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Is the UNESCO Undergraduate Bioethics Integrated Curriculum (Medical) Fit for Purpose?

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Abstract

In 2017, UNESCO introduced an *Undergraduate Bioethics Integrated Curriculum* to be taught in Indian medical schools, with an implied suggestion that it could subsequently be rolled-out to medical schools in UNESCO's other member states. Its stated aim is to create ethical awareness from an early stage of a doctor's training by infusing ethics instructions throughout the entire undergraduate medical syllabus. There are advantages to a standardised integrated curriculum where none existed. However, the curriculum as presently drafted risks failing to achieve its laudable aims. There are important lessons to be drawn from UNESCO's *First Syllabus for Youth Bioethics Education* (2018) which is aimed at schoolchildren and teenagers, and represents a creative, effective and culturally-sensitive way to teach bioethics.

Introduction

In 2017, UNESCO launched an *Undergraduate Bioethics Integrated Curriculum (Medical)*.[1] Based on the *Bioethics Core Curriculum* which the organisation published in 2008,[2] it offers a detailed outline of the bioethics curriculum to be taught in Indian medical schools, with an implied suggestion that it could subsequently be rolled out to medical schools in UNESCO's other member states. Its stated aim is to sow ethical seeds early to produce ethically informed medical practitioners of the future. In furtherance of this aim, the document highlights the necessity of embedding ethics teaching from the pre-clinical phase, and infusing these principles throughout the entire undergraduate medical syllabus. While this important and far-sighted initiative undoubtedly deserves praise, this article seeks to draw attention to some of the challenges posed by the curriculum as presently drafted. Recommendations will then be made on how some of the shortcomings can be addressed by drawing inspiration from another of UNESCO's own documents namely its *First Syllabus for Youth Bioethics Education*.[3]

An Integrated Curriculum: Benefits and Challenges

According to the preamble of the integrated medical curriculum:

> *"Bioethics needs a systematic effort to work within the ethos of medicine, which has traditionally been service to the sick. There is now a shift of focus from the traditional individual patient, doctor relationship and medical care to a greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore necessary to be prepared to deal with these problems."*

In endeavouring to meet these concerns, it was proposed that a bioethical approach be integrated across medical students' undergraduate training.

For this, the 142-page document contains detailed instructions on the general aspects of bioethics that need to be taught as well as the range of ethical issues to be discussed in different modules within the medical syllabus. The general aspects would constitute 40% of the students' overall ethics instruction. These cover the history and evolution of bioethics, the principles of bioethics, moral theories, autonomy and informed consent, justice, privacy, confidentiality, the beginning and end of life, research ethics, organ transplantation, reproductive ethics, professionalism and clinical ethics. The remaining 60% are discipline-specific, to be delivered in the last 5 minutes of classes on modules like Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, Microbiology, Community Medicine, Ophthalmology, Otorhinolaryngology, Medicine, Surgery, and Obstetrics and Gynaecology. The aim is to teach students the significance of ethical principles such as autonomy and consent, privacy and confidentiality, benefit and harm, human dignity and human rights that relate to the medical topics that they cover in any particular class. The curriculum also outlines the assessment strategies, learning outcomes and a suggested order of lessons.

The declared goals of such a meticulous framework are the development of medical practitioners with the competencies to: identify ethical challenges and issues 90% of the time; prevent escalation or institute ethical solutions; deliver ethically excellent healthcare; uphold justice and human rights; carry out scientific enquiry in work and research; undertake critical thinking in relation to ethical issues; maintain a high empathy score; and introduce and promote humanistic values. However, is the integrated curriculum in its current form, able to deliver these ideals? Can other countries learn from this approach?

Before these questions are explored, it is important to acknowledge that there are indeed advantages to a standardised integrated curriculum, particularly in India and other countries where none existed. Medical science and changes in public discourse have transformed medical practice enormously in the last century, with an ever-increasing number of circumstances that invite moral reflection on the permissibility of various actions and omissions.[4] The paternalism of yesteryear no longer has pride of place in contemporary medicine. It is thus important for trainee doctors to reflect on the ethical dimension of their work. Since ethical instruction is either lacking entirely or a poorly-developed feature of the medical curriculum in parts of the world,[5, 6] the standardised integrated curriculum provides an important template for those countries to set up such teaching in their medical curricula. Further, for those countries like India, that had no ethical framework within any of their medical curricula, this is a major initiative. The creation of *an* integrated curriculum is therefore an important advance, for which the drafters of the curriculum should be given credit.

The proposed programme of study nevertheless raises a number of issues that warrant further scrutiny and debate. Firstly, the integrated curriculum states that it has

incorporated all the principles of the *Universal Declaration on Bioethics and Human Rights* ("the Declaration") adopted by UNESCO in 2005, "as this set of bioethical principles form the common platform, that is accepted across geographical, political and religious boundaries". Referring to the Declaration, the earlier UNESCO *Core Bioethics Curriculum* stated that their deployment "does not impose a particular model or specific view of bioethics, but articulates ethical principles that are shared by scientific experts, policy-makers and health professionals from various countries with different cultural, historical and religious backgrounds."

We query whether such claims of the universal acceptance of those bioethical principles are justified when the curriculum's references to autonomy, beneficence, non-maleficence and justice, clearly endorse the four principles of biomedical ethics propounded by the US ethicists Thomas Beauchamp and James Childress.[7] These, developed within the cultural context of Western medicine,[8] denote that the curriculum, in line with the Declaration, also sees bioethical issues, problems and solutions through the philosophical traditions of the West.[9] Other bioethics traditions like Confucianism, Islamic, Buddhist, Asian, African and Indian itself are afforded little recognition. For example, Article 6 of the Declaration emphasises an individualistic model of consent, something which is not necessarily shared by the more communitarian societies of Asia, Africa and the Middle East.[10, 11] Similarly, Article 9 of the Declaration espouses an individualistic model of privacy and confidentiality which does not align well with the more family-centric decision-making approach used in communitarian societies.[12] Hence are the drafters of the *Bioethics Core Curriculum* and the *Integrated Curriculum* correct to claim that the Declaration is accepted and shared across different countries, cultures and religions? Or are

these instead the transplantation and adaptation of Western bioethics to varied cultural settings?[13]

Secondly, by specifying what is taught, and how and when it is delivered and assessed, the proposed curriculum comes across as highly prescriptive. Its level of specific detail leaves very little room for creativity or customisation. This may inhibit medical schools from deciding their ethics curriculum content and from drawing on a wider Arts and Humanities agenda to widen students' reflective thinking. To effectively prepare students for future practice in many arenas, bioethics teaching must be conducted in the context of individual countries' social, legal, political, historical, cultural and religious contexts,[14] cognisant of their economic realities [15] and political threats.[16] However, the proposed curriculum risks being insensitive to these, with its focus and emphasis on Western frameworks, potentially at the expense of recognising moral and ethical culture at a local level and equipping the student to cope with such conflicts.

Thirdly, the formulaic nature also lends itself to a didactic curriculum rather than to problem-based learning. Thus inasmuch as reflective practice forms an important part of critical thinking around the way that decisions are made and clinical care is delivered,[17] the proposed framework seems isolated from the reality of complex clinical practice. There is probably much greater similarity between the European nations' healthcare systems which have a social model of healthcare delivery, similar to the NHS, than where healthcare is privately financed or reliant on independent insurance. When many in the population are unable to access even basic healthcare, the pressures and tensions in decision-making are very different.[15] In developing countries, where basics such as morphine analgesia is not available [18] or where there are low literacy levels among the population,[19] a Western

and developed world's bioethics curriculum as embodied by the integrated curriculum can seem irrelevant, because its interpretation is essential to ensure that it is properly utilised. Further, where persecution of different population groups on grounds of race or creed and embedded social hierarchies are all too common in today's world, clinicians may also find it confusingly difficult to practise ethically and morally in some large nations whose human rights record is poor.[20]

A sound ethical framework should help doctors who find themselves caught up in difficult economic conditions, compounded by the tensions of conflict and violence, to be resourceful and resilient. The inclusion of too much detail in the integrated curriculum risks removing the focus from a framework within which the learner can approach any problem in direct or indirect clinical care, and can adapt to whatever condition they find themselves working in, without betraying fundamental issues of human rights. Rather, the curriculum does not teach the learner to live with clinical uncertainty, nor does it appear to encourage them to re-evaluate and revise opinions. It may fail to teach them that their decision is not absolute and that they may be making multiple decisions all the time on different trajectories, having to modify those decisions as new situations emerge. Instead, it may give them an over-confident view of their own competency and a lack of wisdom from experience. It is not teaching them how to drive on difficult terrains as different parts of the car fail and weather deteriorates, so to speak. It is only teaching them how to get in the car, start the engine and plan the journey just as a driving licence makes people think that they can drive, but none of the instructions taught them how to cope in difficult terrains, with parts failing in bad weather conditions and when being chased by terrorists.

Fourthly, the degree of precision stipulated makes the programme seem resource-greedy in a crowded curriculum. As mentioned previously, in addition to the general aspects of bioethics, as much as 60% of the syllabus is discipline-specific. These are to be taught in the last 5 minutes of each class of every module in the medical school syllabus. An implementation support programme aims to develop educators to deliver the integrated curriculum. Their challenge will be to disseminate the principles across all medical tutors. Success could dramatically raise the standards of clinical services especially where financial conflicts in care delivery arise. Failure to do so, particularly in the developing world, would mean that what is delivered would be a reductionist curriculum.

Fifthly, the tendency to provide long lists of items to cover could prove perilous as a list can never be complete. For example, when teaching the Community Medicine module (p. 81), tutors are instructed, for the topic on 'Air Pollution and Ecological Balance', to discuss the ethical issues relating to environmental ethics, human dignity and human rights, justice, benefit and harm, and vulnerability. Yet when teaching on the 'Effects of Noise on Human Health', they are only to consider environmental ethics, benefit and harm, and vulnerability. There is no logical reason, nor any rationale offered, as to why the latter does not involve considerations of human dignity and human rights, and justice. Similarly, for the 'Pathology' module (p.100), where tutors are instructed, for the topics of 'Tuberculosis' and 'Leprosy' to discuss only ethical issues relating to privacy, confidentiality, benefit and harm. However, when it comes to 'Syphilis', they are also to consider, in addition to those concerns, issues of vulnerability, autonomy, consent, human dignity and human rights. But why are these additional issues not relevant for Tuberculosis and Leprosy? These inconsistencies or oversights do not make logical sense. Nor are they ethically justified. This concern is compounded by the fact that the curriculum does not include some important known

diseases (e.g. Ebola). And, as we live in a rapidly changing world, it is important to cater for the unknown and the unencountered. Yet, the curriculum does not seem to introduce students to the idea of yet unknown pathogens.

These shortcomings in the curriculum should be addressed in its next iteration so that it achieves its goal – to prepare medical students for the future.

Recommendations

To address the concerns highlighted above, one does not need to look very far than another of UNESCO's own publications: *The First Syllabus for Youth Bioethics Education* (2nd edition, 2018). Interestingly or perhaps ironically for present purposes, this document aims to raise bioethics awareness amongst a younger demographic. It offers instructional materials, in ascending order of complexity, to the following four age groups: young children (3-5 years old); elementary school children (6-10 years old); teenagers (11-14 years old); and older teens (15-19 years old). These are presented in the forms of stories, case-studies and games, which are accompanied by methodological explanations on how the materials can be used by educators. A wide range of issues are covered including female genital mutilation, bullying, attitudes towards refugees, female education, physical and learning disabilities, vulnerability, religious persecution, thumb-sucking, physical chastisement, diversity, protection of animals and the ecosystem, medical treatment, the value of human life and road safety. These realistic scenarios can be adapted to different settings.

Like the integrated curriculum, it incorporated the *Universal Declaration on Bioethics and Human Rights*. In fact, the instructional materials were geared around 12 of its general

ethical principles. However, unlike the integrated curriculum, the syllabus does not explicitly advocate nor impose a particular model of bioethics when dealing with these issues. Whilst the Declaration's endorsement of principlism is incontrovertible, instructors are encouraged to be flexible in how they facilitate the sessions. Thus while concepts from the Western model of bioethics may form a vital part of the instructors' toolkit, they and their students may also draw from their own cultural-religious frame of reference. Children and young people explore, through personal reflection and group discussion, different ways of conceptualising ethical dilemmas. They are encouraged to think and problem-solve, and to avoid prejudicial attitudes. They are discouraged, at the same time, from hiding behind culture or from allowing culture to be the excuse or justification for any particular practices or mindsets. They could, for instance, be challenged to reach their own conclusion that torturing someone is fundamentally wrong or that female genital mutilation is unacceptable. Or that education is worth pursuing and fighting for, or that everyone shares the responsibility for protecting the environment.

Thus, while the integrated curriculum is rigid, *The First Syllabus for Youth Bioethics Education* has in-built flexibility which allows it to be respectful to local situations as well as to culture, religion and politics. And where the integrated curriculum is prescriptive, the latter provides only minimal instruction and leaves ample room for discretion and adaptation. Hence where the former produces graduates who may require 'an operations manual', the latter equips the students to be world citizens who have the ability to exercise independent critical thinking. That could in turn enable them to marshal their inner resources, for example, to resist media pressure and avoid being seduced by sound bites designed to induce certain behaviours. It could also empower them to resist coercive forces from peer pressure, fraud and being groomed. As the syllabus also emphasises the value of

human life, it could prevent them from engaging in harmful behaviour towards others and themselves, always striving to make the right choices or decisions in a given situation. All these could mean that those future students will one day arrive at medical school with a basic understanding of bioethics.

Indeed, the youth education syllabus has much to commend it. Its creativity, simplicity, and flexibility should be emulated by the integrated curriculum to produce ethically-informed, culturally-sensitive, judicious, adaptable and emphathetic medical practitioners as originally envisioned.

Conclusion

The *2017 Integrated Curriculum* was written primarily for Indian medical schools by Indian drafters to address a shortfall in bioethics coverage in their country's medical education. However, as the document was prepared under the auspices of UNESCO, their effort will have both national and international relevance.

Fundamentally, we agree that it is crucial for ethics instruction to be embedded within the medical curriculum, and this painstaking and far-sighted attempt to produce a model is indeed laudable. The doctors of tomorrow will practise in a more complex environment than their predecessors, making ethical awareness in decision-making ever more important. However, as discussed, the curriculum imposes a Western model of bioethics and does not sufficiently consider the socio-political, cultural and religious contexts of other countries and the resources available. It is also highly prescriptive and formulaic. This means it does not transfer well to medical school curricula that are already established and have incorporated

bioethics at every stage. Hence for those countries such as the UK where evolving ethical frameworks of thinking have been discussed for many years and have been evolving, such a curriculum can be viewed as ignoring the work that has already been undertaken. It is also difficult to apply in those countries that, like the UK, have moved away from didactic teaching styles towards integrated problem-based learning, and other teaching and learning methods.

Before the proposed curriculum is promoted internationally, ethics teaching should be mapped for each country to understand which framework they are using, and how this is applied in practice. Some basic common denominators, values, duties of clinicians and core principles are important, but beyond that, freedom to develop is also crucial. Indeed the curriculum would be stronger if it is simplified, focused on core principles and aims to increase bioethics understanding incrementally. Other countries should look at adopting core principles and use them within their teaching framework to ensure that bioethics is adequately addressed in the curriculum and is sensitive to local cultural diversity and the resource environment doctors find themselves working in (e.g. in a small island in Indonesia versus a large Australian city).

It is important that a bioethics curriculum adequately equips medical students for a rapidly changing world. As discussed, inspiration can be drawn from UNESCO's *First Syllabus for Youth Bioethics Education* which has managed to be culturally-sensitive and universally applicable without being prescriptive, formulaic or didactic.

REFERENCES

1. UNESCO. Undergraduate bioethics integrated curriculum (medical). 2017.
2. UNESCO. Bioethics core curriculum. 2008.
3. UNESCO. First syllabus for youth bioethics education. 2nd edition. 2018.
4. Morrison E, Furlong, B, editors. Health care ethics: critical issues for the 21st century. Burlington: Jones & Bartlett Learning, 2019.
5. Okoye O, Nwachukwu D, Maduka F. Must we remain blind to undergraduate medical education in Africa? A cross-sectional study of Nigerian medical students. *BMC Med Ethics* 2017; 28, doi: 10.1186/s12910-017-0229-2.
6. Das Neves W, de Araujo L, Rego S. The teaching of bioethics in medical schools in Brazil. *Revista Bioethica* 2016; 24(1): 98-107.
7. Beauchamp TL, Childress JF. *Principles of biomedical ethics*. 7th edition. New York: Oxford University Press, 2012.
8. Ten Have, H. Globalizing bioethics through, beyond and despite governments. In: Bagheri A, Moreno JD, Semplici S, editors. *Global bioethics: the impact of the UNESCO international bioethics committee*. Switzerland: Springer, 2016. p. 1-12.
9. Chattopadhyay S, De Vires, R. Bioethics concerns are global, bioethics is Western. *Eubios Journal of Asian and International Bioethics* 2008;18(4):106-109.
10. Kuczewski M, McCruden P. Informed consent: does it take a village? The problem of culture and truth telling. *Camb Q Healthc Ethics* 2001;10(1):34-46.
11. Hammoud M, White C, Fetters, M. Opening cultural doors: providing culturally sensitive healthcare to Arab American and American Muslim patients. *Am J Obstet Gynecol* 2005;193(4):1307-1311.
12. Chong J A, Quah, Y L, Yang, G M, Menon S, Krishna, L. Patient and family involvement in decision making for management of cancer patients at a centre in Singapore. *BMJ Supportive and Palliative Care* 2013; doi: http://dx.doi.org/10.1136/bmjSPcare-2012-000323.
13. Langlois A. Negotiating bioethics: The governance of UNESCO's bioethics programme. Oxford: Routledge, 2013.
14. Louw B. Cultural competence and ethical decision making for health care professionals. *Humanities and Social Sciences* 2016; 4(2-1): 41-52.
15. Begum H. Poverty and health ethics in developing countries. *Bioethics* 2001; 15(1): 50-56.
16. Gross M. Bioethics and armed conflict: Mapping the moral dimension of medicine and war. *The Hastings Center Report* 2004; 34(6): 22-30.
17. Hargreaves K. Reflection in medical education. *Journal of University Teaching and Learning Practice* 2016; 13(2): Article 6.
18. Knaul F, Farmer P, Krakauer E, et. al., Alleviating the access abyss in palliative care and pain relief – an imperative of universal health coverage: the Lancet Commission report. *Lancet* 2018; 391(10128): 1391-1454.
19. Clayton M, Syed F, Rashid A, Fayyaz U. Improving illiterate patients' understanding and adherence to discharge medications. *BMJ Qual Improv Rep* 2012; 1(1): u496.w167.

20. Arulkumaran S. Health and human rights. *Singapore Medical Journal* 2017; 58(1): 4-13.