument, leading to an ethical impasse. This is largely a result of the fact that human dignity is itself a disputed concept. The contemporary discussion on the meaning of human dignity can be depicted in broad brush strokes as follows.

'Absolute' dignity versus 'contingent' dignity

First, there are those who tend to see human dignity as an 'absolute' value, and those who tend to see dignity as a 'contingent' value.

Absolute understandings of human dignity seek to make human dignity an objectively inviolable normative feature of human persons such that any moral behaviour that violates this dignity is always morally wrong. An example would be understandings of human dignity based on Immanuel Kant's categorical imperative, which states that a human person should always be treated as an end and never only as a means. According to Kant, 15 humans are thus of absolute worth rather than relative worth. Things, and beings other than rational beings, have, according to Kant, a relative worth insofar as they are desirable or necessary to an acting subject. 'On the other hand', says Kant, 'rational beings are called persons inasmuch as their nature already marks them out as ends in themselves, which are thus objects of respect'. 15 Kant's objective in describing humans this way was precisely to set up an objective principle that could serve as the basis of a practical law. Otherwise, Kant feared, without anything of absolute value, no such objective law would be possible.¹⁶

Contingent understandings of human dignity, on the other hand, see dignity as a relative or even subjective value based on, for example, status in society, a degree of acquired moral virtue, or even the degree of flourishing or fulfilment one is able to achieve in the context of one's society. Such contingent understandings may refer to an individual's subjective perception of their own self-worth, or to some assessment of an individual's worth in relation to the attainment of some or other social more. An example here is Cicero's definition of dignity in *De Inventione* (2.55.166) as 'someone's virtuous authority, which makes him worthy to be honoured with regard and respect'.¹⁷ A more contemporary example of contingent dignity might be Avishai Margalit's idea¹⁸ that, unlike for Cicero, dignity is not the honour that accrues to virtuous behaviour or social status but the 'type of honour that people ought to have', a sense of self-respect, and a life in a decent society free of humiliation.

Either this or that

Second, among those who see human dignity as an absolute value, opinions differ as to what it is about the human person that should afford the person this inviolable moral status. For example, some, like Alan Gewirth, ¹⁹ appear to emphasise autonomous moral agency as the basis of human dignity. In consequence, any violation of this moral autonomy is a violation of human dignity. Others, like Pope Benedict XVI, ²⁰ appear to emphasise the uniqueness of each divinely created human life as the basis of human dignity. In consequence, any destruction or harm done to the physical life of the biological human organism from the moment of conception to the moment of natural death is considered by holders of this position to be a violation of human dignity.

Polarisations and commonalities

Both the differences between absolute and contingent understandings and between alternative absolute understandings tend to become further polarised and less nuanced in the context of public debate. For example, in debates concerning the morality of end-of-life decisions, one side might argue that not allowing a person to choose when and how they die is an offence to human dignity (ie, autonomy), while the other side might argue that ending one's own life prematurely is violation of human dignity (ie, the divine gift of life). Such polarisations are also often apparent in the aforementioned debates surrounding the dignity of 'embryonic' human tissue.

This polarisation, however, can be misleading. Like the broad brush strokes used to characterise the various positions mentioned above, polarised appeals to human dignity conceal the various nuances that may in fact underlie the understandings of human dignity in question. For example, although Cicero might appear to emphasise a contingent human dignity based on acquired moral virtue, he in fact grounds human dignity in a universal human capacity to be morally good based on reason and freedom. 17 Therefore, one could say that Cicero shares more in common with the more 'absolute' ideas of Kant or Gewirth than would at first appear. Similarly, Benedict XVI would seem to demonstrate a far more complex understanding of human dignity than simply physical human life. He appears also to recognise human reason and freedom (cf Kant and Gewirth), as well as the more 'contingent' striving for the realisation of the kingdom of God in which people subjectively experience their own dignity in loving relationships with others (Benedict's take on the decent, non-humiliating society, cf Margalit), as constituent of the divine image, and hence of human dignity.²¹

The importance of multidimensionality

It would be naive to suggest that there are no differences between the various understandings of human dignity mentioned above. The point here is that human dignity is generally a more complex, multilayered concept than its polemical use in ethical debates would often have us believe. The mistake underlying such polarised uses of the concept of human dignity—a mistake that gives the misleading impression that human dignity is generally grounded in either this or that, rather than both this and that—is that they forget that human dignity always refers to the human person, and that the human person cannot be reduced to one or other feature. It is precisely for this reason, ie, the multidimensional nature of the human person to whom human dignity refers, that we are able to reveal initial, basic commonalities between the apparently opposing understandings of human dignity mentioned above, their differences notwithstanding.

We maintain, therefore, that human dignity, if it is to be useful and meaningful in ethical discourse, must, like the human person, be treated as a multidimensional concept. What follows is an overview of our proposed understanding of human dignity, which endeavours to avoid privileging one or other aspect of the human person as the basis for the claim that human persons have human dignity, but which instead seeks to ground human dignity in the fullness of the human person as a historically situated, meaning-seeking being in relationship to all that is.

A multidimensional understanding of human dignity

The human person is both an ontological reality and an existential reality, ie, one is, but one is also in the process of living out one's life. This means that dignity must likewise refer to the worth (from the Latin *dignitas*) both of what one ontologically is as a human person (absolute), and of the existentially meaningful moral life that one chooses to lead (contingent). Dignity is thus both something one has and something that one acquires. These two aspects of human dignity, ie, the dignity one has and the dignity one acquires, can be more systematically elaborated as follows (note that all of the features mentioned below combine to form a proper understanding of human dignity, which cannot be reduced to one or other of these elements).

- 1. All humans have dignity because:
 - a. They possess a broad range of capacities—including not only the traditional notions of reason and free choice, but also capacities of emotion, affiliation, play, imagination and so on. $^{22-24}$
 - b. These capacities constitute an innate potential, regardless of their actual level of development.
 - c. The 'potential' is the potential to strive to live in a morally meaningful way, $^{25\ 26}$
 - d. in the historically situated set of relationships in which humans find themselves.²⁷ We are always in relationship to all of reality.
- 2. Humans also seek to acquire dignity, ie, they seek to realise their innate potential.
 - a. Their acquired dignity is a conscious sense of self-worth, ²⁶ ²⁷
 - b. which is the product of what they believe to be their own morally good behaviour.

The value of human dignity for ethical discourse

The value of such a multidimensional understanding of human dignity for ethics is that it serves both a descriptive and a normative function.

It is descriptive in that it can be used to understand why a person engages in a particular course of moral behaviour. We can ask, what is the image of a dignified person that the person in question desires to become? What social mores nourish this image? And what kinds of moral behaviours are seen to promote this image?

At the same time, human dignity is a normative criterion, and this normativity has both 'carrot' and 'stick' aspects. It is a 'carrot' because it affirms the inherent goodness of the human person and of the human effort to realise a meaningful life in relationship to all that is. It thereby encourages people to realise the fullness of their dignity and the dignity of others. At the same time, it is a 'stick' because it affirms that any desired image of the dignified person that requires the diminishment of others' dignity for its own realisation, for example, through violence, is morally bad and ought to be prohibited.

As a consequence of this normative 'carrot and stick' feature, to say that humans have human dignity means more than simply saying they are morally relevant. The normative dimension of human dignity means that although all people have a right to moral integrity in the pursuit of the realisation of their dignity through what they believe to be morally good behaviour, which would be in line with Gewirth's understanding of human dignity, this right is not absolute. The realisation of one's own dignity can never be at the expense of the absolute inherent dignity that inheres in human potential. So, for example, it would always be a violation of human dignity to kill another human person as punishment for a perceived wrong, because this would destroy that person's potential to realise the fullness of their dignity. Therefore, in this instance it would be morally legitimate to infringe upon the moral integrity of the killer, for example, by forcibly putting him in a correctional facility for his safety and the safety of others, without violating the 'absolute' dignity that inheres in his potential. Locking him up and throwing away the key, however, would violate his dignity, as the purpose of this use of force is precisely to humiliate him through punishment, rather than to give him the chance to find alternative ways to acquire a legitimate sense of worth working for the good of others. The task for policymakers and individuals alike is thus to balance the 'carrot' with the 'stick', because, unlike the scenario of the violent person, most other areas of moral decision-making are not as clear-cut.

This 'un-clear-cut-ness' brings us to the final argument for the value of the multidimensional understanding of human dignity presented here. Due to the limitations of our historical situatedness, it is practically impossible to have a morally good behaviour that has no potential negative (although not necessarily morally bad) downside. Therefore, although we all believe that what we do in our pursuit of the moral good of our dignity and the dignity of others is morally good, we can be certain neither that it is morally good, nor that the way in which we are seeking to achieve it is morally the best one. This means that the full realisation of human dignity always remains beyond our grasp, both inspiring us to act in a morally good way (the 'carrot'), and reminding us to be humble and prudent in our moral reflections and behaviour (the 'stick').

If we accept the above multidimensional understanding of human dignity as both something we have and something we can acquire, then to protect human dignity means to protect both the potential inherent in our capacities and the realised sense of self-worth that results from the development and application of these capacities in moral behaviour insofar as this behaviour does not remove the potential of others to realise their dignity.²⁸

VIEWING HUMAN TISSUE THROUGH THE LENS OF HUMAN DIGNITY

Human tissue does not have human dignity

In light of the above understanding, it is clear that human tissue does not possess human dignity. Tissue has no moral agency—potential or otherwise. Moreover, apart from its genetic

makeup, which identifies it as human, human tissue cannot be said to have even the most rudimentary qualities of personhood. Human tissue is not a human person, and thus cannot have human dignity.

This conclusion is not significantly different to that which most other established understandings of human dignity should reach with respect to human tissue. An exception may be an extreme version of a species membership-based understanding of human dignity, which might argue that the tissue has human dignity because it contains the DNA for a unique human. Nevertheless, as demonstrated in the discussion above concerning the polarisations and commonalities in various understandings of human dignity, we doubt that any such truly extreme understanding of human dignity actually exists. If it did, one should not call it human dignity.

Human dignity is still implicated by human tissue

The concept of human dignity is nevertheless relevant to ethical discussions concerning human tissue.

We have said that the protection of human dignity entails both the protection of inherent potential and of realised selfworth. Human tissue in the context of modern biomedical research implicates both of these.

Human tissue and human potential

Tissue contains genes, and genetic science is increasingly making genes a socially relevant aspect of identity.²⁹ For example, one's genes identify one as a human, and thus as one like others, as one who in principle shares the same basic potential as all other humans and thus is worthy of protection and respect. At the same time, however, genes identify one as white or black, male or female, sick or healthy, and thus as one different from others. Who one is perceived to be, by oneself and by others, has important implications for the realisation of human dignity, because these perceptions can either facilitate (eg, in the case of universal human rights) or frustrate (eg, in the case of racism or sexism) the realisation of a sense of self-worth for all humans.

Human tissue and acquired self-worth

A person realises his or her potential (the dignity one has) through morally good interactions: social norms usually associate dignity with moral goodness. Therefore, a person will behave in a way that he or she believes to be morally good and thereby acquire a sense of self-worth. This sense of moral goodness may often be paired with existentially meaningful moral convictions of a cultural or religious nature. The human tissue found in modern biomedical research is often there as a result of a moral decision on the part of the donor/participant. At the core of this decision will most often lie the belief that such a donation will be for the good of the donor or for others. Through the 'morally good' donation of his or her tissue, the donor gains a sense of self-worth.

Therefore, human tissue in the context of biomedical research is a concrete symbol of both the absolute (the dignity we have) and the contingent (the dignity we acquire) aspects of the dignity of a particular donor/participant with a particular genetic makeup and potential, and particular moral convictions and behaviours that help him or her to lead an existentially meaningful life with others. At the same time, because its genetic makeup identifies the tissue as human, it is also a symbol of the inherent dignity that all humans already have.

This is when the understanding of human dignity developed in this contribution as necessarily multidimensional may lead to a somewhat different conclusion regarding the relationship

between human dignity and human tissue than other established understandings of human dignity. For example, an understanding of human dignity that emphasises an absolute dignity based on human autonomy would be of little value in the discussion of human tissue unless it could also include the contingent fruits of this autonomy that arise from moral behaviour. Similarly, a concept of human dignity that emphasises only the absolute value of biological life, while possibly able to make a claim regarding the moral link between human tissue and the inherent dignity of all humans based on species membership, would not be able to be used to claim protection for the autonomy of individuals or their moral integrity.

A multidimensional understanding of human dignity thus resists a reduction of human dignity to a one-dimensional, debate-ending, truncheon, and functions instead as an interpretive lens through which we can reflect on and weigh the many morally relevant features of human personhood that are brought into play through research on human tissue. What follows is illustrative of such a 'dignity-driven' reflection.

IMPLICATIONS FOR HUMAN TISSUE RESEARCH Working with human tissue constitutes moral behaviour

The symbolic nature of human tissue described above means that interactions with human tissue in the context of biomedical research and practice constitute moral behaviour, ie, behaviour that people judge to be right or wrong, good or bad. It is not moral behaviour just because it involves human tissue; hairdressers sweep away human tissue all the time. It is moral behaviour because in biomedical research it is the tissue that is of specific interest. Due to the 'symbolic' nature of the relationship between human tissue and human dignity, human tissue always points to where the tissue comes from, and the ends for which it will be used. So, when we work with human tissue in the research context we are in effect 'touching' the human dignity of the donor and indeed of humans in general. A person has 'entrusted' an aspect of his or her dignity to us, both in terms of his or her genetic identity (absolute) and in terms of the values that may have motivated his or her donation in the first place (contingent).

Moreover, because it is human tissue, the research will have potential consequences for all humankind, and thus also implicates human dignity in the broadest sense. Therefore, even if the samples are anonymised, human dignity is still implicated.

The dignity of the researcher

Because these interactions constitute moral behaviour, the dignity of the researcher is also implicated. The treatment of the tissue and the moral convictions that underpin it are relevant to the researcher's acquisition of a realised sense of self-worth through his or her moral behaviour. No one would want to be known as a sloppy researcher following an avoidable breach of donor privacy.

Therefore, both a refusal to engage in particular kinds of genetic research and active support for such research may be underpinned by convictions concerning the moral rightness or wrongness of such research. Both refusers and supporters could claim that their position furthers human dignity, thereby furthering their own sense of acquired dignity. As long as it is impossible to show that their position constitutes a denial or diminishment of the potential of others to realise their dignity, neither position can be said to be definitively morally wrong, although it may still be possible to discuss which position may be morally better or more morally prudent.

CONCLUSION

Ethics is about leading a good life, about realising our dignity and the dignity of others, but the concept of human dignity cannot tell us concretely how to do that. The relationship between human dignity and human tissue developed here does not provide easy answers for biomedical research and practice. Dignity is not a simple criterion that always makes it possible to judge which treatment of human tissue violates human dignity. The vast majority of research on human tissue would never violate human dignity, especially as the tissue itself has no ontological human dignity.

Yet it is in helping us not to lose sight of the moral relevance of where the tissue comes from and the end for which it will be used that the concept of human dignity is useful. It helps us to remain aware that human tissue, and especially how we use it, nevertheless merits our moral consideration. One believes that what one does with human tissue in the research context is good and right, because one hopes to realise one's dignity and the dignity of others through morally good behaviour, but one cannot know that one is right. Therefore, a multidimensional understanding of human dignity shows us that what we do with human tissue is our responsibility, which at the same time means that it is our responsibility. For this reason, prudence and humility remain essential virtues.

Acknowledgements The authors wish to thank the anonymous reviewers for their helpful questions regarding absolute and contingent ideas of dignity, moral integrity, and possible differences with respect to other established understandings of human dignity.

Funding The authors gratefully acknowledge the financial support of the European Commission under the DISC REGENERATION project (NMP3-LA-2008-213904).

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- Andrews L. Assessing values to set policies for consent, storage, and use of tissue and information in biobanks. In: Dierickx K, Borry P, eds. New challenges for biobanks: ethics, law and governance. Antwerp: Intersentia, 2009:31—47.
- Lunshof JE, Chadwick R, Vorhaus DB, et al. Science and society: from genetic privacy to open consent. Nat Rev Genet 2008;9:406—11.
- Miller PS. Genetic testing and the future of disability insurance: thinking about discrimination in the genetic age. J Law Med Ethics 2007;35:47—51.
- Taylor S, Treloar S, Barlow-Stewart K, et al. Investigating genetic discrimination in Australia: a large-scale survey of clinical genetics clients. Clin Genet 2008;74:20—30.
- Bombard Y, Veenstra G, Friedman JM, et al. Perceptions of genetic discrimination among people at risk for Huntington's disease: a cross sectional survey. BMJ 2009:338:h2175.
- Alta Charo R. Body of research—ownership and use of human tissue. N Engl J Med 2006;355:1517—19.
- Bryant RJ, Harrison RF, Start RD, et al. Ownership and uses of human tissue: what are the opinions of surgical in-patients? J Clin Pathol 2008;61:322—6.
- Allen MJ, Powers LE, Gronowski KS, et al. Human tissue ownership and use in research: what laboratorians and researchers should know. Clin Chem 2010;56:1675—82.
- Gillett G, McKergow F. Genes, ownership, and indigenous reality. Soc Sci Med 2007;65:2093—104.
- Geller G, Micco E, Silver RJ, et al. The role and impact of personal faith and religion among genetic service providers. Am J Med Genet C Semin Med Genet 2009;151C:31—40.
- Van Der Graaf R, Van Delden JJ. Clarifying appeals to dignity in medical ethics from an historical perspective. *Bioethics* 2009;23:151–60.
- Müller-Terpitz R. Das Recht der Biomedizin: Textsammlung mit Einführung. Berlin: Springer, 2006:5.
- Caulfield T, Chapman A. Human dignity as a criterion for science policy. PLoS Med 2005;2:736–8.
- 14. Baylis F, Krahn T. The trouble with embryos. Sci Stud 2009;22:31-54.
- Kant I. Grounding for the metaphysics of morals (Trans. JW Ellington), 3rd edn. Indianapolis: Hackett Publishing, 1993:36.
- Shell SM. Kant on human dignity. In: Kraynak RP, Tinder G, eds. In defense of human dignity: essays for our times. Notre Dame, IN: University of Notre Dame Press: Notre Dame, 2003:53—80.

Research ethics

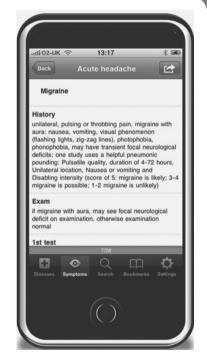
- Cancik H. 'Dignity of man' and ' Persona' in stoic anthropology: some remarks on Cicero, De Officiis I 105—107. In: Kretzmer D, Klein E, eds. *The concept of human* dignity in human rights discourse. The Hague: Kluwer Law International, 2002:19—40
- 18. Margalit A. The decent society. Cambridge, MA: Harvard University, 1996:44.
- 19. Gewirth A. The community of rights. Chicago: University of Chicago, 1996:66.
- Benedict XVI. The Human Person, the Heart of Peace. Message for the Celebration
 of the World Day of Peace, 2007. http://www.vatican.va/holy_father/benedict_xvi/
 messages/peace/documents/hf_ben-xvi_mes_20061208_xl-world-day-peace_en.
 html (accessed 1 Jan 2007).
- Kirchhoffer DG. Benedict XVI, human dignity, and absolute moral norms. New Blackfriars 2010;91:586—608.
- Nussbaum M. Human dignity and political entitlements. In: Human dignity and bioethics: essays commissioned by the President's Council on Bioethics. Washington, DC: President's Council on Bioethics, 2008:351—80.
- Nussbaum M. Frontiers of justice: disability, nationality, species membership. Cambridge, MA: Harvard University, 2006:76—8.

- Nussbaum M. Women and human development: the capabilities approach. Cambridge: Cambridge University, 2000:77—80.
- Van Tongeren P. The relation of narrativity and hermeneutics to an adequate practical ethics. *Ethical Perspect* 1994;1:57—70.
- Taylor C. Sources of the self: the making of modern identity. Cambridge: Cambridge University, 1989:15.
- Janssens L. Artificial insemination: ethical considerations. Louv Stud 1980;8:3—29.
- Gilligan J. Violence: reflections on a national epidemic. New York: Vintage Books, 1997:45—55; 112.
- Kirchhoffer DG. Become what you are: on the value of the concept of human dignity as an ethical criterion in light of contemporary critiques. Bijdragen 2009:70:45—66
- Hauskeller C. Genes, genomes and identity. Projections on matter. New Genet Soc 2004;23:285—99.
- Ursin LØ, Solberg B. The health dugnad: biobank participation as the solidary pursuit
 of the common good. In: Solbakk JH, Holm S, Hofmann B, eds. *The ethics of research*biobanking. New York: Springer, 2009:219—36.

DIFFERENTIAL DIAGNOSIS

Trustworthy guidance on your iPhone





Find out more at bestpractice.bmj.com/differentials

Copyright of Journal of Medical Ethics is the property of BMJ Publishing Group and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.