Section: Community Medicine

Original Research Article

EVALUATION OF THE ATTITUDE REGARDING PATIENTS' DEATH AMONG MEDICAL INTERNS IN A TERTIARY CARE HOSPITAL IN SOUTH INDIA

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ABSTRACT

Background: Attitude towards death is one of the most important factors that can influence the behavior related to the health profession. The aim is to evaluate the attitudes regarding patients' death among medical interns in a tertiary care hospital.

Materials and Methods: This study is a cross-sectional study on 200 medical interns of Government General Hospital, Kurnool. Attitudes were assessed through the questionnaire of Death Attitude Profile-Revised. The collected data were analyzed with SPSS version 23, using descriptive and inferential statistical methods.

Results: Attitude towards death was investigated in the five dimensions including the fear of death (FOD), death avoidance (DA), neutral acceptance (NA), approach acceptance (AA), and escape acceptance (EA). The results showed that the aggregate mean and standard deviation scores for FOD, DA, NA, AA, and EA were 4.43 +0.76, 3.60 +1.09, 3.88 +1.10, 4.023 +0.82, 4.76 +1.06 respectively. Pearson correlation coefficient showed that there was a direct moderately positive significant relationship between gender & FOD and between religion & FOD, NA, AA. Majority of the study participants suggested providing prior guidance to deal with patient's death as a coping mechanism.

Conclusion: The findings of this study underscore the complex and multifaceted nature of medical interns' attitudes toward death. The high levels of escape acceptance and fear of death suggest that clinical exposure alone is insufficient to foster healthy coping strategies. Hence, it is recommended that training programs should be provided for medical students regarding death education.

Keywords: Approach acceptance, Attitude towards death, Death avoidance, Escape acceptance, Fear of death.

INTRODUCTION

Death is a natural process for all human beings. It is recognized as one of the most heartfelt life experiences that individual encounters. Individuals who mostly grapple with the phenomenon of death develop either positive or negative attitudes towards mortality and end of life care, which have been affected by multiple variables including their religious beliefs, cultural background, or societal beliefs.

Death attitude refers to people's emotional reactions when facing the near-death and death stimuli of themselves or others. It is a multidimensional concept that reflects a stable and evaluative psychological tendency and can be generally classified into positive and negative death attitudes.[1]

Death attitudes were initially viewed as single-dimensional that focus on the negative sides of death such as fear and anxiety. Recent research suggest that death attitudes include a wide range of response to death, which includes not only negative aspects but

also neutral and positive aspects. According to the Death Attitude Profile—Revised (DAP-R) developed by Wong et al,[2] positive attitudes include neutral acceptance, approach acceptance, and escape acceptance, while negative attitudes include fear of death and death avoidance.

Medical students interact with patients on a regular basis, which can include those facing serious illnesses and death.[3] It is therefore important to understand how medical students perceive, understand, and respond to death, both in the present and in their future work as medical practitioners.[4] Studies have revealed that medical students have a limited knowledge base of death-related topics and attitudes toward death.[5-8]

Health professional students will inevitably encounter the death of patients in their future careers, and it is thus important to understand their attitudes toward death during the student period.[9]

Therefore, it is understood that knowing the attitude profile of the medical interns towards patients' death can support strategies to be prepared more adequately for these future professionals.

Aim

To evaluate the attitudes regarding patients' death among medical interns in a tertiary care hospital.

Objectives

1. To study the socio demographic profile of study participants.
2. To assess the attitude of study participants towards patients' death.
3. To determine association between socio demographic characteristics and attitude towards patients' death.

MATERIALS AND METHODS

The study was a Hospital - based Cross-Sectional study aimed to determine the attitudes of medical interns of Government General Hospital, Kurnool towards death. Convenience sampling technique used and the total study population consisted of 200 subjects. Those willing to participate in the study were included and those not willing to participate were excluded.

The data collection tool was a questionnaire consisting of two parts, the first section included questions about demographic information including age, gender, address, religion, etc. whereas the second part included Death Attitude Profile-Revised (DAP-R) questionnaire 2. This questionnaire contains a number of statements related to different attitudes toward death. It has 32 questions which were evaluated in the five dimensions. Scoring Key for the Death Attitude Profile-Revised:

- Fear of Death (Seven items) 1,2,7,18,20,21,32
- Death Avoidance (Five items) 3,10,12,19,26
- Neutral Acceptance (Five items) 6,14,17,24,30
- Approach Acceptance (Ten items) 4,8,13,15,16,22,25,27,28,31
- Escape Acceptance (Five items) 5,9,11,23,29

The answers of questions were scored based on Likert scale from One to Seven in the direction of strongly disagree (one) to strongly agree (seven). For each dimension, a mean scale score was computed by dividing the total scale score by the number of items forming each scale.

After obtaining informed consent, the questionnaire was distributed among the subjects and they were completed and collected in the presence of the researcher.

The collected data were analyzed using SPSS software version 23. Categorical variables were presented by numbers and percentages, while continuous variables were presented by means ± standard deviations (SD). Test of Normalcy of Data done using One-Sample Kolmogorov-Smirnov Test and the distribution was normal. Thus, Parametric tests performed are Pearson Correlation, Independent two-sample t-test was used to compare the means between two groups, while analysis of variance (ANOVA) was used to compare the means for more than two groups. $P < 0.05$ was considered statistically significant for all tests.

RESULTS

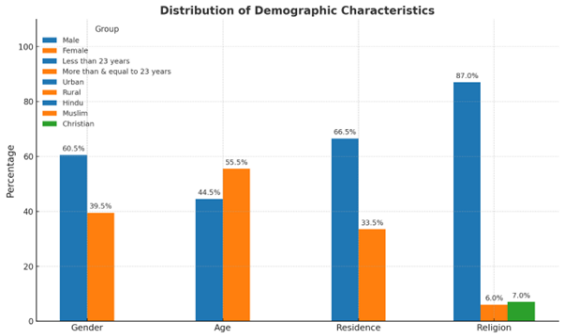

Figure 1: Sociodemographic Data of the study participants

[Figure 1] shows that majority of study participants were males (60.5%), more than 23 years of age (55.5%), belonged to urban residence (66.5%) and of Hindu religion (87%).

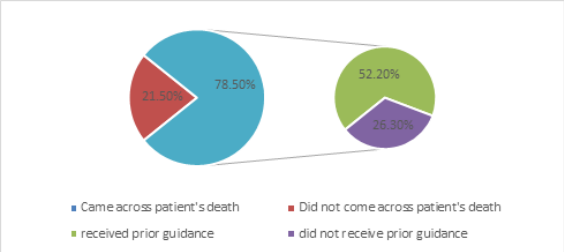

Figure 2: Experience regarding death of a patient during the course of their medical education

Out of 78.5 % of study participants who came across a patient's death during the course of their medical education, only 52.2 % of them have received prior guidance regarding how to deal with it.

Table 1: Descriptive Statistics of Domains of Death Attitude Scale.

Domain	No. of items	Min.	Max.	Mean + SD	Aggregate Mean + SD
Fear of Death	7	15	46	31.03 +5.351	4.43 +0.76
Death Avoidance	5	5	34	18.02 +5.456	3.60 +1.09
Neutral Acceptance	5	5	35	19.43 +5.511	3.88 +1.10
Approach Acceptance	10	16	61	40.23 +8.298	4.023 +0.82
Escape Acceptance	5	11	35	23.84 +5.308	4.76 +1.06

[Table 1] showed that the mean and standard deviation of Fear of Death is 4.43 and 0.76 respectively. Death avoidance is having mean and standard deviation of 3.60 and 1.09 respectively. Neutral acceptance of death is having mean and standard deviation of 3.88 and 1.10. The mean and standard deviation of approach acceptance of death is 4.023 and 0.82 and escape acceptance of death is 4.76 and 1.06.

Table 2: Correlation among different Dimensions of Death

		FOD	DA	NA	AA	EA
FOD	Pearson Correlation	1	.513*	.613*	.560*	.330*
	Sig. (2-tailed)		.000	.000	.000	.000
DA	Pearson Correlation	.513*	1	.632*	.668*	.075
	Sig. (2-tailed)	.000		.000	.000	.293
NA	Pearson Correlation	.613*	.632*	1	.659*	.125
	Sig. (2-tailed)	.000	.000		.000	.077
AA	Pearson Correlation	.560*	.668*	.659*	1	.124
	Sig. (2-tailed)	.000	.000	.000		.081
EA	Pearson Correlation	.330*	.075	.125	.124	1
	Sig. (2-tailed)	.000	.293	.077	.081	
*. Correlation is significant at the 0.05 level (2-tailed).						

[Table 2] reveals that there were significant moderate positive correlation between:

- Fear of death and Death Avoidance, Neutral Acceptance, Approach Acceptance.
- Death Avoidance and Fear of death, Neutral Acceptance, Approach Acceptance
- Neutral acceptance and Fear of death and Death Avoidance, Approach Acceptance.
- Approach Acceptance and Fear of death and Death Avoidance, Neutral Acceptance.

Table 3: Correlation between different Dimensions of Death and demographic data

		FOD	DA	NA	AA	EA
Age	Pearson Correlation	.043	.002	.013	.024	.009
	Sig. (2-tailed)	.548	.983	.853	.740	.903
Gender	Pearson Correlation	.153	.069	.049	.104	.133
	Sig. (2-tailed)	.030*	.330	.489	.144	.061
Address	Pearson Correlation	.081	.008	.030	.001	.099
	Sig. (2-tailed)	.256	.913	.674	.992	.165
Religion	Pearson Correlation	.251	.150	.221	.229	.006
	Sig. (2-tailed)	.000*	.034	.002*	.001*	.934
*. Correlation is significant at the 0.05 level (2-tailed).						

It is observed in [Table 3] that the fear dimension of death presented a statistically significant relationship with gender. Positive correlation was observed between fear of death, Neutral Acceptance, Approach Acceptance, and religion. There is no statistically significant relationship between dimensions of death and age, address.

Table 4: Association between FOD Dimension of Death and gender

Variable		n	FOD		
			Mean ± SD	t	Sig.
Gender	Male	121	30.36±4.98	-2.183	0.030
	Female	79	32.04±5.76		

[Table 4] inferred that higher averages in the fear of death dimension were significantly presented among female participants.

Table 5: Association between FOD, NA and AA Dimensions of Death and religion

Variable		n	FOD			NA			AA		
			Mean ± SD	F	Sig.	Mean ± SD	F	Sig.	Mean ± SD	F	Sig.
Religion	Hindu	174	30.50±5.11	6.946	0.001	18.98±5.46	5.057	0.007	39.47 ±8.04	5.977	0.003
	Muslim	12	34±3.97			21.33±4.79			45.08±7.11		
	Christian	14	35±6.92			23.36±5.01			45.57 ±9.41		

[Table 5] inferred that higher averages in the Fear of death, Neutral Acceptance, Approach Acceptance dimensions were presented significantly among participants belonging to Christian religion.

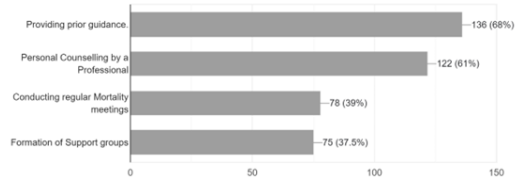

Figure 3: Suggestions for Coping with Patient's Death

[Figure 3] showed that Study participants suggestions for Coping with Patient's Death were as follows: providing prior guidance (68%), personal counseling by a Professional (61%), conducting regular mortality meetings (39%), formation of support groups (37.5%).

DISCUSSION

This study assessed 200 medical interns' attitudes toward death in a tertiary care hospital in South India, out of which majority were male participants (60.5%), age more than 23 years (55.5%), belonged to urban residence (66.5%) and of Hindu religion (87%).

In comparison, in a study conducted by R. Hamadeh,[10] most of the participants in AGU and UofT were females (74% and 81%, respectively). AGU and UofT students were similar in age, with most (AGU 59.3%, UofT 59.8%) being in the age group≥25 years. Similarly, Bushra Alhusamiah's,[11] study had majorly female participants (55%). In a study by Huiwu Han, most of the participants were female (80.9 %) and aged < 25 years (91.9%).[12,13]

Despite substantial exposure—78.5% of participants had witnessed a patient's death—only 53.5% received any formal instruction or psychological support. This gap is echoed in a study by Han H,[13] which found that only 20.9% of students had received palliative care training, despite high educational demand.

In comparison, in a study conducted by Bushra Alhusamiah,[11] nurses and physicians who attended an entire education course on death and dying had significantly higher attitude scores (M = 119.98, SD = 12.82) than those who only received an educational material (M = 102.09 SD = 10.78), and those who did not receive any education at all (M = 92.26, SD = 12.21). Regarding the previous experience with loss; nurses and physicians who stated that they lost someone close had significantly higher scores (M = 109.47, SD = 14.79) than nurses and physicians who had no previous experience with the loss (M = 97.79, SD = 15.79), (F (2,197) = 9.61, p = .001).

Inadequate training contributes to unresolved fear, poor patient interaction, and decreased quality of end-of-life care.

Current study showed that the mean and standard deviation of Fear of Death is 4.43 and 0.76 respectively. Death avoidance is having mean and standard deviation of 3.60 and 1.09 respectively. Neutral acceptance of death is having mean and standard deviation of 3.88 and 1.10. The mean and standard deviation of approach acceptance of death is 4.023 and 0.82 and escape acceptance of death is 4.76 and 1.06.

The present study showed that the health professional students scored highest in the escape acceptance followed by fear of death dimension. This suggests a high level of emotional distress and avoidance, despite participants' clinical exposure to mortality.

Unlike the current study, Kamya Vyas's,[12] study showed that the mean and standard deviation of Fear of Death was 3.46 and 1.37 respectively, representing moderate levels of fear of death. Death avoidance was also reported to be at moderate levels, having mean and standard deviation of 3.81 and 1.59 respectively. Additionally, the participants reported relatively low levels of approach acceptance of death (M = 4.21, SD = 1.52) and escape acceptance of death (M = 3.87, SD = 1.82).

In contrast to the present study, a study conducted by Huiwu Han,[13] showed that the average scores for the five dimensions of the DAP-R, ranked from highest to lowest, were: 3.94 ± 0.56 for neutral acceptance, 3.02 ± 0.78 for death avoidance, 2.96 ± 0.73 for fear of death, 2.81 ± 0.65 for approach acceptance, and 2.74 ± 0.84 for escape acceptance.

High levels of fear of death and escape acceptance may reflect an early-stage professional struggle in reconciling clinical detachment with emotional realities.

Lei Lei's,[14] study showed that neutral acceptance of death, scored the highest (3.35±0.73), followed by death avoidance (2.94±0.71), and fear of death scored the lowest (2.74±0.73) from item scores.

In a study conducted by Anna Maria Cybulska,[15] fear of death and neutral acceptance of death obtained the highest score, i.e., 5.3 points. Slightly lower scores were obtained in the theological acceptance of death (4.6 points) and in escape acceptance of death (4.4 points). The lowest score, i.e., 3.9 points, was obtained by the respondents in the case of avoiding death.

This divergence underscores the role of contextual exposure and cultural framing in shaping death attitudes.

Present study showed that there were significant moderate positive correlation between:

- Fear of death and Death Avoidance, Neutral Acceptance, Approach Acceptance.
- Death Avoidance and Fear of death, Neutral Acceptance, Approach Acceptance
- Neutral acceptance and Fear of death and Death Avoidance, Approach Acceptance.
- Approach Acceptance and Fear of death and Death Avoidance, Neutral Acceptance.

It is observed in the current study that the fear dimension of death presented a statistically

significant relationship with gender. Moderately positive correlation was observed between fear of death, Neutral Acceptance, Approach Acceptance, and religion. There is no statistically significant difference between age and address.

In a study conducted by Anna Maria Cybulska,[15] statistically significant correlations between age and two attitudes toward death were demonstrated: avoidance of death ($r = -0.2147$) and neutral acceptance of death ($r = 0.3412$). Moreover, in the case of the place of residence, a significant correlation was observed with the theological acceptance of death ($r = -0.2206$) and escape acceptance of death ($r = 0.4213$). Inhabitants of villages more often adopted the attitude of theological acceptance of death, while inhabitants of larger cities escape the acceptance of death.

These results indicate that cultural, religious, and sociodemographic variables are consistent moderators of death attitudes across clinical populations.

Current study showed higher averages in the fear of death dimension, significantly presented in female participants.

In a study conducted by Randah R. Hamadeh,[10] death avoidance scores in females from AGU scored significantly higher than females from UofT ($t(127) = 3.46$, $p < 0.001$). In terms of within-group differences, AGU females scored significantly higher on this domain than AGU males ($t(79) = 2.38$, $p = 0.020$).

Bushra Alhusamiah's,[11] study results showed that male nurses and physicians had more positive attitude ($M = 111.14$, $SD = 15.57$) than female nurses and physicians ($M = 102.35$ $SD = 14.78$), $t(198) = 3.89$, $p = .003$.

In a study conducted by Anna Maria Cybulska15, a statistically significant correlation was observed between gender and the fear of death ($r = 0.2487$) and the neutral acceptance of death ($r = -0.2637$). It has been observed that women adopt an attitude of neutral acceptance of death, and men fear death.

Roopini Radhakrishnan's,[16] study showed that t-values measuring variables for gender, the results indicate no statistically significant difference between gender and death attitudes dimensions.

Present study inferred that higher averages in the Fear of death, Neutral Acceptance, Approach Acceptance dimensions were presented significantly in participants belonging to Christian religion. Interestingly, interns identifying with Christianity reported significantly higher levels of both fear of death and approach acceptance, reflecting the dual role of religion in intensifying both mortality anxiety and afterlife hope.

Participants of the current study suggested the following coping mechanisms to deal with patient's death: providing prior guidance (68%), personal counseling by a Professional (61%), conducting regular mortality meetings (39%) and formation of support groups (37.5%).

In a study conducted by Cihangir Akyol,[17] the participants' suggestions for supporting surgeons were as follows: education on coping with patient death (51.5%), formal mentoring system (31.3%), psychological therapy counselling (27.7%), peer colleague support groups (27.3%), a time break after a patient death (13.5%), and morbidity/mortality meetings (11.5%).

CONCLUSION

The findings of this study underscore the complex and multifaceted nature of medical interns' attitudes toward death. The high levels of escape acceptance and fear of death suggest that clinical exposure alone is insufficient to foster healthy coping strategies.

Comparative international data highlight that cultural context, religiosity, gender, and professional training significantly shape death attitudes.

The importance of integrating structured death education into medical training is emphasized across multiple studies. For example, studies conducted by Hamadeh RR, Han H and Wass H. on medical students who lacked exposure to structured bereavement and palliative care curricula exhibited avoidance behaviors, discomfort, and emotional suppression in clinical settings 10,13. These behaviors compromise not only patient care but also clinician well-being.

Globally, death education is emerging as a critical curricular necessity. Studies show that incorporating modules on advance care planning, ethical end-of-life communication, and emotional self-care can improve medical students' professional confidence, resilience, and compassion.

To mitigate maladaptive attitudes and enhance quality of care, we recommend integrating formal death education into undergraduate medical curricula. Such programs should include experiential learning, ethical discussions, psychological support mechanisms, and culturally contextualized modules. Only through such comprehensive education, future physicians will be able to face mortality with empathy, competence, and equanimity.

REFERENCES

1. Han H, Ye Y, Zhuo H, Liu S, Zheng F. Death attitudes and associated factors among health professional students in China. Front Public Health. 2023 May 25;11:1174325. doi: 10.3389/fpubh.2023.1174325. PMID: 37304103; PMCID: PMC10248233.
2. Wong PTP, Reker GT, Gesser G. Death Attitude Profile—Revised: A Multidimensional Measure of Attitudes Toward Death. Death Anxiety Handbook: Research, Instrumentation, and Application. Series in Death Education, Aging, and Health Care. Philadelphia, PA: Taylor & Francis; (1994). p. 121–48.
3. Alnajjar HA, Alzahrani M, Alzahrani M, Banweer M, Alsolami E, Alsulami A. Awareness of brain death, organ donation, and transplantation among medical students at single academic institute. Saudi J Anaesth. 2020;14(3):329–34.

4. Asadpour M, Sabzevari L, Ekramifar A, Bidaki R. The attitude of medical students toward death: a cross-sectional study in Rafsanjan. Indian J Palliat Care. 2016;22(3):354–61.
5. Boland JW, Dikomitis L, Gadoud A. Medical students writing on death, dying and palliative care: a qualitative analysis of reflective essays. BMJ Support Palliat Care. 2016;6(4):486–92.
6. DeMaria S, Silverman ER, Lapidus KA, Williams CH, Spivack J, Levine A, Goldberg A. The impact of simulated patient death on medical students' stress response and learning of ACLS. Med Teach. 2016;38(7):730–7.
7. Gugliucci MR, Padmanabhan DL, Silberstein EB. 48-hour hospice home immersion encourages osteopathic medical students to broaden their views on dying and death. J Am Osteopath Assoc. 2020;120(8):516–23.
8. Ho CY, Kow CS, Chia CHJ, Low JY, Lai YHM, Lauw SK, How AEH, Tan LHE, Ngiam XLL, Chan NPX, et al. The impact of death and dying on the personhood of medical students: a systematic scoping review. BMC Med Educ. 2020;20(1):516.
9. Donne J, Odrowaz T, Pike S, Youl B, Lo K. Teaching palliative care to health professional students: a systematic review and meta-analysis of randomized controlled trials. Am J Hosp Palliat Care. (2019) 36:1026–41. doi: 10.1177/1049909119859521.
10. Hamadeh RR, Abuelaish I, Yousufzai SJ, AlShammari YAT, Ahmed YE, Jahrami HA. Knowledge and attitudes of medical students toward death: a cross-sectional comparative study between an Arab and a Western university. BMC Psychol. 2024;12:133. https://doi.org/10.1186/s40359-024-01616-w
11. Alhusamiah BK, Zeilani RS. Attitude toward death and associated factors among nurses and physicians: a cross-sectional study. Research Square Preprint. 2024. https://doi.org/10.21203/rs.3.rs-4219391/v1
12. Vyas, Kamya & Nadkarni, Ria. (2024). Embracing Mortality: A Causal Analysis of Types of Death Attitude on Self Transcendence. Indian Journal of Positive Psychology. 14. 399-406.
13. Han H, Ye Y, Zhuo H, Liu S, Zheng F. Death attitudes and associated factors among health professional students in China. Front Public Health. 2023;11:1174325. https://doi.org/10.3389/fpubh.2023.1174325
14. Lei L, Zhao H, Ran L, Wang L, Luo Y. Influencing factors of attitudes towards death and demands for death education among community-dwelling Chinese older adults: a cross-sectional study. BMC Public Health. 2022 Jun 23;22(1):1242. doi: 10.1186/s12889-022-13655-2. PMID: 35733112; PMCID: PMC9219144.
15. Cybulska AM, Żołnowska MA, Schneider-Matyka D, Nowak M, Starczewska M, Grochans S, et al. Analysis of nurses' attitudes toward patient death. Int J Environ Res Public Health. 2022;19(20):13119. https://doi.org/10.3390/ijerph192013119
16. Radhakrishnan, Roopini. (2019). Spirituality and Attitude Towards Death Among Senior Citizens With Special Reference to Bengaluru, India. SSRN Electronic Journal. 10.2139/ssrn.3563449.
17. Akyol C, Celik SU, Koc MA, Bayindir DS, Gocer MA, Karakurt B, et al. The impact of patient deaths on general surgeons' psychosocial well-being and surgical practices. Front Surg. 2022;9:898274. https://doi.org/10.3389/fsurg.2022.898274.