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Attitudes on euthanasia and physician-assisted suicide among medical students in Athens

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Attitudes towards assisted death activities among medical students, the future health gatekeepers, are scarce and controversial. The aims of this study were to explore attitudes on euthanasia and physician-assisted suicide among final year medical students in Athens, to investigate potential differences in attitudes between male and female medical students and to review worldwide attitudes of medical students regarding assisted death activities. A 20-item questionnaire was used. The total number of participants was 251 (mean age 24.7 ± 1.8 years). 52.0% and 69.7% of the respondents were for the acceptance of euthanasia and physician-assisted suicide, respectively. Women's attitudes were more often influenced by religious convictions as well as by the fact that there is a risk that physician-assisted suicide might be misused with certain disadvantaged groups. On the other hand, men more often believed that a request for physician-assisted suicide from a terminally ill patient is prima-facie evidence of a mental disorder, usually depression. Concerning attitudes towards euthanasia among medical students in various countries there are contradictory results. In USA, the Netherlands, Hungary and Switzerland most of the students supported euthanasia and physician-assisted suicide. However, in many other countries such as Norway, Sweden, Yugoslavia, Italy, Germany, Sudan, Malaysia and Puerto Rico most students expressed negative positions regarding euthanasia and physician assisted suicide.

Key words: Euthanasia, physician-assisted suicide, attitudes, medical students.

Introduction

Euthanasia (EUT) and physician-assisted suicide (PAS), i.e. voluntary euthanasia, have received increased attention over the last decades.^{1–3} The term euthanasia originated from Ancient Greek philoso-

phers. Plato and Socrates argued that suicide and assisted suicide were acceptable if they meant a more peaceful and less painful death. Plato in his tract "The Republic" writes that a physician should not lay a finger on a terminally ill body, as this would result in a long and unhappy life for the ill person. However,

the Ancient Greek physicians were opposed to euthanasia. According to the "Hippocratic Oath" doctors should preserve the patients' life and not cause harm to them. "I will never give anyone, even if I was asked for, fatal poison..." wrote Hippocrates. The "Hippocratic Oath" is an important issue in contemporary medical debates.⁴

Nowadays there are many changes in the prevailing causes of death (e.g. traffic accidents, malignant tumours) as well as in medical technology prolonging the process of dying but, many times, without improving the patients' quality of life. Numerous surveys have explored attitudes toward EUT expressed by lay public, terminally ill patients or their relatives and medical professionals. However, the available data on this area among medical students, the future health gate-keepers, are contradictory although they will be concerned with terminally ill patients as well as with suicidal patients.

The aims of this study are: (a) to explore attitudes on EUT and PAS among final year medical students in Athens, (b) to investigate potential differences in attitudes between male and female medical students and (c) to review worldwide attitudes of medical students regarding assisted death activities.

Material and methods

To assess attitudes toward EUT and PAS the authors developed a questionnaire based on a review of international studies on the views of physicians and medical students regarding assisted death activities.^{1,2,5-8} The Greek version of the questionnaire consists of 20 items and requires about 10 minutes to complete. The answers on the questionnaire are assessed by fixed-response items with three response options. A copy of the questionnaire can be obtained from the first author (VPK). For a sample of Greek students (n=30) the questionnaire showed appropriate temporal stability (test-retest reliability, $k=0.91$).

A consecutive series of final year medical students in Athens University completed the questionnaire in the presence of members of the research team. Students were informed briefly about the aim of the study. The questionnaires were administered before starting lectures on various psychiatric topics not

related to EUT. The survey was anonymous and no identifying information was placed in the questionnaire. Because the terms "euthanasia" and "physician-assisted suicide" could be unclear, respondents were provided with definitions of the terms. Students were asked to give an opinion on whether EUT or PAS should be permitted as well as to determine the factors that could influence their view on EUT or PAS or would be important in deciding when PAS should be allowed. Questions about age, sex and religion of the respondents were also included.

Descriptive statistics were used to explore patients' demographic characteristics as well as their responses to the questionnaire's items. Frequencies of responses between men and women were compared with the chi-square test. The level of significance was set at 0.05.

Results

Out of a total of 266 students, 15 (5.6%) refused to participate in the study. 251 students completed the questionnaire. Their mean age was 24.7 (± 1.8) years. There were 139 (55.4%) men with a mean age of 24.19 (± 1.6) years and 112 (44.6%) women with a mean age of 24.50 (± 1.5) years. 79.6% of the students were informed about EUT and PAS. 130 respondents (52.0%) were for the acceptance of EUT under some circumstances (i.e. terminal illness). 175 respondents (69.7%) endorsed the view that PAS may be morally acceptable under some circumstances and that the decision should be up to the affected individual. 138 students (55.6%) endorsed the view that if they themselves had a terminal illness, there might be conditions (pain and physical discomfort) under which they would consider obtaining a physician's assistance to end their life. Only 36.8% of the respondents endorsed the view that if a family member or friend had a terminal illness there might be conditions under which they would consider obtaining a physicians' assistance to end his/her life. 199 students (79.2%) believed that withdrawing life-sustaining medical treatment in terminally ill patients to hasten death, if requested by the patient, should be always or under circumstances permitted. 134 respondents (53.3%) believed that prescribing drugs to relieve pain in doses that may hasten death, if requested by the

patient, should be always or under circumstances permitted. Only 86 students (35.0%) believed that a physician should be always or under circumstances permitted to hasten the death of a terminally ill patient if that is requested by his/her family members or friends.

The following factors would be very or moderately important in deciding when PAS should be allowed: the expected quality of life of the affected patient (82.2%); the length of time the patient could be expected to live (52.9%); and the financial burden of the patient or the patient's family (27.5%).

The following factors influenced a great deal or moderately the respondents' view on the issue of EUT or PAS: the consistency with the physician's role in preserving or protecting life according to the Hippocratic Oath (96.0%); the risk that PAS might be misused with certain disadvantaged groups (94.0%); personal moral convictions (92.8%); personal experience with terminally ill patients (i.e. family members, friends or important others) (85.6%); personal religious convictions (66.9%).

140 students (55.7%) believed that there should be sufficient legal safeguards regarding the possible legislation of PAS and EUT. 135 (53.7%) agreed that the legalisation of PAS or EUT may be a risk for the legitimate everyday medical practice.

Only 10 respondents (3.9%) believed that psychiatric evaluation of the patient is required in the case of PAS. Yet, 21.7% agreed that a request for PAS from a terminally ill patient is prima-facie evidence of a mental disorder, usually depression.

The comparison between male and female medical students' attitudes revealed statistically significant differences in only three questions (table 1). Religious convictions as well as the risk that PAS might be misused with certain disadvantaged groups influenced women's attitudes more often. On the other hand, men more often believed that a request for PAS from a terminally ill patient is prima-facie evidence of a mental disorder, usually depression.

Discussion

Concerning the dilemma for or against EUT and PAS there are contradictory data among medical students. In many countries such as the USA, the Netherlands, Hungary and Switzerland most of the students supported EUT and PAS. Two studies among medical students on attitudes towards EUT and PAS were carried out in the USA. In the Oregon study⁵ 65% of the respondents expressed support to PAS and in the Miami study⁶ EUT was acceptable by 75% of the respondents. In the Netherlands, Muller et al⁷ found that 80% of medical students were in favour of EUT and 50% of them endorsed the view that le-

Table 1. Statistically significant differences between male and female medical students' attitudes on euthanasia and physician-assisted suicide.

Question	Answers	Women N (%)	Men N (%)	Stat. Sign
13. To what degree influence your view on the issue of physician-assisted suicide or euthanasia your religious convictions?	AGD	48 (42.9)	45 (32.4)	$\chi^2 = 11.45$ $p < 0.001^*$
	M	40 (35.7)	35 (25.2)	
	NA	24 (21.4)	59 (42.4)	
16. To what degree influence your view on the issue of physician-assisted suicide or euthanasia the risk that it might be misused with certain disadvantaged groups?	AGD	104 (92.9)	109 (78.4)	$\chi^2 = 4.30$ $p < 0.05^*$
	M	6 (5.3)	18 (12.9)	
	NA	2 (1.8)	12 (8.7)	
20. Do you believe that a request for physician-assisted suicide from a terminally ill patient is prima-facie evidence of a mental disorder, usually depression?	Yes	15 (13.4)	37 (26.6)	$p < 0.05^{**}$
	No	82 (73.2)	92 (66.2)	
	IDN	15 (13.4)	10 (7.2)	

AGD=a great deal; M= moderately; NA=not at all, IDN=I do not know/I do not answer

* AGD and M answers vs. NA answers

** Yes vs No and IDN answers

gal punishment of EUT and PAS should be abolished. In Hungary, 78% of medical students supported a person having a right to die, but 44% of them had doubts about the legalization of PAS and EUT.⁸ In Switzerland most medical students supported PAS (77%) and direct active euthanasia (70%).⁹

However, in many other countries, students expressed negative positions regarding the EUT and PAS. In Norway, 36% of the respondents supported EUT in cases of terminal disease, while the legalization of EUT was favoured by 23% of them.¹⁰ In Sweden, 34% of the respondents expressed a positive opinion regarding legalization of EUT, 52% had a negative opinion and the rest were undetermined.¹¹ In Yugoslavia, 35% of students were for the acceptance of EUT and 23% believed that EUT should be legalized.¹² In Italy, only 28% of the students were in favour of EUT and PAS.¹³ In Germany, 89% of fifth-year medical students believed that PAS was illegal and only a third of the students viewed PAS as ethically acceptable in certain situations.¹⁴ In a recent study at two German universities (U1 Bohn, U2 Düsseldorf), with and without palliative medicine education respectively, only 22.4% of final year medical students at U1 and 35.7% at U2 favoured a legalisation of active EUT.¹⁵ In Sudan, the majority (76%) of final year medical students opposed euthanasia and their reasons included religious beliefs, ethical convictions and fear of misuse.¹⁶ In Malaysia, only 32% of students favoured the legalization of EUT, 71% of them were against the idea of active euthanasia but 52% of the respondents were for the withdrawal of active therapy in a patient suffering from a painful terminal disease.¹⁷ In Puerto Rico, 40% of medical students expressed support for EUT and 50% of students were not opposed to PAS, if legalized.¹⁸ In a more recent study from Puerto Rico, 28% of medical students supported EUT and only 13% of them would engage in PAS.¹⁹

About half of medical students in our study favoured EUT and a greater proportion of them (70%) believed that PAS may be acceptable under circumstances. In this study, the variables that influenced the students' attitudes towards EUT and PAS were: moral, religious and professional ethical restrictions (Hippocratic Oath), personal experiences with terminally ill patients and the risk that PAS might be mis-

used with certain disadvantaged groups. Only 4% of the respondents believed that psychiatric evaluation is indispensable in patients requesting PAS. Yet, 22% agreed that a request for PAS from a terminally ill patient is *prima-facie* evidence of a mental disorder, usually depression.

The issue of whether psychiatric consultation should be optional or mandatory for requests for PAS from patients with a physical disease remains controversial. In favour of mandatory psychiatric evaluation is the risk of the physician misjudging the patient's competence and the high prevalence of mental disorders, especially depression, among terminally ill patients asking for PAS. On the other hand, in favour of optional psychiatric evaluation is mainly the risk of "psychiatrization" and "stigmatization".²⁰⁻²⁵ Nevertheless, given the state-dependent nature of mental illness the important role of psychiatrists to detect and treat psychiatric illnesses, mainly depression, in these patients, as well as to provide an assessment of the patients' decision-making ability is well documented.^{21,22,26}

Gender differences in attitudes towards EUT and PAS among medical students have scarcely been explored in published literature to date. Reported results are contradictory and do not allow definite conclusions to be drawn. A study in Dutch medical students found that males were more opposed to EUT and PAS than females⁷; another two studies, in Puerto Rico¹⁹ and in the USA,²⁸ found that women were generally more neutral or uncertain regarding assisted death practices than men; finally, a Norwegian study recorded no significant gender differences.¹⁰ In our study, no significant differences in the acceptance of EUT and PAS between males and females were recorded either; however, women's attitudes were more often influenced by religious convictions as well as the risk that PAS might be misused with certain disadvantaged groups than men while the latter more often believed that a request for PAS from a terminally ill patient is *prima-facie* evidence of a mental disorder, usually depression.

When looking for explanations for differences in attitudes on EUT and PAS between countries or between time periods, the role of cultural influences (such as religious beliefs, family ties, etc.) and their changes diachronically should be considered.²⁸⁻³¹

In Greece, where EUT and PAS are banned by the law, the code of medical practice and the Christian orthodox religion, there are few data exploring general population or health professionals' attitudes on this subject. Few years ago, Papapetropoulos et al (32) explored the attitudes towards PAS among sixth-year medical students in Patras, the third largest city in Greece, and found that less than 10% of the respondents agreed with PAS. In a Greek public opinion survey regarding EUT, about 45% of the respondents were opposed to life-sustaining medical treatment. The most important reasons behind a request for PAS were pain, despair and depression.³³

There are limitations in all studies dealing with subjects' attitudes. The first limitation concerns the potential effect of the tendency of some respondents to respond in a socially desirable fashion. Another limitation concerns the interpretation

of data. Attitudes do not necessarily relate to actual behaviour and there is no simple causal relationship between cultural and personal attitudes and the respective behaviour.

In conclusion, the results of our study could be of interest regarding the progress of legalisation of EUT and PAS in many countries and the need for procedural safeguards. Nowadays, students in medical schools are trained to investigate, diagnose, treat aggressively, prolong life and cure. Yet, both physicians and students feel uncomfortable with death and dying patients.³⁴⁻³⁷ Therefore, there is a need for special education of medical students, the future health gate-keepers, on end-of-life decisions and the possible relationship between the request for PAS and the existence of a treatable mental disorder, usually depression, motivating patients' interest in PAS.

Στάσεις των φοιτητών της Ιατρικής Σχολής Αθηνών σχετικά με την ευθανασία και την υποβοηθούμενη αυτοκτονία

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Η ευθανασία (ΕΥ) και η υποβοηθούμενη αυτοκτονία (ΥΑ), δηλαδή η εθελοντική ευθανασία, αποτελούν αντικείμενο εκτεταμένων συζητήσεων μεταξύ επιστημόνων διαφορετικών κατευθύνσεων (ιατροί, νομικοί, κληρικοί κ.ά.) τα τελευταία χρόνια. Στις μέρες μας καταγράφεται σημαντική αύξηση των νεοπλασματικών και άλλων χρόνιων-τερματικών παθήσεων και των τροχαίων ατυχημάτων. Το γεγονός αυτό σε συνδυασμό με την μεγάλη πρόοδο της τεχνολογίας οδήγησε σε αύξηση του προσδόκιμου χρόνου επιβίωσης των ασθενών αυτών χωρίς όμως –συντά– την ανάλογη βελτίωση της ποιότητας της ζωής τους. Μεγάλος αριθμός ερευνών, σε παγκόσμιο επίπεδο, πραγματοποιείται προκειμένου να καταγραφούν οι απόψεις-τάσεις του γενικού πληθυσμού, των ασθενών με ανίατες ασθένειες και των συγγενών τους όπως επίσης και των επαγγελματιών ψυχικής υγείας σε θέματα

ΕΥ και ΥΑ. Οι πληροφορίες σε σχέση με τα παραπάνω θέματα, όσον αφορά στους φοιτητές ιατρικής –μελλοντικούς υπερασπιστές της δημόσιας υγείας– είναι σχετικά ανεπαρκείς και αντιφατικές. Η μελέτη αυτή στοχεύει (α) να διερευνήσει τις στάσεις σε θέματα ευθανασίας και υποβοηθούμενης αυτοκτονίας μεταξύ τελειόφοιτων σπουδαστών της Ιατρικής Σχολής του Πανεπιστημίου Αθηνών, (β) να εντοπίσει πιθανές διαφορές στις στάσεις ανδρών και γυναικών φοιτητών, και (γ) να παρουσιάσει και να σχολιάσει τις στάσεις φοιτητών ιατρικής σε διάφορες χώρες του κόσμου. Για τη μελέτη αυτή αναπτύχθηκε και χρησιμοποιήθηκε ένα ερωτηματολόγιο 20 ερωτήσεων που βασίστηκε σε ανάλογα ερωτηματολόγια που χρησιμοποιήθηκαν σε διάφορες άλλες χώρες. 251 τελειόφοιτοι ιατρικής (55% άνδρες και 44% γυναίκες), με μέση ηλικία 24,7 ($\pm 1,8$) χρόνια, συμπλήρωσαν το ερωτηματολόγιο. Όλοι οι φοιτητές της μελέτης ήταν Χριστιανοί Ορθόδοξοι ως προς το θρήσκευμα. 79,6% των φοιτητών ήταν ενημερωμένοι σχετικά με τα θέματα της ΕΥ και της ΥΑ. 52% και 69,7% των ερωτηθέντων ήταν υπέρ της ΕΥ και της ΥΑ, αντίστοιχα, κάτω από ορισμένες προϋποθέσεις. 55,6% των ερωτηθέντων απάντησαν ότι εάν οι ίδιοι υπέφεραν από επώδυνη-ανίατη-καταληκτική ασθένεια θα ζητούσαν τη βοήθεια ιατρού για να τερματίσουν τη ζωή τους (υποβοηθούμενη αυτοκτονία). 79,2% των ερωτηθέντων υποστήριξαν ότι θα έπρεπε ένα γιατρός υπό προϋποθέσεις ή και ανεξάρτητα προϋποθέσεων να εκτελέσει την επιθυμία ενός ασθενούς που πάσχει από ανίατη-επώδυνη -καταληκτική ασθένεια και να προχωρήσει σε διακοπή της μηχανικής υποστήριξης των ζωτικών του λειτουργιών. Οι παρακάτω παράγοντες επηρέαζαν θετικά τη στάση των ερωτηθέντων απέναντι στη ΕΥ και την ΥΑ: η χαμηλή ποιότητα ζωής του ασθενούς και οι έντονοι πόνοι (82,2%), η μικρή διάρκεια προσδόκιμης επιβίωσης (52,9%), η σοβαρή οικονομική επιβάρυνση του ασθενούς και της οικογένειάς του (27,5%). Εξάλλου, οι παρακάτω παράγοντες επηρέαζαν αρνητικά τη στάση των ερωτηθέντων απέναντι στην ΕΥ και την ΥΑ: οι Ιπποκρατικές αρχές που οριοθετούν το ρόλο του γιατρού στο «να προστατεύει και να διατηρεί» την ανθρώπινη ζωή (96,0%), ο κίνδυνος κατάχρησης σε άτομα με σωματικές και ψυχικές μειονεξίες (94,0%), οι προσωπικές ηθικές αρχές (92,8%), η προσωπική-οικογενειακή εμπειρία γύρω από ανίατες ασθένειες (85,6%), οι προσωπικές θρησκευτικές πεποιθήσεις (66,9%). 55,7% των ερωτηθέντων απάντησαν ότι πρέπει να υπάρξουν ικανοποιητικές δικλίδες ασφαλείας στην περίπτωση νομικής κατοχύρωσης της ΕΥ και της ΥΑ. Μόνο 3,9% των φοιτητών απάντησαν ότι θεωρείται απαραίτητη η ψυχιατρική εκτίμηση του ασθενούς που επιθυμεί να τερματίσει τη ζωή του ενώ 21,7% απάντησαν ότι η επιθυμία του ασθενούς για ΥΑ είναι πιθανή ένδειξη ψυχικής διαταραχής (συνήθως κατάθλιψης). Η σύγκριση γυναικών και ανδρών φοιτητών έδειξε ότι οι γυναίκες συχνότερα επηρεάζονται στις στάσεις τους από τις θρησκευτικές τους πεποιθήσεις και τον κίνδυνο κατάχρησης σε άτομα με σωματικές και ψυχικές μειονεξίες. Αντίθετα, οι άνδρες συχνότερα πιστεύουν ότι η επιθυμία ασθενούς για ΥΑ είναι πιθανή ένδειξη ψυχικής διαταραχής. Υπέρ της ΕΥ και της ΥΑ έχει ταχθεί η πλειονότητα των φοιτητών στις ΗΠΑ, Ολλανδία, Ουγγαρία, Ελβετία. Αντίθετα, σε άλλες χώρες όπως Νορβηγία, Σουηδία, Γιουγκοσλαβία, Ιταλία, Γερμανία, Σουδάν, Μαλαισία, Πουέρτο Ρίκο μεγάλο μέρος των φοιτητών είναι κατά της ΕΥ και της ΥΑ.

Λέξεις ευρητηρίου: Ευθανασία, υποβοηθούμενη αυτοκτονία, στάσεις, φοιτητές ιατρικής.

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