

Centres of Ethical Gravity: A Comparison of Responses to Contemporary Biomedical Dilemmas Among Young People in Sri Lanka and England.

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Abstract

The achievements of contemporary biomedicine and biotechnology are now widely communicated across the globe. Yet, across different cultures and belief systems, the relationship between the possible and the acceptable when it comes to biomedical advance is highly variable and draws justification from a wide range of sources: culture, religion, 'common sense', family values, ideas of what is 'natural', ideas of what is progress etc. Students' attitudes towards science and by extension toward the new biotechnologies have been extensively researched western contexts. However, relatively little is known about how this relationship plays out in different cultural contexts and there is even less by way of empirical research in this area. In this paper, we are interested in two related questions, the answers to which, we hope will begin to fill these gaps. First, we consider how culture and religion feed into bioethical deliberation among an emerging

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generation of 'bioethical citizens' drawn from Sri Lanka; the contrast that we go on to make with students from the UK is both illuminating and instructive. Second, we consider the points of bioethical convergence and divergence between the two groups. We conclude by offering some observations about what we have coined 'centres of ethical gravity' and what these might tell us about cultural relativism and the operation of bioethical sensibilities in different cultural contexts.

Keywords

Bioethics, Sri Lanka, Medical Ethics, England, Biomedical Dilemma

Introduction

The achievements of contemporary biomedicine and biotechnology are now widely communicated across the globe. Groundbreaking treatments and therapies are extensively trailed in newspapers, television media and the internet. Consequently, knowing about the latest tissue transplant possibilities or breakthrough in genetic or reproductive medicine comes long before they are available to ordinary citizens and this is especially so in developing world contexts where the lag may be significant and, for many, probably permanent. However, awareness of what biomedical science can do is very different from what it ought to do. Knowledge of the possibilities inherent in new developments invites reflection on limits, what these ought to be and how they should be maintained. What do I think? What do others think? What do we think? Encountering the new technologies, even in the imagination, thus requires that one should be part of a public made up of bioethical citizens, that is, people who could, in theory, be directly affected by these developments and, who should therefore, have a view or response.

Yet, across different cultures and belief systems, the relationship between the possible and the acceptable when it comes to biomedical advance is highly variable and draws justification from a wide range of sources: culture, religion, 'common sense', family values, ideas of what is 'natural', ideas of what is progress etc. For example, cultural conceptions of the embryo are instrumental to the way that national policies in areas such as IVF, stem cell research and cloning have developed and will go on developing. The lobbying of the Christian right in the United States has brought about a virtual embargo on stem cell research (Holland et al 2001), whilst researchers in Asia have used rhetoric drawn from Buddhism to overcome ethical objections to such research and fill an apparent bioethical vacuum.¹

Students' attitudes towards science and by extension toward the new biotechnologies have been extensively researched western contexts (Dawson and Schibeci 2003a; Dawson and Schibeci 2003b; Driver et al 1996; Gunter et al 1998, Osborne et al 2003). However, relatively little is known about how this relationship plays out in different cultural contexts and there is even less by way of empirical research in this area. (but see Macer et al 1994; Chen and Ruffian 1999; Becker and Maunsaiyat 2002) In this paper, we are interested in two related questions, the answers to which, we hope will begin to fill these gaps. First, we consider how culture and religion feed into bioethical deliberation among an emerging generation of 'bioethical citizens' drawn from Sri Lanka; the contrast that we go on to make with students from the UK is both illuminating and instructive. Second, we consider the points of bioethical convergence and divergence between the two groups. We conclude by offering some observations about what we have coined 'centres of ethical gravity' and what these might tell us about cultural relativism and the operation of bioethical sensibilities in different cultural contexts.

Our exploration is based on a series of surveys that were carried out between 2004-5 among A-level students in Sri Lanka [urban and rural populations] and a small UK comparator population. In these surveys, we elicited responses to a series of ethical dilemmas posed to the students by way of short vignettes. Students undergoing A-level were identified as an interesting age group in which to carry out our survey because, whilst literate and aware, their formal knowledge of bioethics was likely to be at a relatively early stage of development and not yet in any sense 'expert'. That is, they had not undergone ethics training *per se* and might be thought of as responding directly to our questions without the benefit of any higher level tools of analysis, as distinct from, say, medical students (cf Simpson et al 2005).

Methods

In Sri Lanka two districts were selected, one rural from which 4 schools were selected (total number of students 762) and one urban, also with 4 schools selected (total number of students 219). Both groups were given the questionnaire in Sinhala. The wider Sri Lankan population (from 1981 and 2001 Census Statistics) is ethnically diverse being made up predominantly of Sinhalese [76 %] and Tamil [18 %] with smaller groupings of Malays and Indo-Europeans. There is also religious diversity with the population being made up of Buddhists [70 %], Hindus [15 %], Moslems [8 %] and Christians [7 %]. In view of the areas in which the samples were drawn, the majority of our respondents were Sinhala Buddhist (approximately 98%). For the purposes of this exercise, the small number of students from other religious groupings were excluded, thus yielding a relatively homogenous sample in terms of ethnicity and religion.

The students were aged approximately 15 - 18, of both sexes, and at the Advanced level in the Arts & Humanities (language, literature, history, geography, politics, logic, political science, economics, Buddhist civilization [in Sri Lanka]). At their O-level they had studied basic science.

Although similar in age, gender mix and stage of education the homogeneity of the UK school students was far less and it would have been virtually impossible to select for religion in any meaningful way given the sample size. In the UK, responses from 217 students were elicited. Of these, 87 % stated they had 'no religion'. However, this should not be taken as a uniform and consistent agnosticism but a non-practicing status that masks a wide variety of religious and cultural influences. The apparently liberal / secular cast of the UK students was also likely to be accompanied by greater exposure to science and

technology than their Sri Lankan counterparts. In turn, the urban sample of Sri Lankan scholars was likely to have had greater exposure to western science and technology than rural scholars. For example, data produced by Arseculeratne would suggest that Western allopathic medicine is used less than traditional medicine by rural populations in Sri Lanka (Arseculeratne 2005).

For reasons of consistency, a small number of Asian students were excluded from the UK sample.

The Questionnaire

The questionnaire consisted of a list of ethical vignettes followed by a categorical statement. The questions were originally composed in English and translated into Sinhala. From an original draft of 30 questions, 10 were excluded on the grounds that it was not possible to come up with a sufficiently unambiguous Sinhala translation when translating back and forth between English and Sinhala.

Students were asked to respond to these questions using a five point scale ranging from strongly agree to strongly disagree. For the purposes of statistical calculation, the responses to 'strongly agree' and 'agree' were pooled as were those to 'strongly disagree' and 'disagree'. However, the 5-option responses of the original Likert Scale were used for later analysis of the correlations with the other variables such as sex, family background.

The questions were divided according to the following nine categories: terminal illness, abortion, distributive justice in health policy, euthanasia, medical decision making, professional conduct of doctors, assisted reproduction, organ transplantation, animal experimentation. For purposes of this analysis these have been regrouped under the following headings: A. Value of life; B. New Reproductive Technologies

(NRTs); C. Doctors and their patients; D. Attitudes towards drugs / medicines; E. Organ transplantation.

The comparison of the responses of each of the samples is shown below: (i) rural Sri Lankan - urban UK, (ii); urban Sri Lankan - urban UK and (iii); rural SL - urban SL. Comparisons were made by the χ^2 test using the SPSS package version 10.01. Differences with a p-value of ≥ 0.05 were considered non-significant (ns), $<0.04 - 0.002$ moderately significant (s), ≤ 0.001 highly significant (hs). The percentages refer to the first option 'agree' (pooled strongly agree + agree).

A. Value of Life

As the possibilities for technological intervention at the beginning and the end of life increase in scope and complexity, the question of where boundaries between life and death are constructed becomes the subject of deepening controversy and debate. The questions in this section present a series of vignettes about appropriate actions in cases of terminal illness; where a fetus is carrying a significant defect; where a person is suffering an incurable illness and finally views are sought in relation to the use of animals in medical experimentation.

Terminal Illness

1. A person who was seriously injured is being kept alive by life support treatment. There is no possible hope of recovery, but the doctors are right in continuing with this treatment.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
87% 61%	74% 61%	87% 74%
<0.001 hs	<0.001 hs	<0.001 hs

The difference in responses is highly significant across all three groups with the UK group being less likely to advocate continuation of treatment than either of the two Sri Lankan groups. The percentages also suggest that there is something of a spread, with rural Sri Lankan students most likely to advocate continued treatment and the UK students least likely. The Sri Lankan urban students came out in the middle. One inference that could be drawn here is that in the move from the more traditional, rural, Buddhist setting to a Western urban, secular one there is a change in the way that the absolute value of life is evaluated.

Termination of Pregnancy

2. A woman discovers early in pregnancy that her child may be born with physical defects such as deformed limbs. The doctors are right in complying with her request to terminate the pregnancy.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
31%	78%	46%	78%	31%	46%
<0.001 hs		<0.001 hs		<0.001 hs	

A similar pattern is evident here as in question one. There are again highly significant differences in between the paired groups and the same rural-urban drift is in evidence with less than one third of rural Sri Lankan students feeling that termination of pregnancy was the right course of action and over two-thirds of UK students prepared to advocate this course of action.

Euthanasia and Assisted Suicide

3. An elderly patient with an incurable illness is in great pain and asks his doctor to administer drugs that will end his/her life. The doctor is

right to do so in such a case.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
15% 80%	32% 80%	15% 32%
<0.001 hs	<0.001 hs	<0.001 hs

The same pattern as in question one and question two is in evidence in relation to euthanasia. What is striking, however, is the high proportion of UK students prepared to countenance euthanasia [80%] compared with their Sri Lankan counterparts [15% and 32%].

Animal Welfare

4. Animals are useful in tests for the development of new drugs for medical use in humans. Animals should therefore be used to achieve progress in medical science.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
56% 52%	58% 52%	56% 58%
0.527 ns	0.207 ns	0.624 ns

5. The development of a new drug requires experiments on animals which might result in their suffering. Even so, scientists are correct in doing experiments on animals to develop drugs for treating human illness.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
48% 46%	53% 46%	48% 53%
0.762 ns	0.136 ns	0.248 ns

In neither of the questions pertaining to the value of animal life, was

there a statistical difference between any of the populations.

B. New Reproductive Technologies (NRTs)

One of the most ethically challenging areas in the realm of biotechnology concerns the ability to manipulate human reproductive processes. For purposes of addressing infertility or in the interests of enhancement, it is now possible to produce children with a highly complex genetic and social inheritance. Where before there was only chance there is increasingly the possibility of choice and questions arise as what should be the legitimate limits of that choice.

Infertility Treatments and Assisted Reproduction

6. A man is found to have a defective gene which is responsible for a serious hereditary disease. In future it may be possible to repair such genes whilst they are still in the man's sperm. In this context 'gene repair' will be acceptable.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
84% 96%	86% 96%	84% 86%
<0.001 hs	<0.001 hs	0.434 ns

The figures show that whilst there is little difference between the two Sri Lankan groups, there is a highly significant difference between both these groups and the UK students. However, it should also be pointed out that proportion of Sri Lankan students prepared to countenance 'gene repair' was, in any case, high [84% and 86% respectively].

7. Due to the husband's infertility, a married couple cannot have a child. The doctor explains that it is possible for them to use a donor's (another

man's) sperm. If the husband is unhappy with treatment using donor sperm he has the right to refuse that treatment.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
75%	93%	65%	93%	75%	65%
<0.001 hs		<0.001 hs		0.021 s	

There are highly significant differences between the UK students and the two Sri Lankan groups with the difference between the later two groups being marginally significant. It would appear that UK students are highly supportive of the husband's right of veto. For Sri Lankan students the sense of veto is not so strong which might be accounted for in terms of doctor-knows-best, medical paternalism or out of recognition of the terrible stigma that goes with childbirth and the acceptance of this as a remedy of sorts. In any case, the proportions supporting the idea of husband's being able to veto is relatively high across all groups.

8. Due to a defect in her womb, a woman is unable to have a successful pregnancy. However her fertilised ovum is introduced into the womb of another woman (a surrogate mother) who has agreed to carry the child to term and return it at birth to the infertile couple. This way of producing a baby is acceptable.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
61%	89%	59%	89%	61%	59%
<0.001 hs		<0.001 hs		0.627 ns	

As in question six, the UK students appear to be more comfortable with new technologies than both Sri Lankan groups with the difference being highly significant in both instances. However, the difference between the

two Sri Lankan groups is non-significant. Whether this is might be explained with reference to cultural conservatism on the part of Sri Lankan students or simply that they haven't been exposed to these possibilities to any significant extent is a matter of speculation at this stage.

9. After several years of marriage a couple are still unable to have a child. It is now possible to produce a child by introducing a part of the cell from the father's body into the ovum or egg of the mother (a method known as cloning). Cloning is an acceptable solution to the couple's problem.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
71%	65%	61%	65%	71%	61%
0.192 ns		0.380 ns		0.011 s	

There does not appear to be a significant difference between the UK students and either of the Sri Lankan groups. It is perhaps worthy of note that despite being non-significant, for such a controversial technique, the proportions are still high at over 60% each. Unexpectedly, the difference between rural and urban Sri Lankan students is statistically significant with the rural group being rather more accepting of cloning than their urban counterparts. Whether this represents a misunderstanding on the part of some students about what was being asked in this question or, conversely, they were perfectly aware what was being asked and in their responses were conforming to a Buddhist assessment of cloning as perfectly legitimate cannot be ascertained from the data presented.

C. Doctors and Their Patients.

The shift in power from doctors to patients is one that has gathered momentum in medical practice across the world. However, the speed at which there are shifts from entrenched medical paternalisms of one kind or another to approaches that recognize and act upon patients' rights, is highly variable in different settings. The questions in this section probe some of the ways in which the rights of responsibilities of physicians in relation to their patients are changing.

How Doctors Make Decisions about Their Patients

10. A conscious, rational adult person is in need of life-saving surgery, but refuses to give consent for operation. The surgeon was right not to perform the operation.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
38% 86%	35% 86%	38% 35%
<0.001 hs	<0.001 hs	0.487 ns

The responses here reveal a highly significant difference between the UK students and their counterparts in Sri Lanka. Faced with a question that, in effect, pits medical paternalism against patient autonomy the UK students overwhelmingly went with the latter and the Sri Lankan students the former.

11. A doctor decides to administer a course of tablets to a patient. It is not the doctor's responsibility to tell the patient the name of the medicine, and how and when and in what dose the medicine should be taken and what its side effects might be.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
100%	96%	98%	96%	100%	98%
0.014 s		0.041 s		0.198 ns	

Whilst it is not clear how our respondents interpreted this question in light of the fact the patterns of dispensing are very different in each country, it is nonetheless interesting to note that the majority of respondents in all populations felt that providing information about drugs was not solely the doctors responsibility. However, both Sri Lankan populations differ significantly from the UK population in seeing agents other than the doctor as responsible for providing information.

12. A young man was found to be HIV positive. It is the doctor's duty to tell the man's wife of her husband's condition whether or not he gives permission to do so.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
56%	64%	51%	64%	56%	51%
0.086 ns		<0.001 hs		0.230 ns	

Although the proportions who see it as the doctor's duty to over-ride the patient's right to privacy are broadly similar across all three groups, the difference between the Sri Lankan urban group and the UK group does appear to be highly significant. Differences between UK students and Sri Lankan ones would not be surprising given the high level of visibility of AIDS [advertising, awareness and public health campaigns] in the UK compared with Sri Lanka where AIDS still has a relatively low prevalence. However, that the most significant difference is between the two urban populations is somewhat surprising.

13. A surgeon advises a patient that surgery is essential. The patient refuses consent for this treatment. In such a case the surgeon has no option but to discharge the patient from the hospital.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
21%	68%	19%	68%	21%	19%
<0.001 hs		<0.001 hs		0.452 ns	

Again, the difference here is between UK students and their Sri Lankan counterparts. As in question 10, the Sri Lankan students tend to go with medical paternalism, that is, the surgeon should not discharge. Conversely, the UK students mostly see no alternatives should the patient wish to discharge him or herself.

14. A hospital's medical practitioner develops a mental disorder and begins to undergo medical treatment. The hospital authorities discontinue the doctor's responsibility for medical management of patients. This is the correct course of action.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
88%	87%	90%	87%	88%	90%
0.633 ns		0.280 ns		0.612 ns	

The majority of students in each group felt that removing the doctor from patient care was the correct thing to do. Differences were non-significant.

D. Attitudes Towards Drugs and Medicines

Although there are vast differences in the level of resources put into health care by the UK government and the Sri Lankan government, there

are nonetheless significant similarities. Both countries have a major commitment to a publicly-funded national health service which is free at the point of need. In both countries there are concerns about access, equity of treatment and the ever-increasing bill for drugs and new forms of therapy, all of which raise profound ethical concerns. Both countries have also seen the marketisation of health care and a substantial growth in private-sector activity in both allopathic as well as 'alternative' medical practice.

15. A government is correct in distributing cheaper, generic drugs rather than expensive brand-named drugs.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
81%	UK 84%	75%	84%	81%	75%
0.488 ns		0.008 s		0.055 ns	

Across all groups there is a high level of support for the use of generic. The highest level of support is among the UK students and the only statistical difference is between them and the Sri Lankan urban students.

16. Western medical drugs are sometimes not as effective for the treatment of certain diseases, as the remedies found in alternative systems of medicine such as Homeopathy, herbal therapy, aromatherapy. It is acceptable for doctors trained in western medicine to allow these alternative remedies to be used for the treatment of certain diseases.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
80%	95%	82%	95%	80%	82%
<0.001 hs		<0.001 hs		0.500 ns	

Although the levels of support for pluralistic approaches to health care are high across all groups, it is interesting to note that the difference between the UK students and their Sri Lankan counterparts is highly significant. One explanation for this may be that whilst there is considerable antagonism between allopathic and traditional practitioners in both Sri Lanka and the UK, the perception of the relationship between the two communities is different for students in UK and Sri Lanka. UK students may have been influenced by the growing interest in alternative medicines and the debates that this has engendered about the extent to which alternative therapies should be available through the National Health Service. Sri Lankan students on the other hand are already familiar with a system in which there are well-established alternatives to allopathy, and notably Ayurvedic medicine. It may be that the difference between UK and Sri Lankan groups can be explained in terms of the former's interest in medical holism and the latter's recognition of an already existing medical pluralism.

17. A doctor does not have a duty to explain to a patient the effects of the drugs he prescribes.

SL rural - UK urban		SL urban - UK urban		SL rural - SL urban	
21%	12%	12%	12%	21%	12%
0.014 s		0.863 ns		0.002 hs	

Evidently the vast majority of all groups surveyed think that it is the doctor's duty to explain the effects of drugs prescribed. Where there appears to be a significant difference is between the urban groups [UK and Sri Lanka] and the Sri Lankan rural group. Among the rural students there would appear to be a higher level of confidence in the doctor's ability to prescribe medicines that will only have good effects.

18. In circumstances where a patient has to pay for drugs, the doctor is right to discuss with the patient, the cost and availability of the drug.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
78% 96%	86% 96%	78% 86%
<0.001 hs	<0.001 hs	0.007 s

Again, the majority in each category are clear about what the doctor's duty is. However, there are highly significant differences between the UK group and both Sri Lankan groups. As in question 17, it would appear that the rural students least expectation that the doctor could or indeed should discuss with them the cost and availability of drugs. UK students on the other hand were near unanimous is their expectation that the doctor should enter into discussion on such a matter.

E. Organ Transplantation

The ability to locate the organs of one person in the living body of another offers significant challenges to ideas of life, death and the integrity of the body. However, successful transplantation is dependent on supply of donated organs. More controversially, they might also be harvested from other species [xenotransplantation]. How society might respond to the need for organs is addressed in the final two questions.

19. There is nothing wrong with the use of organs from animals (such as pigs and monkeys) for transplantation into humans because human organs for transplantation are in short supply.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
54% 60%	52% 60%	54% 52%
0.228 ns	0.060 ns	0.675 ns

None of the differences between the groups are significant with just over half the students in each group favorably disposed towards xenotransplantation.

20. It is the duty of everyone, if they are without any illness, to make arrangements to donate their organs (eyes, kidneys) for transplantation, after their natural or accidental death.

SL rural - UK urban	SL urban - UK urban	SL rural - SL urban
80% 50%	89% 50%	80% 89%
<0.001 hs	<0.001 hs	0.001 hs

Here there are highly significant differences between all the groups. Of particular note, however, is the relatively low sense of duty of UK students to be organ donors when compared with their Sri Lankan counterparts.

Discussion

In the statistics presented above we have identified a number of differences and similarities in relation to young people's responses to a series of ethical dilemmas. That there are numerous differences is hardly surprising given the breadth of social, cultural and economic variation captured in the three groups. However, the question to which we would like to turn is what these statistics reveal about what might be referred to as the 'ethical centre of gravity' for each of these groups? In other words,

what might we infer about the collective values, beliefs and attitudes that lead groups to arrive at markedly different responses on some issues, but broadly similar ones on others? Such questions inevitably take us into the realm of relativism in relation to ethics and culture.

The first point to note in this regard is that the differences are greatest between the UK students and both groups of Sri Lankan students. As will be seen in Table 1, the differences between the two Sri Lankan groups is least marked [6 highly significant differences] whereas the difference between the UK group and each of the two Sri Lankan groups is most marked [11 and 12 significant differences with ten of the differences arising the same question]. Furthermore, the level of difference tends to follow a pattern of rural to urban drift with rural groups appearing more conservative in their opinions and the urban groups appearing more liberal and, perhaps, individualistic.

Table 1. Comparison of the responses of the 3 groups of respondents; their responses refer to the first option 'agree' (pooled strongly agree + agree). Total number of questions = 20.

	Significance level			
	hs	ms	ns	total / 20
Differences between				
rural SL and UK group	11*	2	7	20
urban SL and UK group	12*	2	6	20
rural SL and urban SL group	6	2	12	20

* in ten of these instances the questions for which there were highly significant differences were the same in both comparisons.

The second point to consider is that if we examine these areas of significant difference in more detail, a number of important centres of

ethical gravity begin to appear.

The four main ones we would like to discuss here are value of life; technological conservatism, medical paternalism and altruistic giving.

Value of Life [questions 1-3]: In the data presented, it is clear that there are important differences in play when it comes to the way young people think about decisions involving the intentional act of terminating life [euthanasia, termination of pregnancy and withdrawal of life support]. Among a population of students who are almost exclusively Sinhala and Buddhist, a strong pro-life attitude in response to such a survey is to be expected. Indeed, it is consistent with the ethic that exists within Buddhism against taking life. This ethic is enshrined in the first of the precepts which Buddhists aspire to follow. One who follows this precept 'does not kill a living being, does not cause a living being to be killed, does not approve of the killing of living being' (Digha Nikaya III.48 cited in Keown 1995, 170). This view is most strongly articulated in the responses of the rural Sri Lankan students. For UK students however, responses betray a more ambivalent and instrumental attitude to medical decisions to end life, particularly where termination of pregnancy is concerned.

Technological Conservatism [questions 6 and 8]: The extent to which UK students are prepared to countenance new treatments [gene therapy and ovum transfer and the arrangements these make possible such as surrogacy] appears to be high [96 and 89% respectively], This apparent enthusiasm indicates a level of familiarity and acceptance which is not shared by the Sri Lankan students. However, the inference here may not be about ethics at all, but rather one related to the degree of exposure that the students have to such technologies. Arguably, UK students are exposed more frequently to new reproductive and genetic technologies

on a daily basis [news, television dramas, hearsay, direct experience of friends and relatives]. For Sri Lankan students, however, the level of contact may not be so regular or widespread. Nonetheless, the extent to which students in Sri Lanka are able to access global news and current affairs should not be under-estimated. The high proportions of rural and urban Sri Lankan students who approve of gene therapy should be noted in this regard.

Medical Paternalism [questions 7,10,11,13,17 and 18]: The differences identified in relation to the conduct of doctors point to some important differences in the way that doctors are perceived in relation to their patients. In Sri Lanka, the medical profession has enjoyed a position of great power and influence for many years. The veneration of doctors in part comes from their education, social status and privileged access to western medical knowledge. At a more fundamental level, however, the expectation of beneficence among doctors and their commitment to relieve suffering coincides with a fundamental Buddhist aspiration to recognize suffering and bring relief wherever suffering is identified. There are signs that this profound faith in the authority of doctors is beginning to waiver [medical malpractice suits, open criticism and suspicion of doctors, questioning of medical authority etc], however, confidence in the idea of medical beneficence remains high as the young people in this study, and particularly those in rural areas, has indicated. This is in contrast to the young people in the UK group for whom there are stronger expressions of patient autonomy, power, rights and a general assumption that the doctor has a duty to share information with the patient.

Altruistic Giving [20]: Clear differences are apparent among the Sri Lankan and UK groups when it comes to consideration of whether to

donate body parts. One of the foundational values of Buddhism is that of giving and the expression of material and spiritual generosity [*dāna*]. Whilst altruistic giving is a feature of all world religions, Buddhism is perhaps unusual in that its injunction for practitioners to give extends to the body itself [*dāna upa paramitā*]. For Sinhala Buddhists, the idea of giving the body and its parts is commonly captured in the often repeated formula: ‘*aes, his, mas, lā*’, meaning literally ‘eyes, head, flesh, blood’ should all be given (Simpson 2004). Whilst there is considerable ‘ethical publicity’ regarding the importance of organ donation in the UK, it is invariably working against a backdrop of ideas which, for aesthetic or residual religious reasons, often translate into reluctance to donate organs at death.

Finally, it is not just differences that are of note in this survey. The fact there was little by way of significant difference concerning questions about animal welfare or drug distribution policies is of note [questions 4-5 and question 15 respectively]. The response regarding animal welfare is in some ways rather surprising given the significant differences that exist between groups when it comes to the value of human life. It is not clear whether UK students have particular sensitivities when it comes to animals, which is a distinct possibility given the effectiveness of ‘animal liberation’ campaigns in recent years. Alternatively, it may be that claims made about the extent to which Buddhists see the animal world as morally continuous with the human world are in fact overblown. Either way, the valuation of the life of animals would seem to be similar in all locations with respondents split approximately 50/50 on whether it is appropriate to use animals for experimentation leading to medical advance.

Conclusion

There has been much discussion about the existence of an Asian bioethic (for example see de Castro 1999, Sakamoto 1999). To be more specific, the debate seeks to highlight the ways in which bioethics has tended to be dominated by concepts and ideals that are essentially western in origin and orientation. As a consequence, it is argued that dominant bioethical paradigms are not entirely compatible with the cultural and social specificities of non-western societies. The response engendered is an attempt to distil something essential about Asian responses to human suffering and healing. The distinctiveness of an Asian bioethic appears to revolve around the notion of persons who are less individualistic and more attuned to a greater involvement with community and family, and with greater respect for collective interest and authority (cf Hitchcock 1994, xii). However, these claims are usually made in the abstract and with more ideological than empirical force. They are also foisted on a region of unspecified dimensions with enormous variability in terms of religion, culture, development and ethnicity. What we have attempted to do here is to narrow the focus in order to capture some of the specificities that exist amongst a group of Sri Lankan students who are predominantly Buddhist. The specificities are highlighted with reference to a comparator population of UK students.

We are the first to acknowledge that a survey methodology is a blunt instrument when it comes to identifying something as subtle as the formulation and expression of ethical viewpoints. The study undertaken here is an exploratory step in the quest for more detailed evidence and analysis of how cultural influences might have rhetorical impact upon local responses to ethical dilemmas that now manifest globally. The suggestion that there may be different ethical 'hotspots' or centres of 'ethical gravity' in different populations is highlighted by the

appearance of statistically different responses in attitudes towards value of life; technological innovation, medical paternalism and altruistic giving.

These results were presented in abstract and oral form by Professor SN Arseculeratne at the 8th Asian Bioethics Conference, Bangkok, Thailand on 23 March 2007.

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NOTES

1. For example, see Choon Kay and Kitzinger [2007] for commentary on the Korean researcher Hwang and particularly his views on Buddhism [p 305Fn]. Also see (Sleeboom-Faulkner; Schleiter 2004)

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