# Attitudes towards euthanasia among final-year Khartoum University medical students

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موقف طلاب السنة النهائية بكلية الطب بجامعة الخرطوم من قتل المرحمة عوض محمد أحمد، موسى محمد خير

الخلاصة: أجاب 141 طالباً على استبيان، مُغْفَل من الأسماء، لدراسة موقف الطلاب بالسنة النهائية بكلية الطب، جامعة الخرطوم، تجاه قتل المرحمة. وقد وُجد أن مفهوم قتل المرحمة معلوم لمعظم المشاركين في الاستبيان. واعترض عليه 108 من الطلاب (76.6٪) وهم يمَثِّلون غالبية المشاركين، وعَزَوْا ذلك إلى الحكم المشرعي، أو لخشية إساءة استخدامه، أو لاعتباره عمل غير أحلاقي. أما مؤيِّدو فكرة قتل المرحمة (23.4٪) فأشاروا إلى أن أسباب تأييدهم هي تجنُّب معاناة المرضى، واحترام استقلاليتهم وكرامتهم. وقد كان الطلاب الذين وصفوا أنفسهم بأنهم شديدو التديُّن أكثر معارضة لقتل المرحمة (88 طالباً من جملة 87، أي بنسبة 9.54٪) من الطلاب المعتدلي التديُّن (25 طالباً من جملة 54، أي بنسبة 40٪).

ABSTRACT To investigate the attitudes of final-year medical students at Khartoum University towards euthanasia an anonymous questionnaire was answered by 141 students. Most were familiar with the concept of euthanasia. The majority, 108 (76.6%) opposed euthanasia and their reasons included religious beliefs, belief that euthanasia was unethical and fear of misuse. The supporters of euthanasia (23.4%) stated reasons such as preventing the suffering of patients and respecting their autonomy and dignity. More students who described themselves as strongly religious were opponents of euthanasia (83/87, 95.4%) than those who were moderately religious (25/54, 46.3%).

# Attitudes à l'égard de l'euthanasie chez des étudiants en dernière année de médecine à l'Université de Khartoum

RÉSUMÉ Afin d'examiner les attitudes des étudiants en dernière année de médecine à l'Université de Khartoum à l'égard de l'euthanasie, un questionnaire anonyme a été soumis à 141 étudiants. La plupart étaient familiarisés avec le concept de l'euthanasie. La majorité d'entre eux, soit 108 étudiants (76,6 %), étaient opposés à l'euthanasie et les raisons mentionnées comprenaient les croyances religieuses, la conviction que l'euthanasie est contraire à l'éthique et la crainte d'abus. Les partisans de l'euthanasie (23,4 %) ont invoqué des raisons telles que la prévention des souffrances des patients et le respect de leur autonomie et de leur dignité. Les étudiants qui se décrivaient comme étant très religieux étaient plus nombreux à s'opposer à l'euthanasie (83/87, 95,4 %) que ceux qui étaient modérément religieux (25/54, 46,3 %).

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#### Introduction

Euthanasia is the deliberate ending of life of a patient suffering from an incurable and painful disease. Historically, scientific and legal debate about the ethics of euthanasia dates back to at least ancient Greece and Rome [1,2]. In 1870, Williams proposed that anaesthetics could be used to intentionally end the lives of patients with painful and incurable disease [2]. Williams' proposal initiated extensive debates about the ethics of euthanasia in America and Britain [2]. The debate about euthanasia continues, and in some areas in the world euthanasia is not a punishable act if performed according to the voluntary request of a suffering patient [3].

Although, worldwide, the popular media and medical literature have been actively debating the topic of euthanasia, this is not the case in Sudan. The only study on views about of euthanasia in Sudan was done by the authors among 248 doctors of different ages and specialties; 85% of respondents strongly opposed euthanasia, while the rest stated that euthanasia should be performed under strict safeguards [1]. Despite the increasing importance of ethical reasoning and decision-making in clinical practice [4-8], teaching about end-of-life decisions such as palliative care and euthanasia is almost absent in Sudanese medical schools. Therefore, a common reaction to an ethically controversial issue is to immediately label it as "unethical". Even internationally, teaching of ethics suffers some deficiencies. There is a focus on teaching bioethical theories and concepts rather than using this knowledge in case-based teaching and in reducing the uncertainties at the bedside [5,6]. Proper teaching of palliative care is received favourably by students and may positively influence the students' attitudes toward care of and communication skills with terminally ill patients [8].

It is important to know the views of medical students as these may affect their future behaviour towards patients and peers. The aim of this study was to investigate the attitudes of the final year medical students of a Sudanese university toward euthanasia, and to determine factors that influence these attitudes in order to initiate a regional and national debate on this highly controversial issue.

#### Methods

The study was done among the final-year students of the Faculty of Medicine, University of Khartoum, Khartoum, Sudan. The number of enrolled students was 270, of roughly equal sex distribution. Among 26 medical schools in Sudan, the Khartoum school is the largest and oldest (established in 1924) and has a standard 6-year curriculum. Situated in the northern part of Sudan, Khartoum is in an area where the religion of Islam plays a dominant role in people's life.

With the help of a research assistant, a questionnaire was distributed to all students available on a given day in January 2002. The questionnaire was based on one used by the authors in a study of Sudanese doctors [I], modified to be suitable for students. It was piloted on 30 students to ensure its validity.

The questionnaires were completed and returned in a sealed envelope into a box in a special office. The students completed them anonymously and were given assurances about confidentiality. The following data were collected: student characteristics (age, sex, religion); degree of religiosity (students graded themselves on adherence to Islamic fundamental teachings as either strong or moderate religiosity); number of terminally ill patients seen in the last 6 months; familiarity with the term and concept of euthana-

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sia; whether there was formal teaching on euthanasia in the university; whether they personally would perform euthanasia if it were legalized. The questionnaire asked the students whether they thought that euthanasia is ethically justified and should be legalized (agree/disagree) and they were asked to give the reason for their opinion.

We defined euthanasia as the deliberate administration of an overdose of a medication to a terminally ill patient with unbearable suffering at his/her request with a primary intention to end his/her life [1].

The data were analysed and presented as simple frequencies and percentages.

## Results

Of the 182 students, 152 returned questionnaires. They were aged between 23-27 years: 86 were males (58.6%) and 66 were females (43.5%). All the respondents were Muslim: 87 of them (57.2%) described themselves as strongly religious, and the rest (65, 42.8%) as moderately religious. Most students (131, 86.1%) were familiar with euthanasia as a term and concept, and reported that this was because they had read about it in professional journals or (non-Sudanese) magazines. All the students corrected reported that there was no formal teaching about euthanasia in their course. The question about experience of terminally ill patients revealed that 52 students (34.2%) had seen more than 3 cases in the last 6 months, while the rest had seen less than 3 cases.

Of the 152 respondents, only 141 answered the questions about their attitudes toward euthanasia. Of them, 108 (76.6%) were against euthanasia and believed that it should not be legalized. The reasons stated for this view included the student's religious background, belief that euthanasia was unethical, fear that euthanasia could be misused for incapable patients and fear of distorting future research away from better care of the dying.

On the other hand, 33 respondents (23.4%) supported the idea of euthanasia, stating that in certain situations it can be performed and it should be legalized. Their reasons stated for this position included the need to relieve patients' suffering, respect for the patients' wishes and autonomy and helping patients to die in dignity. The supporters of euthanasia suggested safeguards or restrictions that should be observed if euthanasia were legalized; for example that it should only be used in the presence of severe and unrelieved pain, after a psychiatric consultation, after the second opinion of an official committee of doctors and lawyers and after consent of the family, and that the decision should be based on the current situation and not the presumed future consequences. Of the supporters, only 18 (54.5%) would personally perform euthanasia if it were legalized.

Table 1 shows students' attitudes towards euthanasia in relation to sex, religiosity, familiarity with the concept of euthanasia and the number of terminally ill patients they had seen in the last 6 months. More students who rated themselves as strongly religious were against euthanasia (83/87, 95.4%) compared with students who were moderately religious (25/54, 46.3%).

More women (17/61, 27.9%) than men (16/80, 20.0%) supported euthanasia. Students who had seen more terminally ill patients in the last 6 months were more likely to support euthanasia (15/47, 31.9%) than those who had seen fewer (18/94, 19.1%) but the difference was not significant. All the students (33/33, 100%) who reported being unfamiliar with the concept of euthanasia were opponents, compared with 95/128 (74.2%) of those who were familiar with the concept.

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Variable	Total	Support euthanasia		Oppose euthanasia	
		No.	%	No.	%
Familiar with term and concept of euthanasia					
Yes	128	33	25.8	95	74.2
No	13	0	0.0	13	100.0
Sex					
Male	80	16	20.0	64	80.0
Female	61	17	27.9	44	72.1
Religiosity					
Strong	87	4	4.6	83	95.4
Moderate	54	29	53.7	25	46.3
No. of terminally ill patients in the last 6 months					
≥ 3	47	15	31.9	32	68.1
< 3	94	18	19.1	76	80.9
Totalª	141	33	23.4	108	76.6

Table 1 Characteristics of supporters and opponents of

<sup>a</sup>Of 152 respondents, 11 did not give their views about euthanasia.

Of the 11 (7.2%) students who did not answer the questions on attitudes toward euthanasia, 6 were males and 5 females, 3 (27.2%) were familiar with euthanasia, all of them (100%) were moderately religious and 5 of them (45.4%) saw more than 3 terminally ill patients in the last 6 months. The rest (6 students) saw less than 3 terminally ill patients in the same period.

The only previous study on euthanasia in Sudan investigated the attitudes of 382 doctors of variable ages and experiences toward euthanasia [1]. The response rate was 64.9% (248/382 doctors). Those who supported euthanasia were 38 doctors (15.3%), 21 men and 17 women. Euthanasia was opposed by 210 doctors (84.7%), 109 men and 101 women.

#### Discussion

The response rate in this study (141/182,77.5%) indicated the willingness of our students to participate and their interest in the international debate on euthanasia. The response rate is higher than that of the Sudanese doctors in a similar study by the authors [1] and is higher than other international studies, where is ranged from 34%-66% [9-11].

The overall opposition to euthanasia among medical students in our study (76.6%) is not unexpected. Radulovic and Mojsilovic found that 71% of law and 62% of psychology students supported euthanasia in contrast to 36% of medical students [12]. Other international studies among students

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showed rates of opposition to euthanasia ranging from 40%-72% [10,12]. This degree of opposition among medical students, however, is less than our study of Sudanese doctors (84.7%) [1]. This is consistent with other studies, which confirmed that doctors are more conservative than students in their views of euthanasia [6-15]. The studies also showed that the doctors place a higher value on disease-based information as a strong determinant of their decision on euthanasia while the students prefer quality of life [15]. But it is difficult to take this finding as an indicator of a possible positive change toward euthanasia among future professionals. Sudanese society in general is conservative and such changes may need several generations. Doctors may also change their views over their years of practice.

A distinction should be made between agreement to legalize, and willingness to personally carry out euthanasia. Our findings showed that only half of the students who supported euthanasia were personally prepared to perform euthanasia if it were legalized. This is consistent with studies indicating that the majority of proponents of euthanasia are unwilling to terminate the life of a patient by themselves [6].

Many factors might influence the attitudes of medical students toward euthanasia, including sex, religious and other personal beliefs and previous contact with terminally ill patients. In fact, religion was the most important factor in our students' attitudes towards euthanasia: more students who rated themselves as strongly religious were against euthanasia compared with students who were moderately religious. Muslims strictly believe that only God should terminate their lives and Islam even encourages believers to view pain and suffering as a potential blessing or even as a cancelling of sins. However, there have been Islamic opinions (fatwa) that grant patients with an unbearable terminal disease the right to refuse medical treatment [16]. The Roman Catholic and Lutheran churches also uphold the principle of "sanctity of life" and do not allow interventions to end the life of terminally ill patients [17]. A study of Christian students showed similar results to our Muslim students: 75% of students with a Christian belief opposed euthanasia compared with 40% of students without a definable faith [10].

The personal philosophy of students largely shapes their attitudes toward euthanasia. Some of the students expressing opposition to euthanasia expressed feelings of responsibility towards the terminally ill and mentioned their belief that that euthanasia legalization could be dangerous for vulnerable patients (e.g. the fragile elderly, the mentally retarded, children). Debates about euthanasia highlight fears of threatening the moral integrity of the medical professional, subverting the social role of a doctor as a healer and leading to interference of lawyers, judges and police in daily medical practice [18-20]. Also some of the opponents in our study mentioned that euthanasia can divert attention away from attempts to improve terminal care. On the other hand, the students who supported euthanasia argued that euthanasia respects patients' desires and hence their autonomy and that it relieves suffering. Supporters of euthanasia believe that the concept of autonomy can be extended to the timing and manner of death [21,22]. They argue that their aim is to avoid patient suffering [22–24]. In addition, they approximate euthanasia to withholding life-sustaining treatments, as the result in both conditions is the same: the patient's death [25].

Other factors thought to influence attitudes toward euthanasia are sex and clinical experience with terminally ill patients. The role of sex in determining the

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attitude toward euthanasia has attracted the attention of some researchers. Some studies indicated that the female sex is significantly associated with a positive attitude toward euthanasia [26]. Some studies indicate the reverse [27]. However, the majority of the studies indicated no significant gender difference [10,11].

The acceptance of euthanasia was found to be directly proportional to the clinical experience, especially with terminally ill patients [15]. Thus, medical students in Sudan are more willing than doctors to accept euthanasia [1]. In a study in Hungary, social science students with no professional experience with terminally ill patients, had a more permissive attitude towards euthanasia than medical students [27]. Oncologists in Mexico were also shown to be much less accepting of euthanasia than other specialties [28].

Our study is not without limitations. About one-third of the final year students in this unversity are allocated to clinical activities at different areas in the city so only two-thirds of students were available at the faculty campus on the day of the questionnaire. Although the response rate is comparable to similar studies, it could have been higher. Junior medical students were not included. We suggest that future studies in Sudan involve not only junior medical students but also students from relevant fields such as psychology, nursing and law.

### Conclusions

The students in this survey reported that they received no formal teaching about euthanasia. Profound changes are urgently needed in the curriculum of our medical schools to thoroughly cover the issues of end-of-life care. There is a need to establish teaching and training on medical ethics in Sudanese medical schools.

We also suggest that a survey of the attitudes of the general Sudanese population towards euthanasia would be useful to generate a debate on euthanasia among the medical and lay community.

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