Medical Students' Attitudes Towards Death and Related Issues

Dr I Couper
BA, MBBch

S Afr Fam Pract
1994;15:505-11

Curriculum Vitae

Ian was born and schooled in Port Elizabeth. He graduated in 1983 with a BA (distinction in Psychology) from the University of the Witwatersrand. He continued his studies and in 1987 graduated with a MBBCh from Wits Medical School. During this time he was student representative on the Medical Faculty Board and on the Professional and Ethical Standards Committee. Ian worked at Livingstone and Dora Nginza Hospitals in Port Elizabeth before going to Paraguay to work as a volunteer with the Anglican Church for one year. He returned in 1990 and after a locum at Boksburg-Benoni Hospital, started work at Manguzi Hospital in January 1991 where he is responsible for primary health care/community health services development. He has been acting Medical Superintendent since August 1993. He was submitted to alternative service as a conscientious objector and completed that service in September 1993. In 1991 he commenced at Medunsa with the M Fam Med programme. He is married to Jacqui, an occupational therapist, and they have a son, Timothy, 3 years old.

Manguzi Hospital
Private Bag X301
KwaNgwanase, 3973

Summary

A two-part study was done to assess medical students' attitudes to ethical issues related to death, fear of death, and religious beliefs. Part 1 assessed differences between medical and other students, and Part 2 examined changes in attitudes during medical school. It was found that medical students start out with a number of differences in their ethical attitudes, and with greater conscious fear of death, and that these attitudes and feelings remain essentially unchanged despite exposure to medical education. It is thus suggested that attention needs to be given both to the selection of students and to the input they receive in terms of ethical issues and death.

Keywords:
Ethics, Medical;
Education, Medical;
Attitudes to Death;
Students, Medical.

Introduction

There seems to be a nature-nurture controversy in regard to the moulding of the qualified doctor. How much of what he/she thinks did he/she bring into medical school at enrolment, and how much is due to the education process? Schools hope that they play an important part, yet when it comes to critical aspects such as attitudes on ethical issues and towards death, they have by and large expected students to learn by osmosis from the examples of their teachers and other professionals, even though the latter may have been through the same flawed training.

In fact, there is a disparity between the model of the ideal doctor and many of the attitudes promoted during a student's years at medical school.

Attitudes towards Death

Because the primary focus is the mastery of skills, personality development is very often overlooked.[1]

Doctors, in most cases, are taught how to pronounce people dead but not how to deal with the psychological distress of dying.[2] Death is often seen as a failure, the most grievous offence a patient can commit in a university hospital.[3] Thus, as doctors, we refuse to talk about or contemplate death.[4] Despite being constantly confronted by death in the practice of our profession, death is a subject that medical practitioners seem no more able to research or discuss than any layperson, keeping in step with societal taboos which prevent us from talking about death in anything but euphemism if we cannot avoid talking about it at all. Fear of death is present in all people. But to what extent do we as doctors deal with the fear? To what extent have these fears stimulated our decisions to choose medicine as a career?

It is only by breaking through one's own fears to face one's own death that one can learn to comfort a dying patient significantly.[5] Put another way, "we cannot begin to understand until we live close to a dying person".[6] This has only recently been recognised. In the Cumulative Index Medicus between 1960 and 1971 there was not a single article on teaching medical students about death and dying;[7] by 1980, 58% of American medical schools offered some courses in death and dying.[2] Consensus has been reached in the USA about the need to teach medical students how to approach death and dying, but South Africa seems to have lagged behind.

Medical education does have a socialising influence – ideas do change as a result of going through medical school,[8] but in which direction, and how are key issues affected? And to what extent do medical practitioners differ from others in their views? Not much is known about South African medical students' attitudes towards ethical issues, before and after their medical education.

This study in two parts was undertaken in order to try to answer some of these questions. Firstly, its purpose was to see if there is a characteristic set of attitudes that distinguishes the medical student from other non-medical students in terms of attitudes towards death and related ethical issues.

Secondly, it was to explore changes in medical students' attitudes towards death and related issues during their time at a medical school where very little formal attention was given to such matters.

Part I

The aim of this study was to determine differences in attitudes between beginning medical students and beginning engineering students towards different methods of life destruction (birth control, euthanasia, abortion, capital punishment, wartime killing), religious beliefs (belief in an afterlife and in God), and conscious fear of death.

Materials and methods

A questionnaire was drawn up to measure attitudes towards eight issues related to death using a 16-item, likert-type scale developed by Kalish.[9] For each issue there were two questions, one worded positively and one negatively, with the respondent having to indicate a feeling ranging from "strongly disagree" through to "strongly agree", scoring from one to five on a positive question and five to one on a negative, giving a total possible score per question of ten points.
The total form consisted of 32 items,

Students are expected to learn only by osmosis such ethical aspects as attitude to death and moral reasoning.

Primary focus is the mastery of skills – personality development does not seem important.

Students are taught how to pronounce people dead, but not how to deal with the psychological distress of dying.

16 of which were camouflage items related to other social issues not used in the analysis. The questionnaire was entitled "Attitudes on Social Issues". Respondents remained anonymous but were asked to state their sex, age, race, home language and religious affiliation.

The questionnaires were administered in 1982 to 192 first year medical students and 153 engineering students at the University of the Witwatersrand. The subjects gave voluntary consent to participating in a research project on social issues, which had been approved by the Research Committee of the Department of Psychology of the University of the Witwatersrand.

Mean scores on each variable were compared, to assess differences between the groups, using Hotellings T-test to assess significance.

Results

The medical students were demographically a significantly different group from the engineering students, with a higher proportion of female and black students, and students with religious beliefs other than Christian ones. There were no significant differences in age or in home language between the two groups.

As Table 1 shows, there were significant differences on four issues, with medical students being significantly more in favour of birth control, but more opposed to capital punishment and to wartime killing, and showing greater conscious fear of death. Controlling for the demographic variables, and comparing only 17-19 year old, white males, these differences remained significant.

Table 1: Differences between mean scores on the 8 variables tested

Issue	Mean score: Medics	total 10 Engineers	value
1. Birth control	8,22	7,74	0,0145
2. Abortion	8,13	7,93	0,3426
3. Euthanasia	5,95	6,93	0,0857
4. Wartime killing	6,38	6,91	0,0475
5. Capital punishment	6,36	7,87	0,0000
6. Fear of death	6,91	7,37	0,0458
7. Belief in afterlife	7,64	7,47	0,5036
8. Belief in God	8,85	8,44	0,0643

Note:
1-5: Higher score means more in favour of issue listed;
6: Higher score means less conscious fear of death;
7-8: Higher score indicates greater belief.

Discussion

It has been postulated that students choose to do medicine in order to deal with some of their feelings about death; they have a need to gain the power to control disease and to save lives in order to master their fear of death.[10,11] If this is true, it might explain why medical students have a greater conscious fear of death than non-medical students. In contrast, Kasper[12] states, as a rule, that people with conscious death anxiety stay away from medicine. This study lends weight to the opinion that those who choose a career in medicine have a greater conscious fear of death.

Death is often seen as a failure.

Death is the most grievous offence which a patient can commit in a university hospital.

Significant differences between medical and engineering students.

Attitudes towards Death

Howells and Field[13], in comparing 178 British preclinical medical students to 171 social science students, found no differences in fear of being dead or of dying. They did find that students in general were more afraid of the process of dying than death per se, and that death anxiety was associated with higher levels of anxiety in general. On the other hand, Thorson & Powell[14], in an American study, found both junior and senior medical students showed significantly lower fear of death scores than other graduate students. Thus conflicting findings exist and more extensive research is needed.

It is a possibility that medical students, in the light of the nature of their course, are simply more aware of their feelings about death than are engineering students, though that is unlikely to be due to the content of the course itself, in view of the fact that medical students in their first year, in which they are occupied with basic sciences, are not exposed to issues related to life and death any more than engineering students.

The attitudes towards capital punishment and wartime killing may represent a social liberalism that is more common amongst medical than engineering students – though it is surprising that this did not carry over into attitudes towards euthanasia and abortion. Ewan[15] found that medical students were generally less conservative on social issues than their academically equal counterparts in commerce and science based courses, and on a par with arts students. These two variables (capital punishment and wartime killing) have previously been found to correlate with one another.[9]

Birth control was viewed very differently by the two groups of students, and is likely to be related to the mindset which allows a particular choice of career. Previously a relationship has been found between attitudes to birth control and abortion[16] yet there was no difference between the two groups in attitudes towards abortion.

It is interesting – especially in the light of the different make-up of the two groups – that these differences occurred without significant differences between the groups in terms of belief in an afterlife and belief in God, although there was a non-significant difference in the latter. This apparently stands in conflict with the findings in the literature that belief in a Supreme Being is associated with a positive attitude towards death.[17]

Choose medicine in order to master their own fears of death.

Part 2

The aim of this study was to assess whether medical students' attitudes towards the same ethical issues, religious beliefs and conscious fear of death changed after five years of medical education.

Materials and Methods

The subjects were medical students at the University of the Witwatersrand. The questionnaire described in Part 1 was administered again to the same medical school class when they reached the end of the 5th year in 1986.

No change in the students' attitudes after five years at medical school.

Because the questionnaire was anonymous it was impossible to follow up individual students: to rule out those who might have joined the class through re-entry after completing other degrees, failure, transfer from other courses or universities, etc, a question was added to the 1986 questionnaire to find out whether the respondent had been a first year medical student in 1982. All students who were not in the original group were excluded from analysis.

The 1986 survey was done through the Department of Medical Education of Wits Medical School.

There were 192 students who participated in 1982, whereas only 75 students of the 1986 group had been in that class, representing a loss of more than 50%, for the reasons cited and because some students no longer attended lectures, the questionnaire being administered on both occasions during a normal scheduled lecture period.

Mean scores on each variable were compared and differences assessed for significance using Hotellings T test.

Results

Understandably there were no significant differences on demographic variables between the two groups except for age where the expected five year difference was present.

There were no significant differences between the two groups in scores on any of the ethical issues, conscious fear of death and beliefs. The only difference that approached significance was conscious fear of death, which appeared to increase: 6,91 (1982 mean score) vs 6,40 (1986 mean), p=0,085.

Discussion

Although this group did have a small number of voluntary lecture-discussions on ethical issues (about 10 hours) in 5th year, as well as some exposure to human behavioural science and medical sociology in preclinical years, there was no concerted effort to assist students to develop their thinking on ethical issues or to cope with the issues of life and death that they would be facing increasingly. The medical school favoured the "role model" philosophy of education in these matters.

It is evident that, in spite of the hope that students would develop and change their thinking through medical school, there was no alteration in students' ethical attitudes, and even a possible increase in their fear of death. The possible consequences of that on the treatment of patients, breaking of bad news, counselling of bereaved families, etc, are disturbing. This may be, in part, a direct consequence of the academic hospital assumption that death is a failure to be avoided at all costs.

Very few longitudinal studies exist looking at fear of death amongst medical students. One British study which looked at fourth year students when they became junior house officers similarly found a strong consistency of feelings over time, though there was some decrease as students became doctors, suggesting that contact with a real event helps to reduce fears.[18] Howells, Gould and Field in Britain[19] and Thorson and Powell in the USA,[14] comparing lst and 4th years, produced similar results. However, others have found that practising physicians are more fearful of death than medical students, and believe that continued experiences of death make a doctor more fearful of death.[10] This was borne out by Bleekar and Pomerantz[20] who found that the more deaths medical students had personally experienced, the more likely they were to want to avoid dying patients and their families, and to want separate institutions for dying patients. It seems that this could be due to the distress that is experienced during the dying process which is internalised as a negative feeling towards death.

Linn *et al*[2] assessed whether clinical experiences would lead to a reduction in students' fears about death and dying, but found no change over 12 weeks. They suggest that death anxiety may be a trait, but acknowledge that others have shown changes in attitudes as a result of participation in death education programmes. Very interesting in their

Practising physicians are more fearful of death than medical students.

Those choosing family medicine exhibited the least fear.

study is the correlation of different career choices with fear of death, in that those who showed most anxiety tended to follow careers that were either non-clinical or involved limited patient contact, whereas those choosing family medicine exhibited the least fear[2].

It is important, of course, to remember that fear of death is not incompatible with the capacity to render high quality of care to the dying.[14] It has been suggested that small group teaching with students being given an opportunity to discuss their fears, can assist students in dealing with their fears.[18] A lecture course on loss and grief has been shown to do the same,[20] but a small group case-study method has been shown to be more effective.[21] It is vital that this takes place in the clinical years when students are actually being exposed to dying patients.[7]

In terms of ethical and religious attitudes in general, a number of studies show that medical school can have a negative influence on students, with an increase in cynicism and decrease in humanitarian feelings.[1] This may be related to the rigid, aversive, authoritarian environment of the medical school, or to the increasing exposure to dying or chronically ill patients for whom there is no cure,[1] or to a paucity of teachers with whom students can identify[22]; certainly the disenchantment process is a progressive one through a student's years at medical school.[22]

Medical students are thought to be more liberal than their professional colleagues, and tend to become more conservative through medical school – a pattern observed across medical schools with totally different educational approaches.[8] However, in a study of 3 medical schools, Mahaux and Beland[8] found that students' attitudes were related much more to background characteristics than to their medical education, ie selection into medical training more than the medical training per se, is the most important factor influencing medical graduates' outlook. Perhaps the profession tries to clone itself; if changed attitudes are desired, it may be that more attention should be paid to admission criteria than to the education programme.

Baldwin, Daugherty and Self[23] assert that levels of moral reasoning can be positively influenced by small-group, problem-based study of moral dilemmas and that without this systematic effort to teach medical ethics, levels of moral reasoning decline. Their study of 249 American medical students showed an increase in moral reasoning between the first two and the last two years of medical training during which there was exposure to a wide variety of moral dilemmas in small group discussions. They feel that, although simple exposure to the complex clinical environment may be sufficient to foster such growth, this should not be left to chance. However another study found that the educational experience had an inhibiting effect on moral reasoning ability when students were assessed from 1st to 4th year at medical school; furthermore the range of scores for moral judgement narrowed, demonstrating a strong socialising process.[24] It requires a formal teaching programme in medical ethics to produce significant growth and development.[21]

A formal teaching programme in medical ethics can produce growth and development in moral reasoning.

Teaching ethics should be an integrated part of clinical training.

Conclusions

This study has borne out what others have found, that medical students start out with a set of attitudes which are different from other students, rather than such attitudes being developed during medical school training, and that fear of death may play some role in a student's decision to become a medical practitioner. It

suggests that the attitudes of prospective medical students are already preselected, which reflects on the type of students chosen for medicine. More research is needed to clarify this, particularly in terms of any light it may shed on admission policies.

The absence of change in attitudes on ethical issues in this study indicates the necessity of giving attention to the development of moral reasoning in the medical curriculum. Understanding the principles, rules and justifications of complex moral problems will facilitate clinical decision-making[25]. Teaching ethics should thus be done as part of clinical training and integrated in order to be inseparable from it.

In the light of a possible increase in fear of death and the need to relate meaningfully to dying patients, it is also vital that a course in death and dying be instituted for clinical students.

Acknowledgements

My thanks go to Dr SG Reinach of the MRC for help with statistical analysis; to Dr Beverley Chalmers for her assistance with the first part; and to Professor Jacques Kriel for his help with the second part. Above all, I acknowledge the debt I owe to my mother whose dying and death, though they delayed the completion of this study, were responsible for much of my insight into my own and others' attitudes towards death.

References

1. Wolf TM, BalsonPM, Fawcett JM, Randall HM. A retrospective study of attitude change during medical education. Med Educ 1989;23:29-3.
2. Linn BS, Moravec J, Zeppa R. The impact of clinical experience on attitudes of junior medical students about death and dying. J Med Educ 1982;57:684-91.
3. Caroline NL. Dying in academe. New Physician 1972 (Nov).
4. Kubler-Ross E, Wesler S, Avioli LV. On death and dying. (Therapeutics Grand Rounds 36) JAMA 1972;221(2):174-9.
5. Hromas R. Thanatology (Letter). J Med Educ 1981;56:931-2.
6. Longhurst MF. Dying and the family physician. Can Med Assoc J 1981;124:552-4.
7. Black D, Hardoff D, Neiki J. Educating medical students about death and dying. Arch Dis Child 1989;64:750-3.
8. Maheux B, Beland F. Changes in students' sociopolitical attitudes during medical school: Socialisation or maturation effect. Soc Sci Med 1987;24(7):619-24.
9. Kalish RA. Some variables in death attitudes. J Soc Psychol 1963;59:137-45.
10. Feifel H. The function of attitudes towards death. In: Death and Dying: Attitudes of patient and doctor (Group for the Advancement of Psychiatry: Symposium No.11) 1963;5:625-38.
11. Knight JA. Medical students. In: Callan JP (Ed). The Physician: A Professional under Stress. Norwalk, Connecticut: Appleton-Century-Crofts, 1983:29-45.
12. Kasper AM. The doctor and death. In: Feifel H. (Ed) The meaning of death, New York: McGraw Hill, 1959.
13. Howells K, Field D. Fear of death and dying among medical students. Soc Sci Med 1982;16:1421-24.
14. Thorson JA, Powell FC. Medical students' attitudes towards ageing and death: a cross-sectional study. Med Educ 1991;25:32-37.
15. Ewan CE. Attitudes to social issues in medicine: A comparison of first-year medical students with first-year students in non-medical faculties. Med Educ 1987;21:25-31.
16. Moora-Cavar EC. Induced abortion and contraception in sociological perspective. In: David, HP (Ed). Abortion research: International experience, Lexington, Mass: DC Health, 1974.
17. Hopping BL. Nursing students' attitudes towards death. Nurs Res 1977;26(6):443-7.
18. Firth-Cozens J, Field D. Fear of death and strategies for coping with patient death among medical trainees. Br J Med Psychol 1991;64:263-71.
19. Howells K, Gould M, Field D. Fear of death and dying among medical: Effects of clinical experience. Med Ed 1986;20:502-6.
20. Bleeker JAC, Pomerantz HB. The influence of a lecture course in loss and grief on medical students: an empirical study of attitude formation. Med Educ 1978;13:117-28.
21. Self DJ, Wolinsky FD, Baldwin DC (Jr). The effect of teaching medical ethics on medical students' moral reasoning. Acad Med 1989 (Dec):755-9.
22. Schwartz AH, Swartsburg M, Lieb J, Slaby AE. Medical school and the process of disillusionment. Med Educ 1978;12:182-5.
23. Baldwin DC (Jr), Daugherty SR, Self DJ. Changes in moral reasoning during medical school. Acad Med 1991;66(9)(Suppl):S1-S3.
24. Self DJ, Schrader DE, Baldwin DC, Wolinsky FD. A pilot study of the relationship of medical education and moral development. Acad Med 1991;66(10):629.
25. Loewy FH. Teaching medical ethics to medical students, J Med Educ 1986;61:661-5.