

## Nursing Students' Perceived Attitudes towards Death: A Cross-Sectional Survey

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### Abstract

**Background and Purpose:** Nurses, both as part of a multidisciplinary healthcare team or as individual service/care providers to patients with terminal illness and critical illnesses, are posed with imposed demands to understand, evaluate, document and communicate events leading to and the event of death investigations done by forensic medicine and pathology. The objective of this study was to assess the attitudes towards death in a sample of Indian nursing students.

**Materials and Methods:** A cross-sectional study was performed on 52 nursing students (all female) who were recruited on convenient sampling. The survey instrument used in this study was Death Attitudes Profile-Revised (DAP-R) which was a 32-item scale with responses on a 7-point Likert scale and five distinct dimensions- Fear of Death (7 items), Death Avoidance (5 items), Neutral Acceptance (5 items), Approach Acceptance (10 items) and Escape Acceptance (5 items). Descriptive analysis was done using frequencies for each of the items and item-responses of the DAP-R and study participants' demographic variables. Comparison of total scores and subscale scores between age and religion were done using independent t-test and one-way analysis of variance respectively. All analyses were done at 95% confidence interval using Statistical package for social sciences (SPSS) version 16.0 for Windows.

**Results:** Fear of Death score was  $32.78 \pm 4.02$  ( $4.68 \pm 57\%$ ), Death Avoidance was  $23.78 \pm 4.03$  ( $4.75 \pm 80\%$ ), Neutral Acceptance was  $24.96 \pm 4.53$  ( $4.99 \pm 90\%$ ), Approach Acceptance was  $47.82 \pm 5.77$  ( $4.78 \pm 57\%$ ), Escape Acceptance was  $21.44 \pm 4.92$  ( $4.28 \pm 98\%$ ). Overall DAP-R score was  $150.78 \pm 17.48$  and it was found that Death avoidance and Escape acceptance was significantly higher ( $p < .05$ ) in younger students and Christian students respectively.

**Conclusion:** Nursing students had fairly neutral attitudes towards death, while death avoidance was common in younger students and escape acceptance was higher among Christian students.

**Keywords:** Self-esteem; Self-concept; Nursing profession; Nursing education; Personality development.

### Introduction

Human death is a unitary phenomenon that physicians can determine in two ways: (1) showing the irreversible cessation of all brain clinical functions; or (2) showing the

permanent cessation of circulatory and respiratory functions.[1] Most definitions of death – whether cardiopulmonary, whole brain and brain stem, or just upper brain include an irreversibility condition. Cessation of function is not enough to declare death. Irreversibility should be limited to an organism's ability to 'restart' itself after vital organs have ceased to function.[2] Thus controversies exist over the proper definition of "irreversible" in criteria for death[3] to who is held responsible for defining death whether the clinician[4] or the individual person/patient.[5]

Whilst the clinical definition of death in itself posed a significant legal threat[4], there are many other medico-legal issues[6] associated with death ranging from certification/

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registration,[7,8] classification,[7] organ donation,[9] living will[10] and physician-assisted suicide/euthanasia.[11] Healthcare management system presently works on a strong multi-disciplinary contribution from various medical, nursing and allied health disciplines when it comes to medico-socio-legal issues related to death.[12] The field of Forensic Pathology inherently is dependent upon teamwork and communication which are implemented through explicit documentation and ethical guidelines on death.[13]

However, implementation of guidelines would not be a reality in face of healthcare professionals' knowledge, attitudes and beliefs built upon experiences and inter-personal interactions.[14] Nurses, both as part of a multidisciplinary healthcare team or as individual service/care providers to patients with terminal illness and critical illnesses, are posed with imposed demands to understand, evaluate, document and communicate events leading to and the event of death present both in hospital-based[15] and in community-based settings[16] respectively. Such qualities are determined in turn by their attitudes towards death and studies reported previously on nurses' attitudes towards death[17-24] and its associated organ donation[25-7] were on staff nurses in various countries.

Studies on student nurses would provide invaluable information on the development of such attitudes right from their foundational aspects. Early identification of inappropriate attitudes might indicate educational interventions or modifications of the nursing educational curricula. Previous studies on death-related attitudes in student nurses[28-30] and a few other studies on comparison between student nurses and staff nurses[31,32] were from other countries with no retrievable information on our country. In India, cultural and ethnic influences may a major role in attitudes and beliefs in general and in specifically amongst nurses. Hence there is a dearth need to evaluate the attitudes towards death in Indian nursing students. The objective of this study was to assess the

attitudes towards death in a sample of Indian nursing students.

## Materials and Methods

### *Study Approval*

The ethical approval for the study was obtained from the principal of Dhanvantari College of Nursing, Udupi, Karnataka. Participation was wholly voluntary and all volunteers were required to provide a written informed consent.

### *Study Design*

A cross-sectional survey.

### *Participants*

The study was conducted on first-year baccalaureate nursing students who were recruited on convenient sampling. Participants were included if they could understand written and spoken English.

### *Survey Questionnaire*

The survey instrument used in this study was Death Attitudes Profile-Revised (DAP-R).[33] The DAP-R is a 32-item multidimensional scale that measures participants' attitudes toward death using a seven-point scale (1 = strongly disagree to 7 = strongly agree). This measure consists of five subscales: (a) FD- fear of death (seven items that measure negative thoughts and feelings regarding death), (b) DA- death avoidance (five items that measure attempts to avoid thought of death), (c) AA- approach acceptance (10 items that measure to what extent a person views death as an entry point to a happy afterlife), (d) EA- escape acceptance (five items that measure the extent to which a person views death as an opportunity to escape from a painful existence), and (e) NA- neutral acceptance (five items that measure the extent to which a

person views death in a neutral way, neither welcoming nor fearing death). Each option is scored from 1-7 for SD to SA respectively to score each of five subscales or dimensions. Each subscale was scored individually by adding the respondents' scores on each of the items and then dividing the total by the number of items in that subscale.

#### Data Collection

In addition to the survey items, personal information such as age, gender and religion of the participant were collected. Participant anonymity was maintained by coding the questionnaires. One of the author (MP) personally approached the institutions and collected the data. Participants were free to ask for clarifications to the author and the author was required to provide suitable non-leading explanations.

#### Data Analysis

Descriptive analysis was done using frequencies for each of the items and item-responses of the RSES and study participants' demographic variables. Comparison of total scores and factor scores between institutions, age, gender and religion were done using independent t-test or one-way analysis of variance as applicable. All analyses were done at 95% confidence interval using Statistical package for social sciences (SPSS) version 16.0 for Windows.

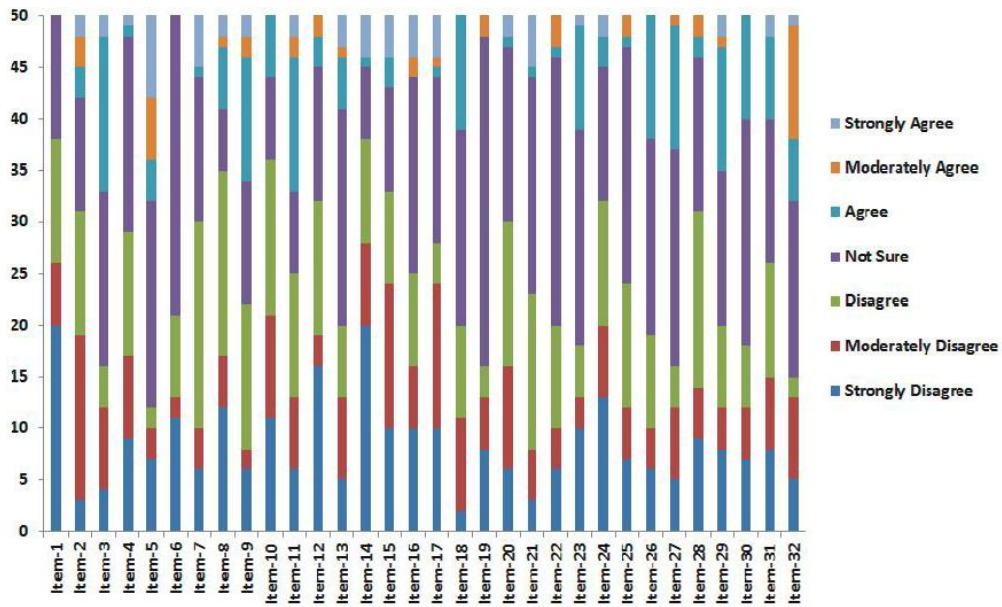
#### Results

The demographic and overall data of the participants is shown in table 1. Out of the total 66 questionnaires distributed and 58

**Table 1: Demographic Data of the Study Participants**

Variables	Values	
Total sample size, N	50	
Age (years)	18-19 years	44 (88%)
	20-21 years	4 (8%)
	22-23 years	2 (4%)
Religion	Hindu	27 (54%)
	Muslim	2 (4%)
	Christian	21 (42%)
Gender	Male	0
	Female	50
Provided care for a terminally ill patient	Yes	3 (6%)
	No	47 (94%)
Witnessed death of a person	Yes	5 (10%)
	No	45 (90%)
Family member's death	Yes	7 (14%)
	No	43 (86%)
Death Attitudes Profile - Revised (DAP-R) total score (32-224), Mean $\pm$ SD	150.78 $\pm$ 17.48	
/224%	67.31 $\pm$ 7.8%	
/32%	4.71 $\pm$ .54%	
Subscales' scores, Mean $\pm$ SD (%)	Fear of Death (7 items)	32.78 $\pm$ 4.02 (4.68 $\pm$ .57%)
	Death Avoidance (5 items)	23.78 $\pm$ 4.03 (4.75 $\pm$ .80%)
	Neutral Acceptance (10 items)	24.96 $\pm$ 4.53 (4.99 $\pm$ .90%)
	Approach Acceptance (5 items)	47.82 $\pm$ 5.77 (4.78 $\pm$ .57%)
	Escape Acceptance (5 items)	21.44 $\pm$ 4.92 (4.28 $\pm$ .98%)

**Figure 1: Comparison of Item-responses for DAP-R in the Study Sample**



received, 50 were selected as eligible for consideration with an overall response rate of 75.75%.

*Item-Responses for the DAP-R*

The comparison of item-specific responses for all the items of the DAP-R scale is shown in figure 1.

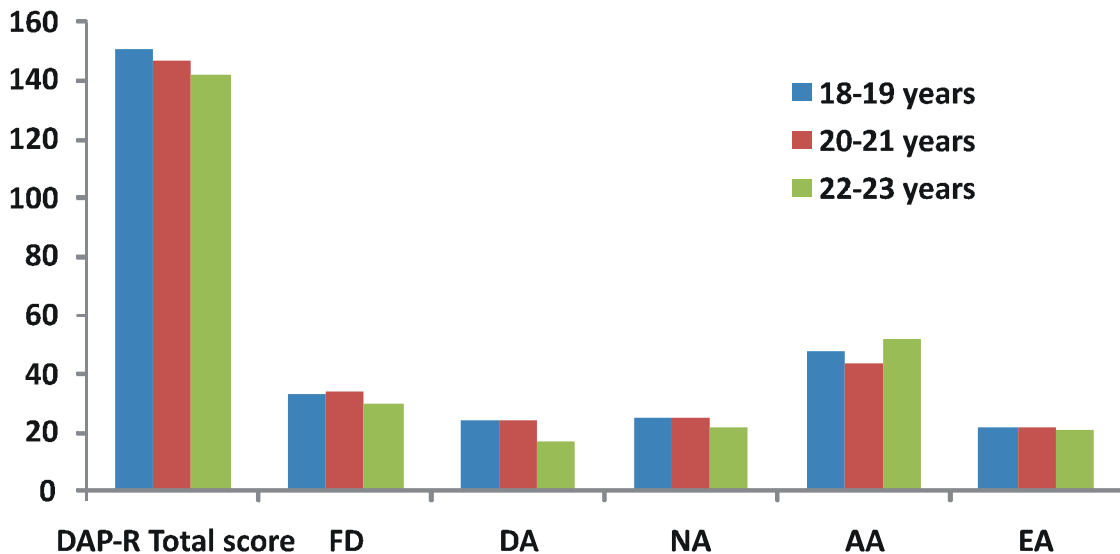
*Comparison of Total and Subscale Scores*

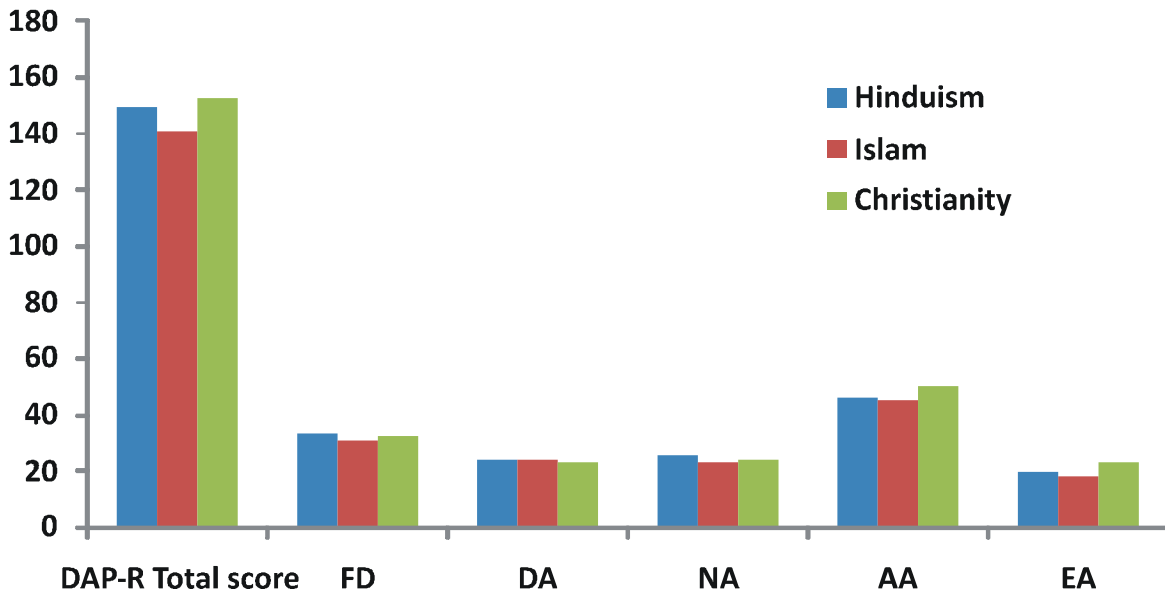
*between Age-Groups*

Between-group comparison for total score of DAP-R ( $F=0.336, p=0.717$ ) and FD ( $F=0.586, p=0.561$ ), NA ( $F=0.433, p=0.651$ ), AA ( $F=1.722, p=0.190$ ) and EA ( $F=0.008, p=0.992$ ) was not statistically significant. DA was significantly different between groups ( $F=3.212, p=0.049$ ) with 18-19 years groups having higher score than 22-23 years (mean difference=  $7.06 \pm 2.79$ ) Figure 2.

*Comparison of Total and Subscale Scores*

**Figure 2: Comparison of DAP-R Total Score and Subscale Scores between Age Groups**

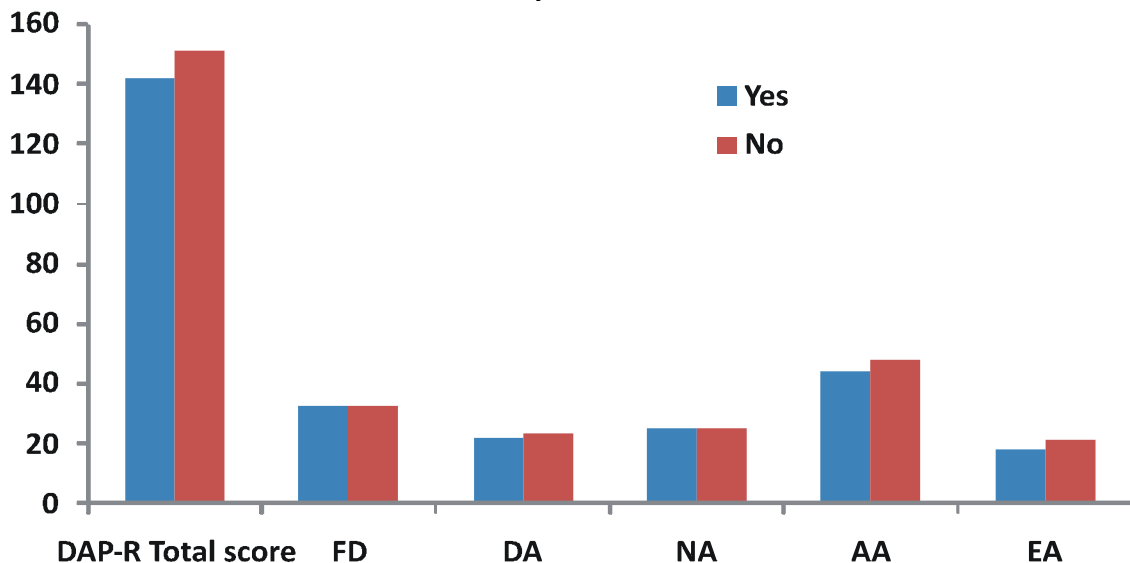


**Figure 3: Comparison of DAP-R Total Score and Subscale Scores between Religions***between Religions*

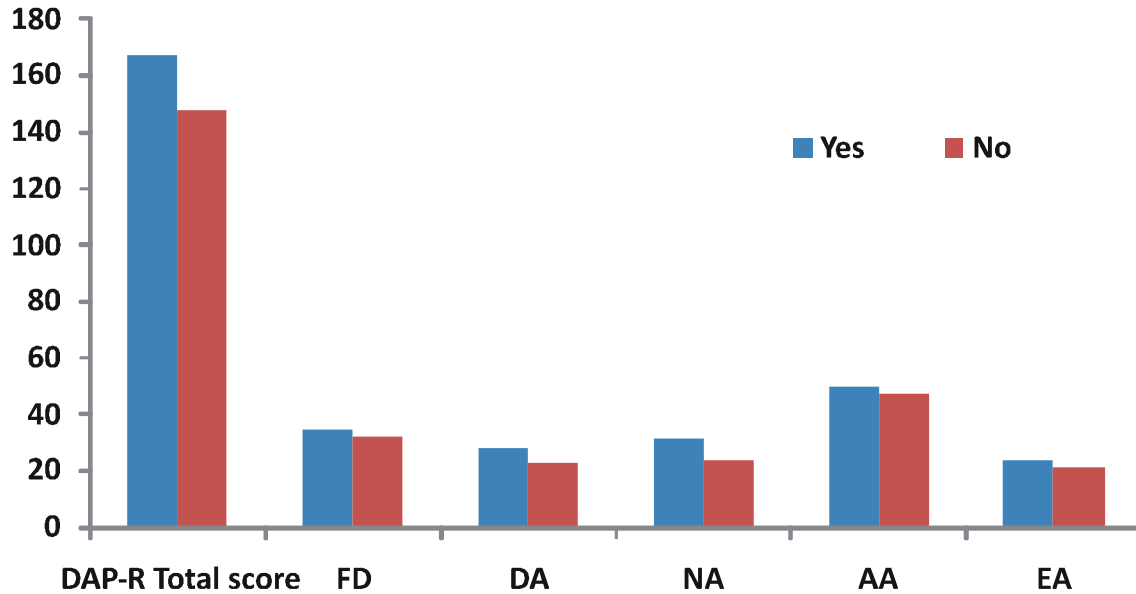
Between-group comparison was not statistically significant for the total score of DAP-R ( $F=0.584$ ,  $p=0.561$ ), and also for its subscales- FD ( $F=0.321$ ,  $p=0.727$ ), DA ( $F=0.047$ ,  $p=0.954$ ), NA ( $F=1.727$ ,  $p=0.189$ ), and AA ( $F=2.7$ ,  $p=0.078$ ). EA was significantly different ( $F=3.615$ ,  $p=0.035$ ) between groups with Christian students having higher scores than Hindus with a mean difference of  $3.36 \pm 1.36$  ( $p=0.05$ ) Figure 3.

*Comparison of Total Score and Subscale Scores**between Exposures to Terminally Ill Patients*

Between-group ('yes' versus 'no') comparison for total score and subscale scores was not statistically significant- FD ( $t=-0.050$ ,  $p=0.960$ ), DA ( $t=-0.637$ ,  $p=0.527$ ), NA ( $t=0.145$ ,  $p=0.885$ ), AA ( $t=-1.18$ ,  $p=0.241$ ), EA ( $t=-1.25$ ,  $p=0.215$ ) and Total score of DAP-R ( $t=-0.861$ ,  $p=0.394$ ). Total DAP-R score, AA, DA and EA were higher among the 'no' group ( $151.32 \pm 17.89$ ,  $48.06 \pm 5.86$ ,  $23.87 \pm 4.13$ ,  $21.65 \pm 4.98$ ) compared to 'yes' group ( $142.33 \pm 4.04$ ,  $44$ ,  $22.33 \pm 1.15$ ,  $18 \pm 1.73$ ) Figure 4.

**Figure 4: Comparison of Total Score and Subscale Scores between Exposures to Terminally Ill Patients**

**Figure 5: Comparison of DAP-R Total Score and Subscale Scores between Exposure with Death**



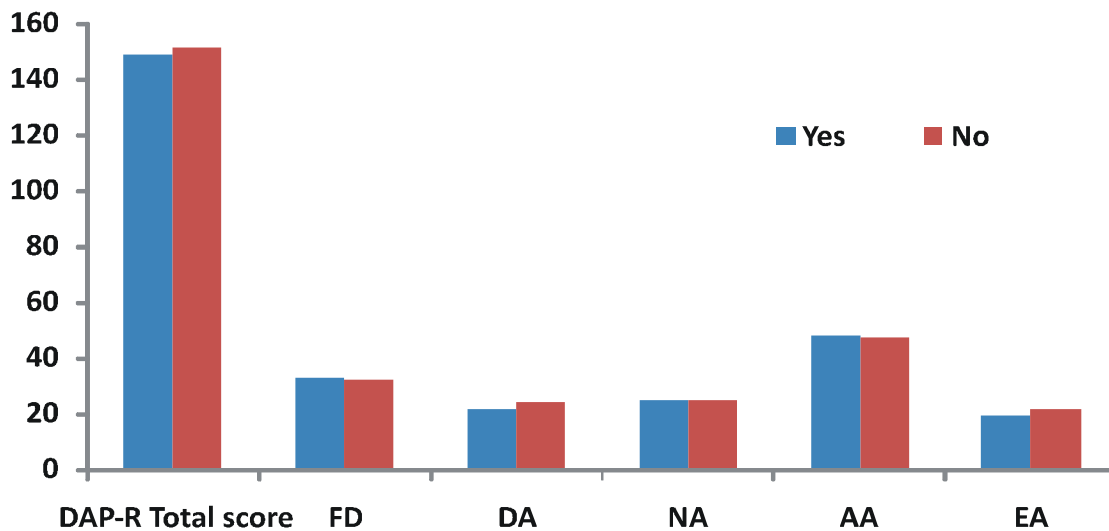
*Comparison of DAP-R Total Score and Subscale Scores between Exposure with Death*

DAP-R total score, DA and NA were significantly higher in 'yes' group (167.60 ± 13.20, 28.2 ± 3.56, 31.4 ± 2.5) compared to 'no' group (148.91 ± 16.99, 23.28 ± 3.8, 24.24 ± 4.14). FD (mean difference= 1.8 ± 1.89), AA (mean difference= 1.97 ± 2.73) and EA (mean difference= 2.84 ± 2.3) scores were also higher among the 'yes' group insignificantly (p>0.05) than 'no' group (Figure 5).

*Comparison of DAP-R Total Score and Subscales' scores between Experiences with Dying Family Member*

Between-group ('yes' versus 'no') comparison for total score and subscale scores was not statistically significant- FD (t=0.255, p=0.800), DA (t=-1.163, p=0.251), NA (t=0.203, p=0.840), AA (t=0.439, p=0.663), EA (t=-0.915, p=0.365) and Total score of DAP-R (t=-0.265, p=0.792) Figure 6.

**Figure 6: Comparison of DAP-R Total Score and Subscales' Scores between Experiences with Dying Family Member**



### *Overall Comparison between the Subscale Scores*

The percentile scores (raw score/ number of items) when compared amongst themselves, the order of scores were highest for NA, followed by AA, DA and FD with EA being the least. Between-subscale scores comparison was significant ( $p=0.000$ ).

## **Discussion**

The study was aimed to study the attitudes towards death among first-year nursing students and we found that overall attitudes were fair and it was influenced by a complex interaction of individual and professional variables. The study had some expected and unexpected interesting observations. Expected observation includes higher scores of death avoidance amongst younger age groups while unexpected observation was the higher approach acceptance score amongst Christian students. According to Christian mythology, approach acceptance or neutral acceptance was more expected than other subscales of death.

For the total score of DAP-R, significant differences were observed between those students who had exposure to death versus those who did not. This was understandable with subscale scores of NA and DA also being significantly higher in 'yes' group. Increase in NA after prior exposure to death event is a subject to be explored in future longitudinal studies. Similar influence of previous experience with death event was reported by Hurtig and Stewin.[34]

Though significant differences were not observed for total scores of DAP-R, the subscales were significantly different and were evidently influenced by a number of variables- age, previous exposure to death and religion. This poses a clear explanation of the greater influence of such confounding factors more on DA, AA, NA and FD.

Despite unavailability of data on existence of death education in nursing

curriculum[35,36] in India, present study's sample of nursing students had fairly better attitudes towards death which highlighted the influence of other factors than educational curricular influences.

One of the few limitations of this study was the small sample size which limited its statistical power, participants were from a single institution, one geographical location and thus cannot be a representative of Indian nursing students, relationship with curriculum could be determined if longitudinal studies are carried out, relationship with academic achievement and/or clinical decision-making or attitudes on caring for the dying people was not explored, and future studies addressing these issues are warranted and comparison between pre-clinical and clinical nurses may indicate better suggestions for educational interventions towards reinforcement of positive attitudes towards death.[37] Such educational interventions not only reduce their anxiety but also improve their locus of control.[38]

The study findings are of significance being the first study on Indian nursing students and it explored the relationship of death attitudes with individual,[39] professional and environmental variables. Death-related attitudes might be one of the building blocks for development of professional self-concept amongst the nurses[40] and it may be a very important attribute in settings such as palliative care or with experience and/or exposure to life's stressful events such as death. Future studies may address these intricate inter-relationships in palliative care management settings.

## **Conclusion**

Overall scores for death attitudes were favorable in the study sample of nursing students. Age and religion played an important role on death avoidance and escape acceptance scores respectively.

## Acknowledgments

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### Conflicts of Interest

None identified and/or declared.

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