

# ETHICS EDUCATION IN A PROBLEM-BASED MEDICAL CURRICULUM

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## **DECLARATION**

I, the undersigned, hereby declare that the work contained in this assignment is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree

Signature

Date:

## ETHICS EDUCATION IN A PROBLEM- BASED MEDICAL CURRICULUM

### ABSTRACT

The complex ethical dilemmas created by advanced technological medicine and problematic doctor-patient relationships have led to an increasing interest in medical ethics education since the 1980's. The Medical School of the University of Pretoria has embarked on a new undergraduate medical curriculum in 1997. Ethics is educated in a longitudinal fashion over the six years of the medical curriculum and has focussed largely on the principal-based approach as described by Beauchamp and Childress. The research participants were the first final year class of this new curriculum, while the facilitators were medical educators or philosophers. The major finding was that the students were not yet able to identify ethical dilemmas with ease, although they were successful in the application of the principal-based approach to the vignettes of the study. The students did not cope well with the uncertainty created by ethical dilemmas and sought to solve the situation by creating boundaries provided by medical law. The recommendations of the study are that the theoretical component of the ethics curriculum should: 1) include more approaches to ethics, than only the principal-based approach; 2) address daily experienced ethical dilemmas during the study years in small group discussions; 3) and implement a portfolio assessment which can serve as a tool for students to track their own development in reflection on ethical dilemmas. In conclusion, the question remains whether we are currently ready to come "face to face" with the "other" as Levinas argues or are we still divided into "only two classes of mankind in the world - doctors and patients" as remarked by Kipling in the 19<sup>th</sup> century.



ETIEKONDERRIG IN 'N PROBLEEM-  
GEORIËNTEERDE MEDIESE  
KURRIKULUM

OPSOMMING

Die komplekse etiese dilemmas, veroorsaak deur hoogs gespesialiseerde tegnologiese medisyne en die problematiese dokter-pasiënt verhouding, het gelei tot 'n verhoogde belangstelling in mediese etiekonderrig sedert die 1980's. Die Mediese Skool van die Universiteit van Pretoria het in 1997 'n nuwe voorgraadse mediese kurrikulum geïmplimenteer. Etiek is op 'n longitudinale manier onderrig oor ses jaar in die mediese kurrikulum en het gefokus op die beginsel-benadering soos beskryf deur Beauchamp en Childress. Die navorsingsdeelnemers was die eerste finale-jaar klas van die nuwe kurrikulum, terwyl die fasiliteerders mediese dosente of filosowe was. Die hoofbevinding van die kurrikulum was dat die studente nie die etiese dilemmas met gemak kon identifiseer nie, alhoewel hulle suksesvol die beginsel-benadering kon toepas op die gevallestudies. Die studente hanteer nie onsekerheid, veroorsaak deur die etiese dilemmas, met gemak nie en probeer om die saak op te los deur die skep van grense verskaf deur mediese reg. Die aanbevelings van die studie is dat die teoretiese komponent van die etiekkurrikulum die volgende moet bevat: 1) bekendstelling aan meerdere benaderings tot die etiek, bo en behalwe die beginsel-gebaseerde benadering; 2) aanspreek van die daaglikse etiese dilemmas gedurende die studiejare in kleingroepbesprekings; 3) en die implementering van 'n portfolio-evaluasie, wat kan dien as 'n instrument vir die studente om hul eie ontwikkeling aangaande nadenke oor etiese dilemmas na te gaan. Opsommend, die vraag is steeds of ons tans gereed is om "aangesig-tot-aangesig" te verkeer met die "ander" soos Levinas redeneer of is ons steeds verdeel in "slegs twee klasse van menswees in die wêreld – dokters en pasiënte" soos opgemerk deur Kipling in die 19<sup>de</sup> eeu.



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“ Men that are occupied in the restoration of health to other men by the joint exertion of skill and humanity are above all the great of the earth” - Voltaire

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## Chapter 1

### INTRODUCTION

Medical care at present is costly and characterised by an explosion of knowledge, which is highly specialised and technologically advanced<sup>1</sup>. This creates new ethical dilemmas, which necessitate careful analysis if they are to be resolved satisfactorily<sup>1</sup>. According to Benatar, there is a demonstrable need for a “shared mode of ethical discourse”<sup>1</sup>. Since the 1980’s there has been an increasing interest in medical ethics education, facilitated by the complexity created by advanced medical technology, as well as problems encountered with unsatisfactory doctor-patient relationships<sup>1,2,3</sup>. One of the attractions of a medical career has always been the doctor-patient relationship<sup>4</sup>. Medical students choose a medical career because of a higher calling and they are initially very idealistic about this vocation<sup>5</sup>. However, less young people currently choose a medical career, due to perceptions that the medical profession suffers reduced respect, is losing autonomy because of managed health care, and experiences a reduction of income<sup>4</sup>. Patenaude et al also report a decline in medical students’ capacity of moral reasoning<sup>6</sup>. This necessitates that the doctor-patient relationship be addressed and improved in medical ethics curricula in order to attract youngsters back to the field of medicine.

The history of ethics education in medicine, prior to 1970, was by “osmosis”, but by 1989 most curricula involved some measure of formal ethics education<sup>3</sup>. The traditional method was to concentrate on ethics theory, moral principles, codes of medical ethics and topical issues<sup>3</sup>. The ethics curriculum is often exclusively geared towards a principle-based approach<sup>7</sup>. Traditional medical ethics education has mainly focused on certain ethics principles such as non-maleficence, beneficence, respect for persons, compassion, confidentiality and trust in the doctor-patient relationship<sup>1,3</sup>. Macklin finds the four principles approach of Beauchamp and Childress a useful framework as an approach to medical ethics<sup>8</sup>. Newer methods introduce case studies, films and television programs as content<sup>3</sup>. The hidden curriculum, which is tacitly obtained at the bedside or in the hospital corridors, is a valuable education tool, which leads to the enhanced enculturation of these students<sup>2,3</sup>. The consensus on the goals of ethics education in medicine includes: ethics is important; case studies are valuable; teachers must come from interdisciplinary



backgrounds; the education is adult-based; and feedback and evaluation are essential<sup>3</sup>. It is important that the ethics curriculum is longitudinal, stretching over several years, and that case studies are from active real-life cases or realistic vignettes. This curriculum must focus on adult-education that is goal-driven, but also stage-specific and tailored to the educational, often multicultural environment. There should be active learning with innovative teaching methods<sup>3</sup>.

Since medical ethics is currently involved in various aspects of health care, including the clinical setting, medical research, public policy and the legal setting, doctors are required to respond to ethical dilemmas with the necessary critical thinking skills and sensitivity<sup>1</sup>. These critical thinking skills include analytical and conceptual skills, the ability to summarise facts, to assess the conflicting principles of medical ethics and come to a decision to act<sup>1</sup>. Both humanism and professionalism are essential elements of a career in medicine where a doctor is in possession of the “cognitive, attitudinal and interpersonal elements”, which allows him/her adjustment to the clinical setting with the appropriate response according to the need<sup>9</sup>.

Both Plato and Aristotle have defined medicine as a craft or *techne*, while Socrates taught his students to discern the good action through reflection and debate on ethical dilemmas, which can be called the Socratic method<sup>1,10</sup>. Aristotle placed the emphasis of academic education on mentoring, while achieving “practical wisdom” or *phronesis* and in medicine *phronesis* is needed to “link the proper rule to the particular action”<sup>1,11</sup>. Associated with a career in medicine is the terminology “humanism, professionalism, integrity, compassion, empathy, respect, and altruism”<sup>9</sup>. The definitions of these concepts are problematic. For example when is a doctor deemed a humanist<sup>9</sup>? According to Pellegrino, the humanist physician is both a cultural being with a value system, ideas and modes of expression and an affective being with feelings, especially with regards to the person who is the patient<sup>12</sup>. Pellegrino, in his reflection on what it takes to educate the humanist physician, addressed the ancient ideal of the humanist physician<sup>12</sup>. He discussed the definition by the second century grammarian Aulus Gellius of the word *humanitas*, which is more in agreement with the Greek term *paideia*, meaning “an educational and cognitive ideal”. Pellegrino described *philantropia*, which means the good feeling towards man or compassion, as part

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<sup>10</sup> E.D. Pellegrino, “Physician philosopher: The philosophical foundation of medicine” at pp.8, 70.

<sup>11</sup> See Pellegrino, *supra* note 10 at p. 70.

<sup>12</sup> See Pellegrino, *supra* note 10 at pp. 154-155.



of the “humanism in medicine”<sup>11</sup>. The physician is in need of three dimensions as a humanist physician, namely education or *paedeia*, necessary competence or *techne* and compassion or *philantropia*. According to Pellegrino not every physician will acquire the necessary three components in the same manner. Added to this is the need for *phronesis* or practical wisdom as described by Aristotle<sup>11</sup>.

Paedia or education in medicine is strongly influenced by rational inquiry and is, of all the health care sciences, the most scientific in its rational inquiry<sup>7</sup>. The majority of medical schools select students on the basis of their proven intellectual ability, but there is a need for better tools to evaluate students’ characteristics or to develop their necessary professional characteristics<sup>4,9,13</sup>. Students are initially deeply immersed in the scientific aspects of the curriculum with added social sciences for broadening the field of study. These social sciences, however, do not necessarily receive the same attention as the scientific part of the curriculum<sup>7</sup>. There is also not enough attention given to the understanding of the political, economic and social climates in which the education takes place<sup>7</sup>. Since the curriculum emphasizes the bioscience, but not necessarily the psychosocial or ethical aspects, students struggle to come to terms with psychosocial and ethical issues, which may lead to the development of cynicism<sup>7</sup>.

Religious and cultural traditions also influence ethical reasoning and do not necessarily provide universally acceptable moral standards<sup>1</sup>. According to Robins it is a challenge to know what constitutes ethically appropriate behaviour<sup>14</sup>. This necessitates doctors to identify their own value system and the influence of their particular system on their decisions. It is necessary to address these value systems to ensure the effective acculturation of medical students in the field of medicine and to develop “cradles of professionalism”<sup>4,9</sup>. Students need guidance concerning their professional role, since their value system and identity may come under pressure in the process of joining the medical environment<sup>14</sup>. This need is not necessarily addressed and very often the teaching of ethics relates mostly to the necessary topical issues of the day such as abortion, AIDS or limited resources and not necessarily to a “developmentally appropriate ethics”<sup>3,17</sup>. In this process it is necessary to bridge the gap between what medical educators want their students to learn from them versus what their examples teach them. It necessitates that medical educators address their own professional norms and value system<sup>4</sup>. Aristotle further stated that we learn by doing and the necessary environment must exist for medical students to



do what they are taught<sup>18</sup>. The students should therefore be exposed to everyday ethics where there are not always answers and the curriculum should be oriented according to the student's medical development.

The best way to teach ethics is in a longitudinal way, exposing students to ethics education continuously during the undergraduate years, while at the same time ensuring that students acquire their sense of professional identity and direction in the patient care setting<sup>16,17</sup>. They need to acquire the necessary virtues and obligations of the health care profession, while contemplating their transformation from lay people to professional doctors<sup>16</sup>. The elements necessary in such a curriculum are "altruism, accountability, excellence, duty, honour, integrity, and respect for others"<sup>9</sup>.

Several studies have identified certain problematic areas for medical students<sup>4,15,17,18,19</sup>. Robins et al found that students do reveal elements of altruism, but were uncomfortable with possible patient deception when introduced as "doctors" to patients, while first year undergraduate students struggled with respect for persons, power abuse, integrity and misrepresentation<sup>14</sup>. Other issues reported about students are disclosure problems, end-of-life decision-making, medical failure and transferral problems<sup>18</sup>. Satterwhite et al reported on an ethical paradox, where students have reported no change in their ethical value system, while 35% of the student sample has reported that derogatory remarks about patients are "often appropriate"<sup>19</sup>. Coulehan et al reported that there is a conflict between the "explicit commitment to traditional values of doctoring – empathy, compassion and altruism" versus the "tacit commitment to behaviours of detachment, self-interest, and objectivity"<sup>20</sup>. They stated that certain students develop into technicians, others into non-reflective professionals and another group will "immunize" themselves against the tacit learning by developing "professional virtue"<sup>20</sup>. Roche et al, however, found that students are not more prone to become cynical when exposed to a problem-based learning<sup>21</sup>.

Another question to be addressed is who should do the teaching? According to Agitch there are four possible groups of people who can influence the practice of medical ethics<sup>22</sup>. These include the physician or philosopher who undertakes the teaching in the clinical setting, the philosopher or anthropologist or sociologist who observes but does not participate actively in clinical medicine, the philosopher who combines observation and participation, and the specialist teacher who has the necessary qualifications in both clinical



medicine and bioethics<sup>23</sup>. There is a definite need for teachers who are medical ethicists, trained both in medicine and ethics<sup>24</sup>.

The next question is how to assess these qualities. There is probably no universal way to assess the humanism of medical students and its evaluation is problematic<sup>3,9</sup>. Faculty teachers' rating of questionnaires indicate this method as the best approach<sup>9,25</sup>. Richards et al were sceptical about this form of evaluation since the characteristics of the evaluator also played a role, while Misch felt that this semi-quantitative assessment was of some value<sup>9,24</sup>. There is also a place for an OSCE (objective structured clinical examination), or for simulated patients with interviews<sup>3</sup>. There are several obstacles in the assessment such as the reluctance of physicians to complete quantitative evaluations or semi-quantitative rating of students<sup>9</sup>. Furthermore, there is always the problem of subjectivity in these evaluations.

We live in the HIV/AIDS pandemic in South Africa, which has had a major influence on clinical medicine in South Africa<sup>26</sup>. The majority of medical students at our universities come from comfortable middle class homes, while the country is characterised by being a multicultural developing country<sup>26</sup>. The new medical problem-based learning curriculum, discussed in the next chapter, was introduced to the University of Pretoria in 1997. Any new curriculum must be subjected to evaluation to determine whether goals are reached. There are 2 important reasons for this, namely to obtain feedback from the students themselves and to use this information to improve the curriculum<sup>27</sup>. For this purpose we have undertaken this study with the first final year class of the new curriculum at the University of Pretoria.

## Chapter 2

### CURRICULUM

The School of Medicine in the Faculty of Health Sciences at the University of Pretoria has introduced a new undergraduate problem-based medical curriculum in 1997, comprising six years of undergraduate teaching. The curriculum is modular-based and integrated with the traditional basic science subjects, combined with the traditional clinical subjects in the different system-based modules. Certain aspects are included in a longitudinal fashion in the different modules where appropriate and are named the golden threads of the curriculum. The theoretical part of the course is completed in the first four and a half years and the last eighteen months are spent in clinical rotation through the major clinical disciplines, which include all aspects of surgery, internal medicine, paediatrics, obstetrics and gynaecology, as well as psychiatry, anaesthesiology and family medicine. There are several core elements identified as essential in good medicine, which are built into the curriculum in a longitudinal fashion throughout the six years of education. These core elements, defined as golden threads, include bioethics, medical law, interpersonal skills, critical thinking skills, epidemiology, a bio-psychosocial approach and the economic aspects of health care. This new curriculum places emphasis on the central role of ethics in the undergraduate curriculum of medical students.

The students are exposed to an introductory course in philosophy and ethics in the first year, which is followed by an introductory course in bioethics in the second year. The first year introductory course in philosophy contains two parts namely Philosophy of Science and Ethics in Health Care. The bioethics component in the second year addresses the need for ethics education, approaches to bioethics, value systems and essential virtues in health care, as well as specific topics not covered elsewhere, such as euthanasia, research ethics, and the African approach to personhood and illness. Ethics is thereafter built into the different modules over the next four years, addressing controversial issues such as abortion, women's rights, children's rights, ethics and the pharmaceutical industry, managed health care and ethics, and refusal of treatment. The main approach to bioethics has focussed mainly on principlism in the first seven years of the curriculum as discussed by Beauchamp and Childress<sup>28</sup>. The final culmination of the bioethics core element is an



ethics breakaway session, which is held annually for the final year class at a venue away from the normal setting lasting over two days. The aim of this breakaway is to prepare the students for the ethical issues, which await them during their professional career.

The aim of the bioethics curriculum is to educate future doctors to practise “good medicine”, while the intermediate aims include the following:

- i. Ethical awareness
- ii. Critical thinking skills
- iii. Medical and ethical knowledge
- iv. Knowledge of the main professional codes and patient charters

Knowledge is seen as the extroverted element, while wisdom is the introverted element of the bioethics curriculum. The human resources include a head of the Virtual Department of Bioethics and several lecturers in either clinical medicine or philosophy. The department is named “virtual”, since it draws on the expertise of physicians with ethics expertise in different clinical departments, without being constituted as a concrete department of Bioethics. The content is designed to be intellectually taxing and to influence the way of thinking. There is support for the program by the Dean and staff of the School of Medicine. The formal teaching consists of lectures, small group discussion, clinical discussions, while the informal curriculum is provided by the way the educators act in clinical scenarios. Currently, assessment involves long questions and multiple-choice questions, especially in the theoretical part of the curriculum, but not during the clerkship period (last 18 months of clinical training). It is planned to assess the students in a portfolio manner in the future. Portfolio assessment in an undergraduate medical curriculum is an assessment of a collection of a student’s best work, which illustrates incremental development in pre-defined learning outcomes<sup>29,30</sup>. Self-reflection skills on individual action are essential for doctors and are best evaluated with portfolios with a “specific structure, coaching and assessment”<sup>30</sup>.

The end product should be a caring doctor that is competent in clinical skills, capable of maintaining high standards of care, delivering cost-effective treatment, not compromising patient advocacy, reflecting on the ethical dilemmas and attempting to solve them in a manner that has the patient’s best interest at heart. However, there is a real need to evaluate and improve the outcomes of the course and for this reason this study was undertaken.



## Chapter 3

### METHODS

The aim was to investigate the undergraduate medical students' ethical knowledge and reasoning skills after five years of bioethics education. This was done to assess this bioethics curriculum and to determine improvements needed. This study was conducted as a pilot study, which was mainly exploratory in nature and for that purpose a qualitative research approach was more appropriate.

The study population comprised of the final year medical students in the year 2003 and the ten facilitators, who were either lecturers at the School of Medicine or persons who had postgraduate philosophy or ethics education. The facilitators were from clinical disciplines (n=4); pharmacy (n=1); basic sciences (n=2); philosophy (n=2); and bioethics (n=1). There were 184 students with a gender ratio of 1:1 and an average age of 24 years. All the students, as well as the facilitators, gave informed consent for participation in the study. The final year class spent a two-day session together at a venue away from their normal setting. These two days involved intensive discussions regarding ethical issues in health care. The students were divided into ten groups with ten facilitators. Each group spent an hour per facilitator with a specific topic. The ten chosen topics with case studies were based on the framework of the bioethics curriculum, including the controversial issues such as abortion and the then much debated treatment for HIV/AIDS. The facilitators utilised either case studies to highlight certain ethical principles and values for debate or included general questions for discussion purposes. The group discussions were summarised on flip charts for analysis. The case studies or questions were as follows:

**Beneficence:** There were four case studies aimed to highlight the principle of beneficence and how context might influence the application of this principle. The students first discussed the case studies in small groups of on average four students per case study, followed by a general discussion by the whole group. The four case studies were:



- i. The Tarasoff case<sup>28</sup>: The former boy friend, Poddar, of Tatiana Tarasoff threatened to kill her, which he subsequently did two months after the threat. Poddar's therapist knew about this threat, but did not warn either Tatiana and found Poddar rational enough to be discharged from hospital. The students had to debate how they would have acted if they were the therapists in a similar situation.
- ii. The second case study involved a case scenario where the individual student arrived as the first person at a traffic accident after having been at a party, where he/she had consumed alcohol. The students had to debate what they would do in this case scenario.
- iii. The third case study was a woman with a ruptured uterus, unconscious and in shock. The life-saving treatment was an emergency hysterectomy, but the husband, who was the next-of-kin, refused to give consent for the procedure. The students had to debate their actions in this case study.
- iv. The fourth case study described the situation whereby a mother brought her thirteen-year old daughter to be tested for drug abuse. The girl adamantly refused to be tested, since she claimed that she was not using drugs and had told her mother so. The students had to debate how they would manage this case study.

Non-maleficence: There were three case studies in this group, which aimed to allow students to debate the application of non-maleficence as an ethics principle in health care.

The three case studies were as follows:

- i. A newborn baby had severe congenital abnormalities, as well as respiratory distress, which needed ventilation. The students had to debate whether they would ventilate the baby or not and gave motivated reasons for their choice of management.
- ii. At the same time there was also a geriatric female patient (80 years of age) admitted with severe pneumonia and respiratory distress, in need of ventilation as well. The students had to debate whether they would ventilate her and motivate their answers. They also had to choose which patient they would rather ventilate and why.
- iii. This case study dealt with the scenario where the individual doctor had been on duty for three periods of 36 hours in one week and were called out again to do

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<sup>28</sup> Beauchamp T.L., Childress J.F. Principles of Biomedical ethics (fifth edition) 2001 at pp.415-418.



emergency work, since another colleague had not come on duty. The doctor was overtired and the students had to debate what they would do if they were in a similar situation.

Autonomy: There were four case studies in this group, which focussed on the principle of patient autonomy. The case studies were as follows:

- i. The first patient was an eighty two year old male, who had gangrene in one leg, necessitating an amputation. The patient refused an amputation. The students had to debate their management of this patient.
- ii. The second case study addressed the issue of the man who was diagnosed with HIV, but refused to inform his wife about it. The students had to debate what they would do as the family doctor of this patient and his wife.
- iii. The third case study was a thirty year old lady with severe cerebral palsy, who needed a nasogastric tube for feeding. She was severely physically handicapped, but not mentally. She requested the removal of the nasogastric tube and the cessation of nasogastric feeds. She had difficulty in swallowing and would not survive without nasogastric feeds. The students had to debate how they would manage this patient.
- iv. The fourth case study was about a male patient with chronic renal failure, seeking haemodialysis and/or a kidney transplant. He did not qualify for either form of treatment according to government hospital policy, but insisted on receiving a renal transplant. The students had to debate how they would manage this patient's request.

Distributive justice: There were four case studies aimed to let the students apply distributive justice as an ethical principle. They were as follows:

- i. The students had to debate the policy of the South African government offering no antiretroviral treatment to HIV-infected South Africans with antiretroviral therapy at the time<sup>31</sup>.
- ii. The students in the second case study had to choose one of two public health interventions and had to motivate their choice. The two interventions were either a new preventative vaccine for children or a new ACE inhibitor drug for hypertension in the public health sector.



- iii. The third case study focussed on the real life scenario whereby a chief executive officer of a regional hospital allowed a non-governmental organisation to supply antiretroviral prophylaxis to rape victims on the premises of his government hospital<sup>32</sup>. The MEC of the province for health care subsequently sacked him, since this was not in agreement with government policy. The students had to use this case study to debate the issue of what to do where personal ethics is in conflict with authority, as well as the need and nature of patient advocacy.
- iv. The fourth case study focused on the real-life case whereby Soobramany, a patient with chronic renal failure, diabetes mellitus and alcohol abuse, was refused access to haemodialysis, since he was deemed a non-compliant patient and did not meet the government's criteria for access to this kind of specialised care<sup>33</sup>. The students had to debate the justice of this decision.

Compassion in medicine: The students had to discuss the following four questions and the aim was to elicit the role of compassion in medicine:

- i. What is a physician?
- ii. What is a patient?
- iii. What risks are involved in choosing medicine as a career?
- iv. Why do you study medicine?

Deception in medicine: There were two case studies with elements of deception involved:

- i. The first case study involved a patient, who was a known patient with various somatic complaints and considered as a hypochondriac. She took all kinds of supplements, but did not suffer substance abuse, nor did she have a major mood disorder. She feared that she might develop dementia like her mother. She presented with a paresis of the left arm, which was diagnosed as conversion disorder with the existing somatisation disorder. The physical and special investigations all showed insignificant results. The students had to discuss the management of this patient according to the following questions:
  - a. A colleague suggested that that the treating physician gave her a Vitamin B injection or any other "harmless" pill, which in effect might serve as a placebo in the treatment of her condition. The students had to list ethical, and potential legal, difficulties, if any, with following this advice.

- b. The students had to consider their answers they would give her when she asked them about her diagnosis.
  - c. They had to discuss whether they would give her a sick letter stating that she is not medically fit for work at present?
  - d. They also had to discuss whether they would report the diagnosis on this certificate if the patient consented to such.
  - e. They had to describe their actions if the patient asked them not to mention conversion/somatisation disorder, but “anything else” instead for the medical aid.
- ii. The second case study involved a patient who requested a vasectomy since he had three children. The doctor, however, with his clinical examination found that the man was infertile, since he has spermatid chord agenesis and a vasectomy was therefore unnecessary. The students had to discuss whether they would inform the patient that he was infertile with no need for a vasectomy and at the same time let the man realise that it was impossible for him to be the biological parent of his three children.
    - a. The students had to discuss whether they would perform the operation and what the ethical issues were, as well as the different actions that they might undertake?
    - b. They had to discuss the ethical difficulties with each of the proposed actions they suggested?

Abortion, women’s rights and feminist ethics: There were two case studies, whereby five groups debated the first case study and the next five groups discussed the second topic. The topics were:

- i. Abortion in the South African context, whereby abortion on demand is legalised<sup>34</sup>.
- ii. The empowerment of women in the South African context, where they are the most vulnerable group to contract HIV infection<sup>25,35</sup>.

HIV/AIDS and the religious interpretation of disease: The facilitator concentrated on the impact of HIV/AIDS on health care in South Africa and all the tension that occurred due to this pandemic<sup>25</sup>. He posed four questions, which the students had to discuss and motivate their answers:



- i. What treatment are you as the doctor going to provide to HIV-infected patients?
- ii. Would you allow an AIDS patient to promote a religious interpretation of disease?
- iii. What kind of support systems should be provided for HIV-infected patients?
- iv. What would you do if your intended actions were going to clash with government policy?

Student's oath: Medical students at the University of Pretoria medical students can publicly and voluntarily undertake a pledge on their final day in medical school since the late eighties. The discussion focussed on the content and whether the students were comfortable with this pledge (Appendix D).

Current South African laws and ethics: The discussion focussed on the legal framework within the framework of health care in South Africa.

The data collection process:

The students reflected on the given case studies in their groups with the assistance of the facilitators. Data were collected in the following ways for analytic purposes:

- The discussion process in each group was documented on flipcharts and the facilitator, in collaboration with the students, documented the conclusions.
- The two researchers acted as independent observers of the process and attended two sessions in each group to document student attitudes of to ethics.
- At the end of the first day the researcher conducted a focus group interview with the facilitators to discuss their experience of the students' preparedness for ethical reasoning. The interview was audio taped and transcribed.

Data analysis:

The data was analysed according to acknowledged data analysis strategies in qualitative research. The three different types of data sets, namely the flip charts of group discussions, the focus group discussion of the facilitators and the independent observers comments, served as triangulation.



## Chapter 4

### RESULTS

There were ten groups with 16 to 20 students per group. Focus will firstly be on the different group discussions, thereafter on the focus group discussion with lastly some comments by the observers.

#### **Group discussions**

##### **Beneficence:**

The emerging themes from the case studies are as follows: With regards to the Tarasoff case, where the patient threatened to kill his fiancée, all the groups had a similar response<sup>28</sup>. The ethical dilemma in the case study is the opposition between the confidentiality of the patient and the threat to the life of a third party. The whole student class is convinced that they will warn the fiancée in a similar case scenario, since the third party's life is more important than the necessary confidentiality of the patient. They would follow the following procedure namely first assess the seriousness of the threat, and if serious certify and admit the patient to a psychiatric facility. There was not consensus whether all would certify the patient under the circumstances, but all agreed that they would admit the patient. The students use both a legalistic and scientific approach with regards to the patient and potential perpetrator and can cite the specific South African law that they will use to certify the patient for medical reasons.

The second case study involved the scene of a road accident, which the students encounter on their way home after a party, where they had consumed alcohol. In the planning of the case study, the researcher hoped to get the students to debate how they would manage the case study since they suffered from potential compromised medical ability due to the alcohol consumption. The students again had a uniform response, but the results were surprising in that the discussion mainly focussed on personal safety, which was their first concern. The discussion centred on the action to ensure that the accident was not staged and not a potential hijack scenario. Only thereafter would they help the victims at the accident scene. Nobody discussed the problems with alcohol consumption, which might influence their clinical skills. Living in the context of South Africa with a high crime rate,



this is probably how these youngsters experience their world<sup>36</sup>. They are also concerned about other safety measures such as gloves to protect against HIV infection<sup>25</sup>. The majority feel that they will rather call emergency services on their mobile phones. After establishing that there is no threat to their safety, they agree that they will do what was potentially possible to stabilise the patient(s) and that they will stay with the victims until the paramedic team arrives to take over the management of the victims.

The third case study involved the patient with a ruptured uterus after delivery, who was unconscious, and where the husband, as next-of-kin, refused the immediate life-saving hysterectomy. The students feel that it is more important to save the life of the patient than to respect the husband's decision. For the majority of students they will overcome this problem by referring the decision to higher authority, which ranges from the chief executive officer of the institution to another colleague for a second opinion. They are in agreement that their most important role is to save the woman's life. There was little discussion on how to manage the situation afterwards.

The fourth case study involved the scenario where a mother brought her thirteen-year old daughter to be tested for drug abuse and the child was refusing any testing on the grounds that she was not using drugs. The responses to this case study were more varied than in the other case studies. The majority will try to counsel the mother and the child together and separately to facilitate the process between the mother and the child. However, five groups argued that the child is a minor and therefore the mother's consent is overriding the child's right. They will test the girl since it is in her best interest. They also argue that they will tell the child that she "has got nothing to lose, by being tested". Furthermore the argument is raised that since it is in the best interest of the child to be tested, she needs to be counselled on the dangers of drug abuse. Three out of ten groups would refer the case to higher authority if they could not get the child to assent to the drug testing. In two groups the higher authority was the social worker, but one group would refer the child to a psychiatrist. One group felt uncomfortable with the scenario, since they felt that the child might never have confidence in the patient-doctor relationship if they acted against her wishes and would try to facilitate a good outcome for both the mother and the child. None of the students considers the child's claim that she is not taking drugs as a possibility.



### Non-maleficence:

The first case study was a neonate with severe congenital abnormalities and respiratory distress syndrome, necessitating ventilation. All the groups argue that more facts are necessary to make a decision about management. The factors identified to play a role are socio-economic circumstances of the parents, the state of the marriage and whether there are other siblings. Two groups felt that the discussion should include the parents in the decision-making process, while 4 groups would base their decision on the long-term prognosis of the baby. A minority group felt that one should look at the facilities available, which would determine the decision (2 groups). There was more uncertainty in this case, since a number of students felt the baby should be ventilated, since this would allow the family more time with the baby, even if the baby would be handicapped, but that at the same time they felt that the financial costs should be taken into account (2 groups). They were more likely to ventilate the baby than the old lady in the second case study. Only one group would not ventilate the baby, since the baby was not deemed to be able to have quality of life.

The second case study involved an old female patient of 80 years of age with pneumonia in need of respiratory support. Five groups argue that she had lived her life and will treat her only with palliative care. One group said they would discuss the treatment options with the patient and the family. Four groups mention that they will base their decision on the quality-of-life of the old lady, with two groups voicing that she should be kept comfortable, but that no heroic treatment should be offered. One group felt that they would look at her baseline functioning to determine their action, while one group felt that they would treat the underlying cause of the respiratory distress. If the students have to decide which of the two patients, namely the old lady or the baby should receive ventilation, if only one ventilator is available, they choose the baby.

Regarding the third case study that involved the overtired doctor (who had three 36-hour work shifts in the last week), who was needed again for emergency care, had varied responses. The argument is that they should establish a personal decision namely: "Can I or can I not work safely anymore?" Two groups will make a plan by asking to either do only paper work or arrange with another colleague to help. Three groups answer that they will refuse since their level of performance will be poor. Two groups argue that they will assess what their capabilities are. One group will assess the kind of emergency service to be



delivered before making a decision. Two groups did not report any comments on the flip charts.

#### Autonomy:

The case studies were: the geriatric patient with gangrene of the leg, refusing amputation; the removal of a nasogastric feeding tube in an adult woman with cerebral palsy; the disclosure of HIV status to the wife of an HIV-infected husband; and the demand of a patient with renal failure to undergo a renal transplant. The response is uniform for the first two case studies, where the response is that autonomy should be respected when the patients are assessed to be of sound mind and competent. They will however, as doctors, make good notes to protect themselves against further legal action at a later stage, indicating a legalistic approach to the case studies. The handicapped person with the nasogastric tube will be assessed for depression and there is discomfort to respect the person's autonomy in such a scenario, since this may lead to suicide-assisted death. However, her autonomy takes precedence to their discomfort. The scenario of third party risk for an infectious disease such as HIV/AIDS again has a uniform response that, if the person's sexual partner is constant e.g. wife etc., they will override the autonomy of the patient at the cost of confidentiality and inform her of the risk. The argument to motivate this behaviour is again that the safety of the third party takes precedence over the confidentiality of the patient, who is refusing to inform his wife. With regards to the patient with renal failure seeking a renal transplant the consensus agreement is that, even though the patient was seeking care, he should be responsible for his own care, and that this is subject to the available resources. He does not necessary qualify for a renal transplant just because he is demanding such management. Clearly distributive justice is found more important than autonomy, as well as a more libertarian approach to medicine, whereby the individual is deemed responsible for his choice of health care<sup>28</sup>.

#### Distributive Justice:

The three case studies were as follows: The Government's HIV policy prior to April 2004, whereby no antiretroviral therapy was provided by the state for HIV-infected patients, except for pregnancy and needle-stick injuries<sup>31</sup>, the public health scenario whereby the authorities needed to decide whether to provide a new vaccine for the prevention of a disease in children or to provide a new ACE inhibitor for the adult population in need of such treatment; conflict between the CEO of a hospital and local government with regard



to the management of rape victims by providing antiretroviral therapy to these victims<sup>32</sup>. The major indication for antiretroviral therapy in state hospitals included prevention of vertical transmission, needle-stick injuries, infection due to contaminated blood transfusions and rape victims. There is no group lobbying for antiretroviral therapy for the large number of HIV-infected patients in government hospitals. One group claims that one “must follow the rules even if you are in disagreement”. With regard to the choice of new interventions as public health experts, the students all elect to implement the vaccine rather than the new ACE inhibitor, expressing a utilitarian argument in that the vaccine will provide more benefit to the largest group of patients. With regard to the conflict between the CEO versus provincial government, 2 groups of students feel that government was justified to terminate the services of the CEO, who acted on behalf of patients and advocated better treatment practices, which was in opposition to government’s policy. Only one group will insist on the change of policy by government. One group claims that one “must follow the rules even if you are in disagreement”. The majority of the students experience a discomfort but have no clear solution to the problem (5 groups). The last case study focussed on the situation of a diabetic patient with renal failure and alcoholism and a history of poor compliance. He should have received haemodialysis, but there are limited resources in the public sector. The students debated whether he should have received haemodialysis and the majority (7 groups) felt that, in the scenario of limited resources, the patient did not qualify for this treatment due to his poor compliance.

## HIV/AIDS

South Africa has a huge problem with HIV/AIDS, which is the fastest growing epidemic in the world<sup>25</sup>. The facilitator therefore asked the students 4 questions with regard to HIV/AIDS. The first question was what the management of HIV/AIDS was. Seven groups discussed the medical management of the complications to HIV/AIDS namely the treatment of opportunistic infections. Only three groups indicated that they would give antiretroviral therapy. Two groups justified the non-treatment with ARV by stating that there were limited resources and in such a setting, the government could not supply such a costly treatment, especially if the patients were not compliant.

The second question was how the students would handle with the female patient who had a religious interpretation of the disease, which influenced management. The question was built around the case scenario where a rural woman with HIV/AIDS and gave a religious



explanation for her disease and refused treatment. Her religious interpretation is that the forefathers are punishing her for her previous wrongdoings. Two groups said they would not agree at all and would propagate the scientific explanation of the disease. Four groups stated that if that was the patient's choice they would respect it and quoted cultural beliefs and respect for culture as reasons. One group said they would not interfere at all, while another group debated the issue without any consensus agreement; some students supporting the notion to allow the patient to maintain her beliefs and the rest for propagating the scientific explanation. One group did not summarise any discussion on this topic. One group stated the need for community education with regard to HIV/AIDS.

The third question was what social support structures the students would put in place for such patients. Two groups had no knowledge of what to do for emotional support, one group knew of existing structures in the community for support and another two groups would attempt to develop support structures for their patients. Two more groups would either seek the help of community leaders or social services. Three groups never discussed the question.

The fourth question was what they would do as doctors if they were in conflict with official policy and their ethics differed from persons in authority (government). The question was asked in a hypothetical manner with no factual information. The majority of students (7 groups) assert that, when in conflict with government, they will rely on the Hippocratic oath, whereby the best interest of their patient will guide their actions. This was in conflict with the groups' previous discussion of the practical scenario whereby the CEO was in conflict with government and they felt he should obey local policy.

#### Feminist Ethics and Abortion

The facilitator asked half the student class (5 groups) to discuss the empowerment of women in the HIV/AIDS pandemic (the most vulnerable group to contract the disease)<sup>25,35</sup>. The remaining five groups discussed the question of whether they would support abortion<sup>31</sup>. The students use a very scientific model to address the empowerment model of women and quote the ABC (abstinence, be faithful, condoms) campaign in South Africa to prevent HIV/AIDS (5 groups)<sup>35</sup>. These students also state that they will empower women and men through education with regards to women's rights (5 groups). With regard to abortion, the moderate group dominates the conservative group, followed by the least number of liberal views on abortion. The moderate group will analyse the situation and



look at other issues to determine the right to abortion. The conservative group will never do an abortion except for serious medical reasons. Only one person stated that he/she would perform abortion on request. This is surprising since South Africa has one of the most liberal abortion laws in the world<sup>34</sup>.

### Deception

With regard to the use of placebos in medicine, the students related it all to clinical trials and the need for informed consent in the research scenario. However, with regard to the hypochondriac patient, the majority want to refer the patient to the psychiatrist and illustrate little empathy with this type of patient. The students will use placebos in clinical trials, for the hypochondriac patient, for contraception and the majority express that they feel obliged to take action. With regard to the patient seeking a vasectomy, while being infertile, only two groups noted their comments on the flip charts. Most of these students would not do a vasectomy more to protect themselves from doing an unnecessary operation. They had little inclination to tell the patient that he could not be the father of his three children, but could not clearly motivate why they would not do so. They also could not indicate what the difference was between the two case studies and why there might be a need to handle the truth in a different manner.

### Compassion

The facilitator used the following questions to stimulate discussion and determine attitudes towards medicine in general. The questions were: ‘What is disease?’; ‘What is a physician?’; ‘Why medicine?’. The majority characterise a physician as a person who is caring (7 groups), with compassion (5 groups) and who acts as a counsellor (4 groups). Other important characteristics include an educated person with the necessary skills (5 groups); who has empathy (2 groups); sought continuous further learning opportunities (3 groups) and one who will always comfort patients (2 groups). Only one group discussed the question ‘What is disease?’. They concluded that disease was when something is wrong with the physical body or a mind disturbance. They felt that disease was unfair and an assault on humanity. With regard to the question ‘Why medicine?’, again only five groups responded. The majority experience medicine as a calling (5 groups). Four groups indicate that they have chosen medicine for financial considerations. Three groups indicate that they have chosen medicine since the field is interesting, while two groups each indicate freedom, human interaction or status as reasons. There was one group each with a feeling



of either passion or compassion or research or a challenge as the main reason for their choice of medicine. There were two strange statements generated namely “Ethics is how your life is saved” and “Ethics is to regulate power”.

### Oath

There is a pledge vowed by medical students in public on their final day at the University of Pretoria’s Medical School (appendix D). The oath taking ceremony is not compulsory and only for students that want to participate voluntarily. The oath formed the basis of the discussion, since it was deemed important for the students to reflect on the content of the oath before ending their studies. The majority of students support the concept of an oath and want to do it in public (5 groups). One group felt that the oath was too idealistic. Two groups stated that they would want to do it in their own language (South Africa has eleven official languages)<sup>37</sup>. The majority of the students have mixed feelings with regards to medicine being their “highest calling” and feel that it can only relate to their professional life and not their whole life. They also feel that the oath should reflect the fact that there is a limitation to their capabilities (5 groups). Three groups voiced their discomfort with the sentence that stated that they would maintain patient confidentiality. Three groups had problems with the concept that they should respect their teachers and felt that not all teachers qualified in this respect. Six groups did not feel it was necessary to “promote the status” of the University of Pretoria in their professional careers, with one group stating that they should have been informed about this sentence in the oath before they became students at the university. Five groups have a big discomfort with the wording that medicine will be their “highest calling”. Three groups have a problem with the concept of having the “highest respect for human life” since abortion can be done on request in South African and physician-assisted death may also become part of their work.

### South African Law

The discussion concentrated on the laws that regulate health care or those that might be used in the case of medical negligence. The students had three responses to this discussion namely “Know the law (5 groups); “Know your rights (2 groups); “Do the right thing (2 groups); while they also expressed the need for more law courses during their medical training.



## **Focus group discussion**

The content of the focus group discussion was audio taped with the consent of the facilitators and thereafter transcribed. The following is a summary of the discussion by the facilitators with regards to the different topics used for the group discussion with the students.

### **Beneficence**

According to the focus group there is a gender difference. Men in general come to quick decisions, while women are deliberating longer, judging the options in depth. The students experience frustration with all the questions and want to be informed of the answers. There is a feeling that the students lacked maturity, while some students have a paternalistic approach to the case studies. The students tend to be in general very individualistic. Some students are very reticent, while others are very dynamic. They are quite conscious of the local context, namely living in South Africa. Safety is a major issue for the entire student class and they feel themselves very vulnerable.

### **Non-maleficence**

The students had the background knowledge and knew the theory, but had never applied it and needed facilitation. They wanted quick answers. One of the students had a sister with severe disability, which was similar to the case study. This group had the opportunity to fully discuss the pros and cons of rescuing the baby. The majority had it as a goal to ensure that the family should be happy and wanted to ventilate the baby to prepare the mother for the later loss. The students quoted their own exposure in one of their training hospitals where this baby would never be ventilated. The discussion led to the scenario of how to defend your own ethical values. There is great discomfort among members of one group, who is adamant that they will uphold their own ethical values. When confronted with the scenario of being overtired, the majority said that they would not work any longer, the reason being their fear for needle-stick injuries.

### **Autonomy**

The students definitely had the background knowledge of the principle of autonomy and would protect it. They again had quick answers without necessarily taking the complex ethical problems into consideration. They find the constraints in health care problematic and are frustrated by it. Many feel a calling to choose a medical career, but are frustrated lack of help for their patients.



### Distributive justice

The students were clearly exposed to the principle of distributive justice and claimed to have had several lectures on this topic. They again had quick answers and there was a lack of experience. There was great discomfort when confronted with the von Molendorf case, where the CEO was sacked because of allowing rape victims access to prophylactic ARV therapy<sup>32</sup>. Only one group will aim to change the policy of the state if they feel it is unethical or in conflict with their ethical principles. They claim that notes are important when refusing treatment. The students are in general sick and tired of the topic of AIDS and feel overwhelmed by the problem. There is no serious advocacy for patients and the students will obey authority in general.

### HIV/AIDS

The students had to discuss the tension between a religious, scientific or political interpretation of the disease. There was a lack of response to the questions that the facilitator put to them, with no great interest in the topic and a lack of vitality. There was also not a high level of sensitivity to AIDS. The majority will uphold the scientific explanation of disease and feel that the patient should be enlightened. When confronted with what they will do if they take away religion as support system, they answer that they will refer to social workers or other professional workers. Few had ideas about how to provide support structures for HIV/AIDS victims. When in conflict with authority with regard to the management of patients, the majority quote the Hippocratic oath as the way to act. They have clear-cut recipes for how to manage the problems and a lack of association with other related fields. They only offer the scientific explanation and negate the religious explanation. They experience problems with relativism and feel insecure. They want more law courses to prepare them for the future. They are sensitized to ethics, but experience a tension between the law and ethics, which they will resolve with the Hippocratic oath.

### Compassion

A number of students choose to study medicine for reasons like prestige, power and a high income. They are very uninformed about the identity of the physician. They find the nature of humanity problematic and have very basic answers. The mystery of the human being is problematic and compassion is not part of the actual hardcore medical basis. The religious affiliation of the students imposes itself on the self-concept of the profession. The nature



of medicine includes risks. Some students claim courageously: “medicine chose me”, when confronted with the question why they have chosen medicine. They again have a great need for answers and illustrate very little critical thinking skills. The facilitator posed the question whether the School of Medicine should not concentrate on developing thinkers and leaders instead of only practitioners. Another question was how to empower the students not to be intimidated by the machinery of political or party bureaucracy or other power structures.

#### Feminist ethics and abortion

There was a lot of ignorance about abortion, while very few knew that the age of foetal viability is 24 weeks. There is a strong religious element in the discussion of abortion. There are more moderates, who favour a utilitarian approach, followed by the conservatives, with only one person claiming that she would do an abortion on demand. More than 50% will not do an abortion when asked directly. The reasons for not doing abortions are very superficial. Female empowerment involves a lot of racial issues. Some heard for the first time about the different conceptions of gender in African culture. The students had to deconstruct the ABC campaign of the government for the prevention of HIV/AIDS to determine why it is not successful<sup>35</sup>. (A=abstain; B=be faithful; C=condom). The students participated with great eagerness in the discussions. The consensus is that women do not have enough scientific knowledge. They also feel that scientific knowledge should be combined with indigenous knowledge.

#### Deception

The students listed indications to be considered in clinical trials where placebos are to be used. They were never taught about this practice, but tacitly picked up this knowledge in the corridors. The students tended to concentrate more on their own risks than on the risks for the patients and were more worried about the consequences for themselves. Hypochondriacs can get any treatment as long as it does not harm them. “Hypochondriac” is a demeaning term. Some had difficulty with the need for truthfulness and scientific accountability. The relationship between ethics and law is unexplored and some students think that law has the ultimate answer. The facilitator felt that ethical reasoning should not be coming from law. He concluded that the students gained a lot of tacit knowledge in the hospital corridors.



## SA Law

The health profession has a bigger body of law than any other profession and the students will work in a very litigious environment. The majority of the facilitators made the comment that doctors were easy targets for medical litigation. The laws provide a framework for litigation for the patients. The students are acutely aware of the risks and feel ill equipped. They feel that there are not enough law courses in their curriculum and the facilitator expressed a need for medical hardcore law with a dedicated module. The facilitator added that doctors are often blamed for the following: "We close ranks". The students also expressed a need for a bundle of documents with regard to laws. Laws however, change rapidly. The students need a forum to contextualize structured knowledge. Doctors have obligations and have to protect the rights of others, but fear uncertainty. With regard to ethics, students still feel they do not know what is right or wrong. Laws, however, will define the scope of their practice for them. As doctors they feel like the Good Samaritan obliged to treat, but also fear this. They have a strong feeling of asking themselves why they should put themselves at risk. The conclusion is that they should: 1) know the law; 2) be critical when applying the law; 3) know their own rights.

The facilitators of the session that addressed the pledge were not present at the focus group discussion.

## Observers' comments

The first observer experienced a great apathy among the students. The students used different resources for their arguments; including both academic knowledge and gut feeling. They concentrated on the biomedical mode and there was not much evidence of the bio-psychosocial mode, as illustrated by a feeling that doctors should give an injection, not a kiss. If the condition was not an organic condition, it was of less importance. They did not necessarily indicate that they appreciate the use of evidence-based medicine. They have more of a narrow versus a broader approach; - more that technical than humanistic. They have a mechanistic view of patients. The curriculum does not help students to integrate medical studies into their own cultural world-view. The oath was not analyzed but only read. Students are scared, especially in an Old Testament way for the wrath of God and want final answers. Polygamy, one of the issues in the debate of empowering women, is wrong for white students and they verbalised an attitude of intolerance for other cultures practicing polygamy.



Students find ethics “stupid”, since they experience “ethical answer” as not definitive enough. They experience uncertainty and want one correct answer. The students feel that there are 2 levels of action needed in health care namely on the individual or community level and believe official public policy to be more important and authoritative than individual opinion with regards to these actions. The Hippocratic oath featured strongly in discussions. There is a feeling that doctors play God, which leaves the students with discomfort. There is still a perception that the students are spoon-fed and do not take responsibility for their actions on the basis of their mechanistic approach to medicine.

The focus group moved from a fairly focussed discussion on ethics education of medical students to the influence of both the University of Pretoria and South Africa in general, on medical education. In this discussion the facilitators sought answers for the students’ performance. The different student groups varied in their reactions, while there were differences experienced between the two genders and between races. The students use either academic concerns or gut feeling for their analysis of the case studies; culture may considerably influence gut feelings. The hidden curriculum, taught in hospital passages, is important. There is clear AIDS fatigue. The students are not yet fully exposed to reality and want to use the law in such a way that further reflection on moral issues by them is ideally no longer required.

The second observer also determined that there was a clear gender difference in the approach to ethics. The women are more contemplative, while the men tend towards quick answers, thus revealing a hesitance to address the challenges posed by ethical reflection adequately. There is still a paternalistic mode of thought. With regard to the ethical challenge posed by a conflict with authority, students have a quick answer, namely that the person in conflict with government is working for government and therefore needs to do what government tells him to do. This illustrates the students’ adherence to authority structures. If the context is personalised, they experience discomfort and have no answer.

The students have easy and straightforward answers to the case studies. They reconcile the case studies very well with the theoretical part of the course in ethics. For example, when faced with the possible removal of the nasogastric tube in the adult patient with cerebral palsy on request, they experience no problem. They will respect her autonomy, even if the action may lead to her death if she is deemed competent. However, if the case scenario is changed to an anorexic patient, who will definitely die, they are adamantly against patient-



assisted suicide. The students are naïve, even after six years of study. They are exhausted as regards HIV/AIDS issues. They favour the young for treatment versus the geriatric patient, which they will palliate, as well as favouring vaccines for the young versus an ACE inhibitor for the older patient.

#### Themes

The emerging themes from the flip chart summaries, the facilitators' focus group discussion and the observers' notes are as follows:

- The students have a good knowledge of the four principles approach as described by Beauchamp and Childress and have no difficulty in the application of this approach in the case studies<sup>28</sup>. This is evident in the different group discussions, as well as the focus group discussion and for the independent observers.
- There is a gender difference with regard to reflection on ethics, with women being more sensitive and reflective than men as found by both the focus group discussion, as well as the independent observers.
- The best interest of the patient is often quoted as the guiding principle in complex ethical dilemmas as illustrated by the unconscious patient, the minor child and the hypothetical scenario of personal values in conflict with authority's policy.
- The students will favour treating the young versus the older patient, as illustrated by the two case studies in need of the same treatment (although the patients are of different ages), as well as by the choice for a vaccine for children versus a drug for older adults. They are far more aggressive in their treatment of the newborn than the geriatric patient. This was observed in the group discussion by the independent observers, as well as the facilitator.
- The majority of the students will not adhere to confidentiality if a third party's life is threatened as illustrated in two different case studies in two different sessions with different facilitators. They will consistently find it their duty to protect a third party from harm.
- There is a significant need to ensure their own safety, which probably reflects the students' experience of their working environment in South Africa, which has a very high crime rate<sup>36</sup>. The whole class respond in a similar fashion, that is to say



all ten groups have exactly the same consensus agreement on their management of the case study.

- There is considerable respect for autonomy. All the groups will respect the patient's wishes if the patient is deemed competent when discussing the case studies involving autonomy as the topic.
- There is also a strong insistence on "knowing and upholding their own rights" and the students are not comfortable with the phrase that medicine is their "highest calling". They claim it should reflect the limitations to their capabilities. This is in contradiction to the stated feeling of a calling to choose a medical career by a number of students.
- The students have little regard for patient advocacy as illustrated by their lack of support for the CEO and his HIV preventative treatment, as well as by the absence of active patient advocacy in their responses about anti-retroviral therapy for AIDS patients.
- There are mixed feelings with regard to the religious interpretation of disease, with a third of the class actively supporting the scientific explanation, while the majority are prepared to respect cultural differences.
- The majority of students will not do abortions voluntarily and have a strong religious prejudice against the process.
- The students have accumulated tacit knowledge in the hospital corridors with regard to administering placebos to hypochondriac patients. They seem to be well acquainted with a substantial list of conditions where they would prescribe a placebo without the patient's knowledge. They acknowledged, however, that they never had formal lectures on the topic.
- There is no strong commitment to the telling of the truth and to scientific accountability as illustrated by their reluctance to tell the hypochondriac patient that there is nothing wrong with the patient and the ease with which they will prescribe a placebo to treat recurrent complaints without informing the patient. They will definitely in this scenario deceive. They cannot motivate why they will manage truth in a different manner when dealing with the infertile man who does not need a vasectomy, although none is prepared to do the operation.

- A third of the class has problems with unconditionally respecting their teachers, while more than half the student group are not prepared to vow to promote the status of their university.
- The students want more lectures on medical law in the curriculum, since law will provide them with the necessary framework within which they can more comfortably function. They do not like the uncertainty, which they associate with ethics. They feel a great need for clear-cut answers that do not generate more questions. They find the inconclusiveness of many ethical arguments and “answers” intolerable.
- There is apathy and lack of interest in HIV/AIDS, which was probably due to compassion fatigue. This may also be due to an inability or reluctance to identify and grapple with ethical dilemmas.



## Chapter 5

### DISCUSSION AND CONCLUSION

The ethics curriculum is principal-based during the first seven years of this new problem-based- curriculum<sup>28</sup>. The students illustrated that they had acquired the knowledge and were able to apply this approach to bioethics when analysing vignettes. This was illustrated by the ease with which the students could apply the four principles of respect for persons (autonomy), beneficence, non-maleficence and distributive justice to the vignettes presented to them. According to both Campbell and Macklin, the principles approach of Beauchamp and Childress creates a useful framework for analysis of ethical dilemmas, or as Harris states a “useful checklist for those new to the field”<sup>29,38,39</sup>.

The students demonstrated respect for autonomy of competent persons as was illustrated by their response to the vignettes dealing with autonomy. However, there is the question as to what extent the ease with autonomy is due to a superficial application of a principle or a genuine internalised concept of respect for persons. For example, the whole class would prefer to terminate the naso-gastric tube feeding in the severe cerebral palsy adult patient on her request, due to the respect for her autonomy, but some voiced discomfort at the idea of supporting physician-assisted suicide. Another example is the fact that we have a very liberal law for the termination of pregnancy on request in South Africa, while the majority of students are conservative and will only do an abortion for medical reasons<sup>34</sup>. This indicates that the students will probably act within their own moral framework, which is influenced by personal belief systems. This is, however, at the same time disproved by the students’ obedience towards authority in the form of supporting the government’s action against von Mollendorf, even if this is in conflict with their own ethical code<sup>32</sup>. They voiced this by stating that one should adhere to the government policy if in the position of an employee.

Satterwhite et al found in his study that students participate in unethical conduct and experience erosion of their personal ethics code, although the students themselves do not report experiencing this<sup>19</sup>. Another indicator of a potentially eroded ethical code is the finding that scientific accountability is not that important, with students admitting that they



have had no formal lectures on topics such as placebos for hypochondriac patients. There is, however, a great discomfort with the religious interpretation of disease by patients, with strong support for the scientific interpretation of disease, indicating a rational response to disease.

The students also feel strongly about their own rights – a phenomenon which indirectly supports their adherence to the importance of autonomy, even if only on a personal note. The strong support for autonomy may be linked to the human rights culture that currently permeates the social culture in South Africa after the reform to a democracy in 1994 with first an interim Constitution, which was adopted on 27 April 1994 and later by the 1996 Constitution<sup>40,41</sup>. The emphasis in these documents is on respect for persons and individual rights for all citizens, which was not the case before 1994, when only a white minority had individual rights, but made decisions for the larger black majority<sup>41</sup>. This, however, will need more in depth investigation, since the students voiced the importance of their own rights in both the discussions with regards to South African health law, as well as when discussing the university's pledge (University of Pretoria, Appendix D).

The students are, however, paternalistic in their approach to the minor child and feel that the parent's authority overrules the minor's autonomy. They argue that it is in the best interest of the child to overrule her autonomy. It indicates a potential insensitivity to the respect that is owed to children according to their evolving capacity towards autonomy. This is not in accordance with the Convention of the Rights of Children, which state that children deserve the same respect as adults and should be allowed to express their opinion<sup>42</sup>. This can probably be explained in terms of the fact that children's rights are not adequately dealt with in the ethics curriculum, which was only introduced to the curriculum in 2002 for fourth year medical students and to which this student class was not exposed. This emphasizes the importance of regularly evaluating the ethics curriculum to ensure that the content is broad enough to sensitise medical students for a vast majority of ethical dilemmas that they may encounter in their professional career.

The emphasis on autonomy and informed consent can be criticised, since it focuses on the individual that is rational and who may ignore the physician-patient relationship characterised by the physician's virtues such as compassion, courage, temperance and a lack

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<sup>40</sup> J. De Waal, I. Currie, G. Erasmus, "The Bill of Rights Handbook" (fourth edition) 2001 at pp. 2-6.

<sup>41</sup> See De Waal *supra* note 40 at p.2.



of will to address social issues<sup>1</sup>. This study provides proof that the students have no problems with respect for the patient's autonomy in the given vignettes, but do not consider participating in patient advocacy issues as seen by their non-involvement in the fight for antiretroviral drugs for HIV-infected individuals or support for Von Mollendorf, the CEO, whose services were terminated because he allowed rape victims access to antiretroviral therapy<sup>31,32</sup>. This lack of a sense of the importance of advocacy for antiretroviral therapy may be due to a lack of compassion, although the students are still idealistic in their views of what physicians ideally is or ought to be, naming caring, compassion and counselling as the major characteristics of a physician.

There is more emphasis on beneficence in cases where the patient is incompetent and the closest family member refuses a life-saving operation. When the patient is incompetent (comatose), the students resort to the guideline "best interest of the patient" as their guiding principle, as illustrated by the case study with the woman with a ruptured uterus. The best interest of patients also takes precedence when there is a conflict between autonomy, confidentiality and the safety of a third party. In this situation, the student group are unanimous in their choice for the third party's safety, even if that leads to a disregard of the patient's autonomy or confidentiality.

Distributive justice is important when it comes to saving the life of a severely handicapped neonate in a setting of limited resources, and the general feeling is that it would depend on the available technical and material resources of the parents. The students are very sensitive about the health care costs involved in the managing of these patients, which is probably a reflection of the influence of limited resources in health care in South Africa and the high incidence of poverty with minimum support for the handicapped<sup>43</sup>. With regard to the chronic patient, who demands a kidney transplant in a setting of limited resources, as well as the non-compliant patient who requests haemodialysis, the student groups have a similar response, namely that distributive justice overrules autonomy<sup>33</sup>. This may be due to their sensitivity to the unequal distribution of scarce resources in South Africa. Another (unlikely possibility) is that the students may support libertarian theories, which protect people's rights to liberty, and allow them to improve their social status, but where individuals are



responsible for their own health care costs<sup>28</sup>. It will require further research before such a conclusion can be drawn.

According to the students' case analyses and discussions, the age of patients determine health care management and the young ought to have preference of access to necessary care vis-à-vis the aged. This is illustrated by the analyses of the two case studies, where the students will rather ventilate the baby and provide the preventative vaccine to children instead of offering management for the middle aged and older patients. This is in accordance with other authors, who argue that younger persons ought to receive preferential treatment<sup>44,45,46</sup>. The basis for the students' arguments is quality of added life years, where they feel that the geriatric patient have already lived a full life and therefore does not deserve more. This view probably also reflects paternalism, since only one group mentioned that they would discuss this with the patient and/or her family. This is probably also a reflection of the social context of the students, where the average age of the population is younger in South Africa versus more developed countries with an older population<sup>47,48</sup>. Furthermore the focus is on health care for children and pregnant women, who have access to free medical care in the state setting in South Africa, emphasizing the importance of maternal and child health, which also permeates the medical curriculum<sup>26</sup>. This is in contrast to industrialised countries, where people over 65 years are getting priority attention for health care with more health care resources allocated to them<sup>46</sup>.

The students are very concerned about their own safety in an emergency situation and will first ensure their own safety before attempting to rescue the injured at an accident scene. This is probably influenced especially by the local context in which they live and where the high levels of violent crime reflect one of the worst situations in the world, according to Interpol and the South African crime statistics, with CIAC data indicating a major escalation in violent crime since 1994<sup>36</sup>. Furthermore, hijacking of vehicles is very common in South Africa and such a fake accident is an easy scenario to stage<sup>36</sup>. This finding stresses the importance of improving the safety of ordinary South African citizens, since an attitude of fear for personal safety may have serious implications for emergency workers in health care, which may compromise the lives of patients in emergency settings. The student class focus in the discussion only on the their personal safety in an emergency scenario, while nobody contemplate the importance of their actions under the influence of alcohol.

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<sup>28</sup> T.L. Beauchamp, J.F. Childress, *Principles of Biomedical ethics* (fifth edition) 2001 at p. 231.



The social and cultural context of the students also play a role, as illustrated by their responses when asked what they would do if they suffer from fatigue after very long working hours and are obliged to, again, report for duty. Their reason for either arranging an alternative doctor or volunteering for paperwork is the feeling that their technical ability will be compromised and, above all, they fear needle prick injuries in the light of the HIV/AIDS pandemic in South Africa<sup>25</sup>. Furthermore, the students probably suffer from compassion fatigue, since there is a great apathy to discuss the issues related to HIV/AIDS patients as noted by two facilitators, the observers, as well as voiced by the students that they were tired of the topic HIV. The finding may also indicate that the student class does not really acknowledge or recognize the ethical dilemma of dealing with the AIDS pandemic in their daily life, especially where their explanation for disease focus only on the scientific model and they have not shown a caring disposition. Further investigation will be needed to elicit the reasons for the apathy, emphasizing the importance of psychosocial support for medical students during their training. Medical students are exposed to tremendous stress and uncertainty, which is true of our students, who are living in this devastating AIDS pandemic<sup>21</sup>. It is well described that medical students go through a process of “traumatic de-idealization”<sup>49</sup>. According to Feudtner ethics education should focus on the experiences of the medical students in their clinical rotations, where a safe environment to discuss their experiences is created and students can discuss ethical dilemmas that they have experienced and the impact on their psyche<sup>17</sup>. Medical training is usually analytical, concentrating on the scientific aspects, while Feudtner suggests that the ethics curriculum should rather focus on the social and cultural context of the students’ learning experience to identify and address the complex ethical dilemmas<sup>17</sup>. These findings are important and should receive attention in future planning of ethics group discussions.

There seem to be a gender difference in the way students approach the case studies, with women tending to have higher ethical standards (being more reflective), but it will need a specific study design to confirm the observation. This finding is confirmed by other studies that found a similar gender difference, although this conclusion is not supported by a large study done by Rowe and Snizek<sup>50,51</sup>. According to Sankaran et al there is also a relationship between student characteristics and ethics standards<sup>50</sup>. They describe two personality types namely type A, who is highly motivated, task oriented and time-driven versus type B, who is more patient and co-operative<sup>50</sup>. The highly competitive type A students tend to have lower ethical standards<sup>50</sup>. The majority of our students are selected according to strict



criteria for academic excellence and indirectly we may select more type A personality types for medical studies, which may explain the quick “solutions” reached in the case discussions. This aspect actually needs further investigation and we can only speculate in this study on the potential influence of the personality type on the students’ ethical standards.

Sankaran also found that ethical standards improved with age, with older students being more reflective<sup>50</sup>. This may indicate that there is a need to mature, since our students were relatively young. There is a maturational process in medical students in which they need to gain the necessary ethical characteristics in their education process. This is in agreement with Feudtner’s observation that medical students still develop their ethical self in medical school<sup>17</sup>. Sankaran et al further suggests that ethics should be the outcome of practice and not only be the result of formal lectures, which is in agreement with Aristotle who suggested that phronesis or practical wisdom is gained through practice<sup>50</sup>.

The majority want to have an oath-taking ceremony in public, which is a common practice in medical schools in the United States and Europe, although the timing of the ceremony may differ<sup>52,53</sup>. Huber regards this as an important step in the professional development of medical students<sup>53</sup>. The timing at our university is at the end of six years of study and is a public event marking the change in status from medical student to qualified doctor. The students, however, have great discomfort with the content of the existing oath (appendix D). One of the major obstacles is the words “highest calling”, which they argue should only be used for their professional context and not their whole life, since they experience limitations to their capabilities. Another bone of contention is the promotion of their university’s status, as well as the obligation to respect their mentors. Their problems with respect are surprising, since they all demonstrated obedience to the state in their support of the termination of von Mollendorf’s services, and the expectation that the child patient should be blindly obedient to the mother’s authority<sup>32</sup>.

The students voice their need for more law courses. This may be due to the realisation that in due course they will be the responsible doctors for patient care and it is a statement about their feelings of insecurity with regard to their responsibilities. Bauman addressed the issue of rules, which can be universal, binding and treating humans alike, but it is by having



to take the responsibility that we become individuals<sup>54</sup>. According to Bauman, rules guide our actions and provide for a safe environment where we know where our responsibility begins and where it ends<sup>55</sup>. This protects the individual from facing the ‘other’<sup>56</sup>. We are ontologically side-by-side according to Bauman and his interpretation of Levinas. But this state of sided-by-side can easily be changed to face-to-face and this creates a need to protect the self from the ‘other’ and therefore one needs the Law<sup>56</sup>.

The students are faced with their own uncertainty about the interaction with their patients, which confronts them with the responsibility of facing the ‘other’<sup>56</sup>. The students are probably still partially in an ontological state, which according to Levinas, is the state where there is little morality, while he argues that morality “is a transcendence of being”, where choosing for ‘face-to-face’ is chosen above being ‘with’ another. According to Levinas “Ethics is precisely ethics by disturbing the complacency of being (or of non-being, being’s correlate)”. Our students here illustrate their uncertainty and their need to create safe boundaries, in which they can function; hence the need for directives like medical law. It is clear that the ethics curriculum should address the management of uncertainty.

In deciding what these findings indicate with regard to the ethics curriculum, it is important to again reflect on what the teaching of medical ethics entails, namely the teaching of what the doctor/health care worker should do in the professional-patient relationship, of professional codes of conduct, and of institutional code of ethics<sup>55</sup>. Carse had severe criticism of an ethics education programme that focuses mainly on the universal principles in an attempt to provide for a dispassionate analysis of the complexity of ethics<sup>56</sup>. She suggested a caring orientation, which is a valid point in the analysis of our results where the application of the principal-approach is well demonstrated, but not the caring attitude or compassion that is necessary in health care. Clouser and Gert argued that principlism without adequate moral theory may obfuscate moral reasoning, which is probably true in that there is no clear indication that respects for individual/‘the other’ is truly an internalised concept<sup>57</sup>. Pellegrino argued that medical ethics education should involve, not only the cognitive knowledge, but also sensitising the affective attitudes, which involves empathy, openness, warmth and the ability to communicate well<sup>58</sup>. Doctors need to be able to interact with patients and demonstrate altruistic and trustworthy behaviour<sup>21</sup>. We need

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<sup>54</sup> Z. Bauman, *Postmodern ethics* 1993 at p.54.

<sup>55</sup> See Bauman *supra* note 54 at p. 60.

<sup>56</sup> See Bauman *supra* note 54 at p. 70.



adequate scientific base knowledge for clinical practice but also a sound framework to deal with medical ethics, which incorporates different value systems and universal principles coupled with care and other virtues. It is important in pluralistic societies that, not only the physicians and philosophers are involved in the education, but also the theologians, sociologists, anthropologists and other individuals from society<sup>1</sup>.

Coulehan et al stated that medical education might have one of three effects on the ethics of doctors: The one group will accept only tacit values and will act only as competent physicians in their diagnosis and management, but with little of the other virtues of a good physician<sup>20</sup>. Another group will be non-reflective in their professional career and will follow the doctrine of the best care for their patients with the patients the object of their medical care, while a third group will be immune to these tacit values and will develop professional virtue. From the findings of the study we can deduce that the majority of the students are either in the competent technician group or the non-reflective group who takes the best care of their patients seriously.

The question to be asked is how do educators ensure that their students develop professional virtues. The question is probably answered by examining the method of teaching. Our curriculum is mainly lecture-based, due to large classes and few teachers. Lecture-based education limits the active participation of students. It is necessary to build in more small group discussions with teachers well versed in the Socratic method of teaching<sup>55</sup>. This is, however, difficult since there is no dedicated department but only a virtual department of Bioethics, responsible for the teaching at our university<sup>55</sup>. Time management is further very difficult in our curriculum with a huge teaching load, which may influence the students' critical thinking skills<sup>55</sup>.

Educational institutions such as universities should emphasize a high professional level of conduct of their personnel for students. Mentorship or role modelling is an important part of the education process of medical students, which happens in an unplanned and unstructured manner<sup>11</sup>. This is a resource that is probably underutilised, and in the study already evident in the refusal of the students to vow to respect their teachers, which they will not do unconditionally, since they feel the teachers do not deserve respect or perhaps are not good role models<sup>11</sup>. However, negative role models also have an important educational function since they can be a reminder to the students of how they should not behave<sup>11</sup>. The students learn about deception or the art of obfuscation from their seniors,



as has been illustrated in the study by the support for the use of placebos for a range of complaints without informing the patient<sup>17</sup>. We should remember that students enter medical school with their basic character, but their professional character will be shaped by the education and experiences in a medical curriculum and therefore a lot can be achieved with good role modelling<sup>11,19</sup>.

Mitchell et al proposed the “Know-Can-Do pyramid” for the gain of ethical reasoning skills<sup>59</sup>. The students must know the different ethics theories and principles as related to health care. The ‘can’ should measure the students’ ability to use the cognitive component and apply it in clinical scenarios. The ‘do’ is the behaviour of the students in a daily clinical scenario, when he/she is not necessarily observed and the behaviour is spontaneous and part of the individual’s doings<sup>60</sup>. To assess the ‘know’ level one can ask long questions and discussions by giving a vignette to discuss. In this assessment the students must identify the ethical dilemma, analyse it and suggest a course of action, either in a written format or in oral presentation. The ‘can’ can be tested by an OSCE (objective structured clinical examination) with either a real patient or a simulated patient. A checklist is a valuable tool to assess this competency. This again may test the student in an artificial manner and not necessary reflect the true daily scenario. The ‘do’ level is best assessed in the daily clinical setting with patients and through a portfolio assessment<sup>29,30</sup>. The advantage of a portfolio is that the information is gathered from many sources and is more adequate for the testing of attitudes, while the students can also track their own progress<sup>29,30</sup>.

The potential limitations of the study could be the choice of the case studies, the methodology and/or the potential for bias in the data analysis. The case studies, chosen for the purpose of this study, aimed to address either the necessary virtues of physicians or common ethical dilemmas or controversial issues that students were exposed to during their study. The topics chosen were based on the theoretical content of the ethics curriculum and the students proved their ability to successfully apply the principle-based approach. The knowledge component of the curriculum is therefore successful, but can be improved by ensuring exposure to other approaches to ethics. However, the students did not necessarily develop the ability to recognize the ethical dilemmas or to reflect about them as illustrated by their apathy towards HIV/AIDS. The summaries of the group discussions served as focus group discussions for the students, but could be biased due to peer pressure with regards to specific issues and were not compensated for by individual

interviews with a representative group of students. These interviews might have added information to the testing of attitudes and ability for self-reflection. The study design used triangulation design model for analysis purposes<sup>61</sup>. The aim of this model is to gather data at the same time in three different ways and thereafter to integrate the data for interpretation. The results were correlated between the different data sets, but two sets focussed mainly on the responses of the facilitators and the researchers, with only one set representing the students' own responses. For this reason it would have been useful to also include individual interviews as a data set.

In conclusion, the major finding of this study is that this students examined are not yet sensitised to recognize ethical dilemmas of which the HIV pandemic poses the major current ethical dilemma. The recommendations for the ethics curriculum are that there should be more emphasis on other approaches to medical ethics than the principle-based approach in the theoretical part of the course. Small group discussions on daily experienced ethical dilemmas may enhance the ethical conduct of medical students, as well as address the traumatic experiences that may lead to "de-idealization". A portfolio assessment during the course of the medical education will provide a tool for students to follow their own development in reflection on ethical dilemmas. Finally, the question can be asked whether we are ready to come "face to face" with the "other" as Levinas argues or are we still divided into "two classes of mankind in the world - doctors and patients" "as remarked by Kipling in the 19<sup>th</sup> century"<sup>56,61</sup>.

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<sup>56</sup> See Bauman supra note 54 at p. 70.



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## APPENDIX A

### A PILOT STUDY TO DETERMINE THE INFLUENCE OF A PROBLEM-BASED CURRICULUM ON MEDICAL STUDENTS' PREPARATION FOR ETHICAL REASONING

Study investigators: Mariana Kruger; Annemarie Bergh, Danie Lombard

#### Introduction:

The teaching of ethics in the undergraduate curriculum of medical students is deemed to be of benefit to improve doctors' clinical practice (1, 2). However, there is lack of evidence whether ethics teaching in a problem-oriented curriculum with more emphasis on formal ethics teaching will improve general practitioners' critical thinking skills or work performance related to the wide spectrum of ethical issues (3). The School of Medicine of the University of Pretoria introduced a new undergraduate medical curriculum with elements of outcome-based curriculum in 1997. In this curriculum ethics education has been identified as one of 13 golden threads in the curriculum, which by definition means that students should be exposed to ethical aspects of medicine throughout the curriculum. This study is a pilot study, in the quest to determine to what extent this curriculum has enabled them to ethical issues and has enabled the students to develop sufficient skills in ethical reasoning.

**Aim:** To investigate the undergraduate medical students' ethical reasoning skills and knowledge after five years of medical studies.

#### Methods:

As this is a pilot study the investigation will be mainly exploratory in nature and for that purpose a qualitative research approach is more appropriate.



The setting:

The student intern complex of 200 students, currently completing their final year of medical education, have their usual 'ethics weekend' in March 2003. During these two days they are involved in intensive discussions on ethics relating to health care. The 200 students will be divided in ten groups with ten facilitators, who will each deal with a different ethical topic or principle. Each group will spend an hour with a facilitator discussing specific case studies around a particular ethical issue. The case studies will highlight the following ethical principles or topics:

Beneficence

Non-maleficence

Autonomy

Distributive justice

The role of compassion in medicine

Virtue ethics

Care ethics/casualty/Feminist ethics

Professionalism

Student's credo

Current South African laws and ethics

The data collection process:

The students will reflect on the given case studies in their groups and the facilitators will facilitate the discussions. Data will be collected in the following ways:

- The discussion process in each group will be documented on flipcharts and the facilitator, in collaboration with the students, will document the conclusions. All the notes will be typed.

- The two researchers will act as independent observers of the process and will attend two sessions of each group to document attitudes of the students to ethics in a semi-structured manner.
- At the end of the first day a focus group interview will be conducted with the facilitators to discuss their experience of the students' preparedness for ethical reasoning. The interview will be audiotaped and transcribed. Facilitators will afterwards be contacted via further e-mail discussions to clarify unresolved issues or to verify the interpretation of the data.
- The ten groups will be described in terms of demographics and their conclusions to the case studies will be compared to identify different attitudes and knowledge to ethics.

#### Data analysis:

The data will be analysed according to acknowledged data analysis strategies in qualitative research. The three different types of data sets will serve as triangulation.

The researchers will first analyse the data independently and then come together to discuss, compare and reach consensus on their categorisations and identified patterns. These results will then be circulated to some or all of the facilitators for verification and comments before the final synthesis is made.

#### Informed consent:

- Informed consent will be elicited from all the participants, both students and facilitators.
- Student participants not willing to give informed consent will be excluded by being separated into non-participative groups on an anonymous basis. The information collected will be anonymous and will not be linked to any individual or group in a manner by which they can be identified.



- Facilitators will not be obliged to participate in the focus group.

References:

1. London L, McCarthy G. Teaching medical students on the ethical dimensions of human rights: meeting the challenge in South Africa. *J. Med. Ethics*, 1998; 24: 257-262.
2. Hope T, Fulford KWM. The Oxford practice skills project: teaching ethics, laws and communication skills to clinical medical students. *J. Med. Ethics*, 1994, 20: 229-234.
3. Mattes E. Should there be more teaching of critical thinking in Australian general practice? *MJA*, 2000; 173: 153-156.

## APPENDIX B

### DATA RESOURCES

1. Original notes of the researchers
  - a. Field notes
  - b. Focus group discussion
2. Flip chart notes of all the sessions with the different themes
3. Informed consent of participants
4. Audio recording of focus group discussion
5. Case studies used by facilitators in the different theme discussions



## APPENDIX C

### ETHICS CURRICULUM

The current curriculum for undergraduate students is an integrated problem-based curriculum with an outcomes based approach. The curriculum follows a modular format with ethics built into the different modules over a period of 6 years undergraduate education. The content is as follows:

#### **Year 1:**

The students receive introductory lectures in philosophy in the module titled “Science and World Views” and the lecturers are from the department of Philosophy. The course has two parts namely “Scientific philosophy” and “Ehtics and Health Care”. There are 14 lectures/discussions of an hour each (14 hours in total).

#### **Year 2:**

During the module with the title “People and their Environment”, the students receive 12 in Bioethics (12 hours), which include the following topics:

1. What might ethics be?; Why ethics?; Varieties of ethics in medicine
2. Autonomy and Informed Consent
3. Beneficence and non-maleficence
4. Distributive justice
5. Ordinary and extraordinary obligations
6. Ethics and public health
7. Ethics in the African context
8. Research ethics
9. Euthanasia
10. Confidentiality

## 11. Deception in medicine

### Year 3:

Several modules in the third year have ethics discussions built in the different modules. They are the following:

1. Haematological malignancies: Patient refusal of medical treatment (1 uur)
2. Pregnancy and neonatology:
  1. “Whistle blowing” (1 hour)
  2. The tyranny of the 1 kg baby: Management of patients in a setting with limited resources (1 uur).

### Year 4:

The following modules have ethics built into the program:

1. Diseases of Childhood:
  - a. Children’s rights (1 hour)
  - b. Charter for hospitalised children (1/2 hour)
  - c. SA Constitution, children and health care (1/2 hour)
  - d. Children and research (1 hour)
  - e. Medico-legal issues with regards to children (2 hours)

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There is a student ethics breakaway of 2 days with discussions on various current topics in contemporary health care ethics. There are small group discussions on ethics in the clinical disciplines surgery, obstetrics and gynaecology, paediatrics, internal medicine and psychiatry.



A P P E N D I X D

PLEDGE OF THE GRADUANDI IN MEDICINE AT THE  
UNIVERSITY OF PRETORIA

With acceptance of my degree in

Medicine and Surgery

from the University of Pretoria

and with my entry into the medical profession;

I solemnly declared to:

devote my life to the service of humanity;

have the highest regard for human life

from the beginning thereof until it's natural end;

uphold the honour and noble traditions

of the medical profession to the best of my ability;

to practice my career dutifully and with dignity;

treat my colleagues with the necessary respect;

to refrain from making public any

confidential information about my patients;

still promote the status of the University

and to display the respect for my mentors that they deserve;

to make the motto of the Faculty

“Salus Aegroti Suprema Lex”

-the welfare of sickest is my highest calling –

an integral part of my life and way of thinking

and to strive towards this objective with diligence and perseverance.