

Assessment of awareness and attitude of medical students about physicians' participation in capital punishments in India — a cross-sectional study

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ABSTRACT

Introduction: In the context of capital punishment in India, the involvement of physicians raises ethical concerns, given the fundamental principle of 'do no harm.' This study aims to evaluate the awareness and attitudes of undergraduate medical students in a Chennai-based medical college regarding physicians' participation in capital punishment.

Methods: A survey employing Google Forms was conducted among 154 randomly selected medical students. The questionnaire, validated for content, comprised 13 statements assessing awareness and attitudes toward physicians' involvement in capital punishment. Descriptive analysis was applied to interpret the collected data.

Results: The study revealed a notable lack of awareness among medical students concerning physicians' roles in capital punishment in India. Merely 19.3% of participants were knowledgeable about the various responsibilities physicians undertake in judicial hanging, including certifying the prisoner's fitness for hanging, confirming the prisoner's death post-hanging, and ensuring humane conditions for the execution. Despite limited awareness, the predominant attitude among participants was one of disapproval towards physicians' participation in capital punishment.

Conclusion: This study underscores the inadequate awareness among medical students regarding physicians' involvement in capital punishment. Despite this limited awareness, the prevailing attitude among participants leans towards the disapproval of physicians participating in such practices.

KEYWORDS: KAP Survey, Capital Punishment, India, Perception, Physician Awareness

INTRODUCTION

Capital punishment is a highly controversial area of debate. While on one hand there is contentious disagreement on whether capital punishment itself is necessary, there is a lot of debate also on the ethics of medicalization and physician's involvement in capital punishments. In India, capital punishment is currently carried out by judicial hanging. A pivotal Supreme Court ruling in 1995, prompted by a petition challenging the practice of allowing the body to hang for 30 minutes post-execution, mandated that the convict should remain hanging until declared dead by a medical officer. This ruling paved the way for the medicalization of judicial hanging. A physician must be present during the hanging and must periodically examine the convict and instruct the hangman to continue hanging till all signs of life stop.^[1,2] The Law Commission of India, in its 187th report in 2003, recommended a transition from judicial hanging to lethal injections.^[3] This will further medicalize capital punishment as the process of lethal injections will involve calculating the dose of the lethal drug, administration of the drug to the convict, and monitoring the convict till there are no signs of life.

The physicians perform multiple functions in the preparation and conduct of the execution of convicts. They care for the convict while the convict awaits execution. The physician treats any medical conditions in the convict and certifies them as fit for execution. Further, in the case of lethal injection, they also calculate the dose and prepare the medicines. They may also be required to directly supervise the injection of the lethal drug. They examine the convict and pronounce their death. They may also be required to participate in conducting an autopsy as well as harvesting organs for donation. While some of these functions are ethical, many of them are unethical because they go against the dictum of 'first do no harm'.^[1]

Treating the convict while awaiting capital punishment, testifying in the court on medical issues related to the crime committed by the convict and convict's mental state, certifying the death of the convict after the capital punishment is carried out by someone else, are all considered to be ethical. On the other hand, preparing the lethal dose of drug, advising on the modalities of hanging, checking vitals while carrying out the capital punishment, supervising or giving the lethal injection, and confirming the death of the convict are all acts which are considered unethical. [4]

The World Medical Association in its 210th Council Session in October 2018, said that a physician using their specific knowledge of human health and life for any activity other than welfare of human beings is unethical. Therefore it forbade physicians' participation in capital punishment calling it an unethical act. [5] The Indian Medical Association also requested the Medical Council of India to introduce a clause that physicians' participation in capital punishment is unethical. [6, 7] However, in India physicians continue to participate in capital punishment as there has been no legal progress in this issue.

Given that physicians in India still participate in capital punishment there is a need to assess the awareness of undergraduate medical students about this fact and their attitudes towards it. The undergraduate curriculum has recently undergone a major overhaul with a competency based medical education model. This new curriculum has a major component of Attitudes Ethics and Communication (AETCOM). [8-10] Physicians' participation in capital punishment is a very important area of ethical discussion. The perspectives on either side of the debate on whether physicians should participate in capital punishment or not, will help shape the ethical attitudes of budding young doctors. This study was designed as a cross-sectional assessment of undergraduate medical students' awareness and attitudes about physicians' participation in capital punishment.

METHODS

The study utilized a cross-sectional design and targeted undergraduate medical students in a Chennai-based medical college, encompassing first to final-year students and compulsory rotatory resident interns. The research was conducted in April and May 2020. With an assumed prevalence (p) of 40% for good awareness about physicians' involvement in capital punishment, a sample size of 150 was calculated for a 95% confidence level and 20% relative precision, following the formula $n = 4pq/d^2$. A random sample of 40 students from each of the 5 batches was selected using Microsoft Excel-generated random numbers. The first year MBBS students, unable to be approached, had their 40 samples distributed among the remaining 5 batches. No exclusion criteria were applied.

A questionnaire was developed after a literature review and discussions with ethics experts. Comprising three parts, the questionnaire covered socio-demographic details, basic

questions about capital punishment in India to assess awareness, and 13 Likert scale-based statements reflecting students' attitudes towards physicians' participation in capital punishment. Ethics experts validated the questions, leading to modifications. The questionnaire was administered through Google Forms via email or social media platforms, allowing a week for responses. Data collected were extracted into Microsoft Excel and analysed using SPSS version 21.

Characteristics of participants were presented as mean and standard deviation for continuous variables and frequencies/percentages for categorical variables. Knowledge question responses were described in terms of frequencies and percentages. The study's ethical approval was obtained from the Institutional Ethics Committee (IEC/2020/1/11), and informed consent was secured through Google Forms, ensuring confidentiality of responses. Only researchers had access to the data.

RESULTS:

Emails and social media messages were sent to a total of 200 students from the five batches enrolled in the medical college at the time of the study. Out of them 154 responded within 2 reminders. All these 154 responses were complete and were included in the analysis. The basic socio-demographic characteristics of the study sample is shown in Table 1

Of the 154 respondents 71% knew that physicians are expected to participate in capital punishment in India. A vast majority of 95% knew that hanging is the method of judicial execution practiced in India. The question on why the American Medical Association considers physicians' participation in death penalty unethical elicited mixed responses with 72% responding correctly that it goes against the dictum of 'first do no harm' Figure 1. The others gave responses which indicated that capital punishment is unethical. For the question on awareness about which aspect of physicians' participation in death penalty is considered unethical, the participants did not have a clear idea. Only 32% knew correctly that calculating the length of the rope and height of hanging is considered an unethical act as it directly uses medical knowledge for taking a life. All other responses such as testifying in court, certifying the death of the convict, and certifying fitness to stand trial in a court are all ethical acts, but some participants even mentioned these to be unethical Figure 2.

Table 2 illustrates the medical students' general attitudes regarding a doctor's primary duty and adherence to the law. A majority (61.3%) strongly agree that a doctor's primary duty is to save lives, while 48% agree that physicians must always abide by the law.

In Table 3, Examining the anonymity of physicians in capital punishment, only 2% strongly agree that participating doctors should be kept anonymous. However, a significant

Demographic Characteristic	Categories	Number
Age (in years)	17 – 19	38 (25.3%)
	20 – 22	89 (59.3%)
	≥ 23	23 (15.4%)
Sex	Male	64 (42.7%)
	Female	86 (57.3%)
Year of Study	First	35 (23.3%)
	Second	34 (22.7%)
	Third	31 (20.7%)
	Final	28 (18.7%)
	Interns	22 (14.7%)

Table 1: Demographic Characteristics of the study sample

General Attitude Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Attitude
The primary duty of a doctor is to save lives and not to take it.	92 (61.3)	49 (32.7)	8 (5.3)	-	1 (0.7)	Against
A physician must always abide by the law	41 (27.3)	72 (48)	26 (17.3)	10 (6.7)	1 (0.7)	Favors
No human being (not even a doctor) has the right to take a life.	42 (28)	59 (39.3)	30 (20)	17 (11.3)	2 (1.3)	Against

Table 2: General Attitude of study participants towards physician's role

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Attitude
The physicians participating in capital punishment should be kept anonymous	3 (2)	6 (4)	21 (14)	59 (39.3)	61 (40.7)	Against
If a physician participates in capital punishment his/her license must be canceled.	6 (4)	2 (1.3)	30 (20)	71 (47.3)	41 (27.3)	Favors
A physician participating in capital punishment is seen as a representative of society rather than as a doctor treating the same society.	11 (7.3)	63 (42)	52 (34.7)	20 (13.3)	4 (2.7)	Favors

Table 3: Capital Punishment and physician's identity

portion (47.3%) favors the cancellation of a physician’s license if they participate in capital punishment.

Table 4 elaborates into medical students’ concerns about the personal and professional impact of participating in capital punishment. A majority (51.3%) believes that participating in capital punishment negatively affects the personal life of the physician.

Table 5 highlights the moral and philosophical views. 35.3% of respondents agree that taking a life is against the law of nature. Additionally, 42% feel that participating in capital punishment goes against the norm of “First, do no harm.”

Table 6 explores medical students’ perspectives on responsibility and alternatives in capital punishment. A notable 44.7% believe that if physicians do not take responsibility, someone else must, while 26% are equivocal on the idea that sometimes doctors must actively take lives.

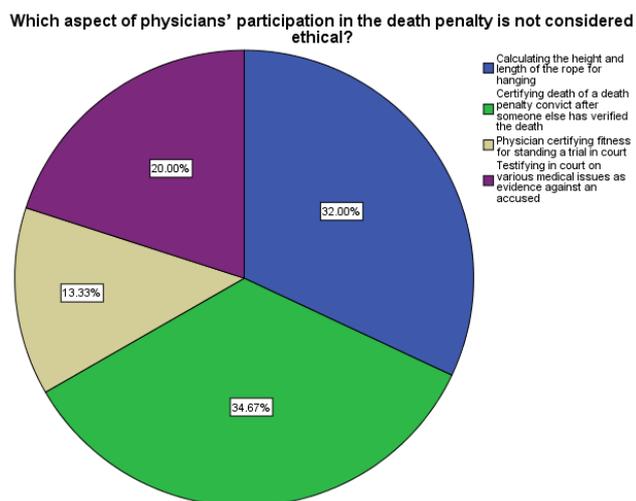


Figure 1: Aspect of physicians’ participation in the death penalty considered to be Unethical

DISCUSSION

This study to the best knowledge of the authors, is the first study to explore the attitudes of medical students towards physicians’ participation in capital punishment. The study found that the awareness of the medical students was poor with respect to the ethics of physicians’ participation in capital punishment. However, the responses to the attitude scale indicated a predominant attitude against physicians’ participation.

While there is an ongoing debate on whether physicians must participate in capital punishment and whether capital punishment should be medicalized, it is not clear whether the physicians and people in the medical field favour this or are against it. It is intuitive to believe that physicians would be against participation in capital punishment as it

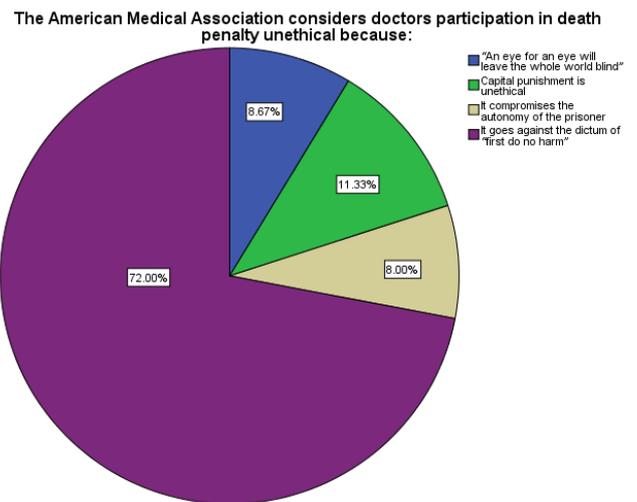


Figure 2: The American Medical Association consideration of doctors’ participation in death penalty to be unethical

goes against the fundamental principle of ‘do no harm’, the findings from previous surveys among physicians does not indicate such a sentiment. A survey of 482 physicians in the United States revealed that 80% indicated that they would engage in at least one of the unethical acts in physicians’ participation in capital punishment and 34% mentioned that they would participate in all the unethical acts. While 43% said they would inject the lethal drug, 74% agreed that they would determine that death had occurred. This study also found that those who favoured the death penalty tend to agree to engage in the various unethical activities involved in capital punishment.^[11] In another study from United States, 41% of the respondents indicated that they would engage in at least one of the unethical activities involved in capital punishment. This study also revealed that physicians perceived their participation in capital punishment as a duty to the society.^[12] However, Sawicki KS and Alper T suggests that healthcare professionals’ involvement in lethal injections is context-dependent, urging a nuanced, case-by-case evaluation of the ethical considerations surrounding such participation and the physicians in the execution process could help ensure that the process is carried out in a humane manner.^[13, 14] Yet, both in the USA and India, the government and Supreme Court maintain that medical professionals are legally obligated to oversee executions. Refusal is considered a neglect of the duties owed by medical professionals to the state as citizens.^[15, 16]

While many studies were carried out among practicing physicians, the present study explores the attitudes among medical students. One of the reasons for some of the equivocal responses and responses favouring participation in capital punishment could be the fear of law. The statement number 5 in table 2, “a physician must always abide by the law” has a response pattern which favours participation in capital punishment. The students here face the conflict between having to adhere to law, versus being ethical and ‘do no harm’.

Ethical Concerns Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Attitude
Participating in capital punishment affects the personal life of the physician	27 (18)	77 (51.3)	34 (22.7)	12 (8)	-	Against
There is a conflict of interest if physicians who treat prisoners for their illness are also asked to participate in their capital punishment.	30 (20)	77 (51.3)	26 (17.3)	16 (10.7)	1 (0.7)	Against

Table 4: Ethical Concerns and Professional Impact.

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Attitude
Taking a life is against the law of nature.	29 (19.3)	53 (35.3)	46 (30.7)	19 (12.7)	3 (2)	Against
Participating in capital punishment goes against the norm of "First, do no harm"	29 (19.3)	63 (42)	44 (29.3)	12 (8)	2 (1.3)	Against
No human being (not even a doctor) has the right to take a life.	42 (28)	59 (39.3)	30 (20)	17 (11.3)	2 (1.3)	Against

Table 5: Moral and Philosophical Perspectives

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Attitude
If physicians do not take responsibility for capital punishment, someone else has to.	15 (10)	67 (44.7)	43 (28.7)	21 (14)	4 (2.7)	Favors
Sometimes doctors must actively take lives.	7 (4.7)	39 (26)	38 (25.3)	41 (27.3)	25 (16.7)	Equivocal

Table 6: Responsibilities and Alternatives

For the statement, "A physician participating in capital punishment is seen as a representative of the society rather than as a doctor treating the same society" has a response pattern which favours participation in capital punishment. This is probably because the students are conflicted here between their societal role and their role as physicians to 'do no harm'. Similarly statement number 12, in table 2, "If physicians do not take responsibility to conduct capital punishment then someone else has to" also has a response pattern which indicates the same conflict between their societal role and their role as physicians.

Despite a low level of awareness about the situation of physicians' role in capital punishment in India, this study shows that the students have a predominant attitude against physicians' participation. The findings of this study indicate that medical students must be made aware of

the ethical debates surrounding physicians' participation in capital punishment. The AETCOM module that is currently incorporated into the medical curriculum can include a debate on this topic.^[8-10] It would throw open important discussions on duties of physicians, doing no harm, intersection between medical ethics and the law, and would help students reflect on the ethical aspects of these issues. These discussions must also focus on how the medical student should carefully reflect on their role as physicians in always doing no harm, as it conflicts with their role as part of the society which imposes capital punishment and their role as law-abiding citizens.

There are several limitations in this study. All participants belonged to the same college, which can restrict the generalizability of the findings. Studies spanning more colleges must be undertaken to explore this construct

further. The attitude scale that was used was developed for the purpose of this study and was not thoroughly validated using psychometric methods. Therefore, no psychometric measurement techniques could be applied. The scale must be validated rigorously before it can be used as a measure of attitude towards the ethics of physicians' participation in capital punishment. The relative precision used for calculating the sample size was quite broad, thus limiting the precision of the estimate of knowledge as well as attitudes. Smaller relative precision could have increased the sample size and given more precise estimates.

More exploration of the awareness and attitudes of medical students regarding physicians' participation in capital punishment must be conducted in future studies involving multiple centres, with larger sample size and with a more rigorously validated instrument.

CONCLUSION:

Medical students who participated in the study had very low awareness about the status of physicians' participation in capital punishment in India. Despite this low awareness, they had a predominant attitude against the participation.

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REFERENCES

1. Groner JI. The hippocratic paradox: A surgeon's journey to death row and back. *Journal of Trauma and Acute Care Surgery*. 2018;85(4):679–683.
2. Jesani A. Medicalisation of 'legal' killing: doctors' participation in the death penalty. *Indian J Med Ethics*. 2004;1:104–5.
3. Law Commission of India. 187th Report on mode of execution of death sentence and incidental matters; 2003. Available from: <https://cdnbbsr.s3waas.gov.in/s3ca0daec69b5adc880fb464895726dbdf/uploads/2022/08/2022081073.pdf>.
4. Waisel D. Physician participation in capital punishment. *In Mayo Clinic Proceedings*. 2007;82(9):1073–1080.
5. Association WM. WMA Resolution to Reaffirm the WMA's Prohibition of Physician Participation in Capital Punishment. Reykjavik; 2018.
6. Gadde P, Akkaloori A. The revised Declaration of Geneva, 2017, and India's contradictory legal provisions. *Indian J Med Ethics*. 2018;
7. Vora P. Indian Medical Association asks that doctors be excused from participating in execution of convicts; 2017. Available from: <https://scroll.in/pulse/855310/indian-medical-association-asks-that-doctors-be-excused-from-participating-in-execution-of-convicts#>.
8. Lal S, Sehgal P. Integration of Attitude, Ethics, and Communication Competencies into Competency-based UG Curriculum. *Indian J Community Med*. 2022;47(1):4–7.
9. Prabhu G. The disappearing act: Humanities in the medical curriculum in India. *Indian J Med Ethics*. 2019;4(3):194–197.
10. Module 4.8: Dealing with death. In: *Attitude, Ethics and Communication (AETCOM) Competencies for the Indian Medical Graduate*. New Delhi: Medical Council of India; 2018. p. 70–72. Available from: https://www.mciindia.org/CMS/wp-content/uploads/2020/01/AETCOM_book.pdf.
11. Sawicki KS. Health-Care Professionals and Lethal Injection: An Ethical Inquiry. *J Med Philos*;47(1):18–31.
12. Alper T. The Truth about Physician Participation in Lethal Injection Executions. *C L Rev*. 2009;88:11–11.
13. Farber NJ, Aboff BM, Weiner J, Davis EB, Boyer EG, Ubel PA. Physicians' willingness to participate in the process of lethal injection for capital punishment. *Annals of Internal Medicine*. 2001;135(10):884–892.
14. Wirt DP, Bailey WC, Bowers WJ, Farber NJ, Davis EB, Weiner J. Physicians' attitudes about involvement in lethal injection for capital punishment [4] (multiple letters). *Arch Intern Med*. 2001;161(10):1353–1357.
15. Konecny B. A Lack of Transparency: The Restoring Proper Justice Act as a New Mourning Veil of Execution Procedures. *N C Cent Univ Sci Intellect Property Law Rev*. 2016;9(1).
16. American Psychological Association. The Death Penalty in the United States; 2001. Available from: <https://www.apa.org/about/policy/death-penalty>.

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