

Kinga Jaglak<sup>ID</sup>, Ewa Kobos<sup>ID</sup>

Department of Development of Nursing and Medical and Social Sciences, Medical University of Warsaw, Warsaw, Poland

# Attitudes towards death among the nursing staff in oncology departments and hospices

## Abstract

**Background:** Attitude towards death is the way people perceive the process of dying, as well as related emotions, moods, and one's own assessment of death. The attitude towards life transience, particularly among the nursing staff dealing with terminally ill patients in their daily practice, is of key importance for the way of perceiving the purposefulness and validity of their work. This study aimed to analyze attitudes towards death among the nursing staff in hospices and oncology departments.

**Participants and methods:** Overall, 159 members of the nursing staff in stationary hospices and oncology departments participated in the study. The Death Attitude Profile-Revised (DAP-R) was used to collect research material. A statistical analysis of the findings was conducted using the Student's t-test, ANOVA, Mann-Whitney U test, and the Kruskal-Wallis test.

**Results:** The median (Me) results for the particular dimensions were as follows: approach acceptance: Me = 42, fear of death: Me = 27, neutral acceptance: Me = 29, death avoidance: Me = 17, and escape acceptance: Me = 21. Concerning neutral acceptance, the median values for the oncology hospital and hospice staff members were Me = 29 and Me = 26, respectively.

**Conclusions:** Oncology nurses show a higher tendency towards neutral acceptance compared to the hospice staff. The respondents with a secondary level education demonstrated a higher tendency towards escape acceptance and death avoidance. Nurses with previous experience in oncology, hospice, or palliative care in addition to their current job demonstrate a higher tendency towards fear of death.

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**Keywords:** nursing staff, attitude, death, hospice, oncology

## Address for correspondence:

Kinga Jaglak

Department of Development of Nursing and Medical and Social Sciences, Medical University of Warsaw,

Żwirki i Wigury 81, 02-091 Warsaw, Poland

e-mail: borowekkinga@gmail.com



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## Introduction

The attitude towards death determines personal feelings associated with the transience of human life (individual and referring to other people). It describes various moods or psychological dispositions that appear while dealing with death as well as its assessment [1]. There are two primary institutional care models related to dying: hospital and hospice models. It has been shown that the factors associated with nurses' spiritual care competence include their death attitudes in terms of approach acceptance and escape acceptance [2]. Care provided to patients in their terminal phases is particularly demanding for the nursing staff to be in constant and direct contact with these individuals. The attitude toward death appears to be an important issue in addition to the required knowledge and skills. The way its perception affects the view on caring for a dying patient and subsequently influences the quality of care provided as well as the mental and physical health of the nursing staff [1, 3, 4]. A negative attitude towards the transience of human life involves fear of death, death avoidance or escape acceptance. Fear of human life ending is a common and complex issue manifested by perceiving death as a departure to the unknown, by the sense of loss, or the religion-related dilemmas. Concerning death avoidance, the feeling of anxiety diminishes in the defense mechanism of its wiping from the mind while escape acceptance emerges when individuals are overwhelmed by their suffering and existential dilemmas together with the sense of ineffectiveness [5]. These experiences shape the psychosocial condition of the medical staff and affect patient management.

Improper ways of coping with the dying process result in nurses being tired of demonstrating empathy and a lower level of job satisfaction, which compromises the quality of care provided [6]. Negative attitudes are also associated with the phenomenon of occupational burnout [7]. Patient care in their end-of-life phase and the suffering observed in oncology departments and hospices pose a high risk of developing this problem. Concerning the palliative care team, the data show that the highest levels of emotional exhaustion (19.5%) and depersonalization (8.2%) are seen among nurses [8]. A high or critical level of burnout syndrome was observed in 9.75% and 2.43% of oncology nurses, respectively [9]. The research findings confirm that the burnout prevalence is higher among oncology nurses compared to those involved in palliative care [10, 11].

A positive view on death stands in contrast to the deterioration of the care quality and the poorer

emotional state of the health professionals caused by the negative death attitude. This positive attitude includes approach acceptance and neutral acceptance. Approach acceptance is associated with the belief in a joyful afterlife which helps accept death. A similar attitude is neutral acceptance when an individual is not afraid of death but accepts it as an integral part of life and feels indifferent to it [5]. Maintenance of optimism while facing the process of transience results in a lower risk of occupational burnout [7]. In addition, an appropriate view on death improves the subjective well-being of the medical staff which, together with a good scientific attitude to dying, helps improve the quality of care provided [1]. Therefore, it is important to determine the attitudes toward death among the nursing staff whose job involves dealing with dying patients regularly and facing the discomfort typical of oncology departments and hospices. Moreover, factors associated with a particular view (especially those that can be modified) are worth identifying to provide support to the staff dedicated to palliative and cancer care and to reduce or prevent adverse consequences of the negative attitude towards death.

## Participants and methods

### Data design and collection

This cross-sectional study was conducted in the National Research Institute of Oncology in 11 clinics and two stationary hospices in Warsaw. Questionnaires and secured boxes for their collection were provided to the charge nurses by the principal investigator following a phone call. The questionnaires were collected by the principal investigator on the scheduled day. The study participants were selected based on the purposive sampling and the inclusive criteria involved the nursing staff members working in oncology departments or adult hospices as the primary workplaces, with at least three years of professional experience overall and at least one year's experience in the current workplace, who gave their consent to participate. The consent to conduct the study was obtained from the directors of the above institutions. The study was conducted between September and November 2023.

### Ethical considerations

The study was carried out by the Declaration of Helsinki principles. The Bioethics Committee at the Medical University of Warsaw acknowledged the study design (No. AKB/E/313/2023). The questionnaire contained information about the purpose of the study, voluntariness, confidentiality, and anonymity of the data collected as well as the information they will only

be used for the research purpose. Each participant could withdraw from the study at any time without giving reasons.

### Measurement

A questionnaire consisting of two parts was applied to the study. The first part contained the socio-demographic and professional data: age, gender, marital status, education level, religion, the workplace and the form of employment, the number of working years, and additional postgraduate education. Moreover, the nurses were asked about their personal experiences related to disease and death. The other component was the Death Attitude Profile-Revised (DAP-R) by Wong et al. [5] in the Polish adaptation by Brudek et al. [12]. The questionnaire contains 32 statements referring to attitudes toward death in 5 dimensions: fear of death (7 items), death avoidance (5 items), neutral acceptance (5 items), escape acceptance (5 items), and approach acceptance (10 items). The overall score ranges from 32 points to 224 points. The respondents were asked to declare how they agree with each statement by selecting the answer on a 7-point scale where 7 points refer to "strongly agree" while 1 point means "strongly disagree". Each subscale (1 to 7 scoring points) represents one of five attitudes towards death. A higher score indicates a stronger tendency to demonstrate a particular attitude. The reliability of the DAP-R questionnaire was validated using Cronbach's alpha. The internal consistency was satisfactory, with  $\alpha = 0.863$ .

### Statistical analysis

The assumed significance level was  $p \geq 0.05$ . For the analysis of quantitative data presented in groups, non-parametric tests (the Man-Whitney U or the Kruskal-Wallis with *post-hoc* tests) were applied. For the analysis of correlations between quantitative variables, the Spearman test was used. The tests were selected based on the distribution of variables which was verified using the Shapiro-Wilk test. The calculations were performed in the SPSS Statistics and MS Office 2019 programs. Results were presented as medians and interquartile range.

## Results

### Participants

Overall, 310 and 50 members of the nursing staff in the National Research Institute of Oncology and in the stationary hospices, respectively, were invited to participate in the study. The questionnaire was completed by 196 respondents (62.2% return

rate), of which 35 questionnaires were not included in the analysis due to incomplete items or double answers. As the number of stationary adult hospices was limited and they usually employ a small number of nurses, a comparison of the staff attitudes between both kinds of institutions revealed a numerical diversity.

In total, 159 respondents participated in the study, including 127 nurses who declared a hospital or a cancer institute as the primary workplace and 32 nurses employed in stationary hospices. In the study group of the medical staff, the largest subgroup included the female personnel (87.4%), with a bachelor's (40.5%) or master's (41.1%) degree, having a personal relationship (65.4%), being a member of the Roman Catholic Church (61.0%), with the employment agreement (81.8%) (Table 1).

The mean age of the respondents was 43.58 (SD = 12.81) years, the mean number of their overall working years was 17.94 (SD = 13.16), and the mean number of their working years in the oncology department or the hospice was 12.51 (SD = 9.86). Concerning the attitudes towards death, the median results for the particular dimensions were as follows: approach acceptance: Me = 42, fear of death: Me = 27, neutral acceptance: Me = 29, death avoidance: Me = 17, and escape acceptance: Me = 21 (Table 2). There were no correlations with significant *p* values between the particular death attitude dimensions and the respondents' age, the overall number of working years, and the number of working years in the oncology department or the hospice.

The analyses of relationships between the attitude towards death and sociodemographic and professional variables show that there were differences with significant *p* values between neutral acceptance and the workplace of the respondents ( $p = 0.001$ ). Higher values in this median were observed among the members of the oncology hospital staff (Me = 29). No differences were shown between fear of death, death avoidance, approach acceptance, death acceptance, and the respondents' workplace were confirmed. The differences were demonstrated between fear of death ( $p = 0.02$ ), approach acceptance ( $p = 0.008$ ), escape acceptance ( $p = 0.04$ ), and the respondents' gender. There were no differences between the nursing staff's attitudes towards death and their marital status. The differences were confirmed between escape acceptance ( $p = 0.006$ ), death avoidance ( $p = 0.049$ ), and the respondents' education levels. Differences with significant *p* values were observed between fear of death ( $p < 0.001$ ) as well as death avoidance ( $p < 0.001$ ) and the sense of comfort during a conversation about death (Table 3).

Table 1. Characteristics of the study group

| Characteristic  | N   | [%]  |
|---|-----|------|
| <b>Gender</b>   |     |      |
| Female  | 139 | 87.4 |
| Male  | 20  | 12.6 |
| <b>Marital status</b>   |     |      |
| In a relationship   | 104 | 65.4 |
| Not in a relationship   | 55  | 34.6 |
| <b>Education</b>  |     |      |
| Secondary-level medical degree  | 28  | 17.7 |
| Bachelor degree   | 64  | 40.6 |
| Master degree   | 66  | 41.7 |
| <b>Primary workplace</b>  |     |      |
| Oncology hospital   | 127 | 79.9 |
| Hospice   | 32  | 20.1 |
| <b>Religion*</b>  |     |      |
| Does not state religion   | 30  | 18.9 |
| Roman Catholicism   | 97  | 61.0 |
| Christianity  | 14  | 8.8  |
| Other   | 3   | 1.8  |
| <b>Palliative care specialty</b>  |     |      |
| Yes   | 22  | 13.9 |
| No  | 125 | 79.1 |
| In the process  | 11  | 7.0  |
| <b>Cancer nursing specialty</b>   |     |      |
| Yes   | 45  | 28.3 |
| No  | 103 | 64.8 |
| In the process  | 11  | 6.9  |
| <b>Additional postgraduate education</b>  |     |      |
| Yes   | 39  | 24.7 |
| No  | 111 | 70.3 |
| In the process  | 8   | 5.1  |
| <b>Previous experience in oncology, hospice, or palliative care in addition to the current work</b> |     |      |
| Yes   | 58  | 36.5 |
| No  | 101 | 63.5 |
| <b>Form of employment</b>   |     |      |
| Contract of employment  | 130 | 81.8 |
| Mandate contract  | 13  | 8.2  |
| Self-employment   | 15  | 9.4  |
| <b>Family history of a serious cancer</b>   |     |      |
| Yes   | 94  | 59.1 |
| No  | 65  | 40.9 |
| <b>Caring for a terminally ill family member</b>  |     |      |
| Yes   | 92  | 57.9 |
| No  | 67  | 42.1 |
| <b>Previous participation in a life-threatening incident</b>  |     |      |
| Yes   | 58  | 36.5 |
| No  | 101 | 63.5 |
| <b>Sense of comfort during a conversation about death</b>   |     |      |
| Definitely yes  | 33  | 20.9 |
| Probably yes  | 60  | 38.0 |
| Difficult to assess   | 34  | 21.5 |
| Probably no   | 23  | 14.6 |
| Definitely no   | 8   | 5.1  |

\* Atheism was indicated by 15 (9.4%) nurses

Table 2. Median scores of DAP-R

| Dimensions          | Q25   | Me    | Q75   |
|---------------------|-------|-------|-------|
| Fear of death       | 22.00 | 27.00 | 35.00 |
| Death avoidance     | 11.00 | 17.00 | 22.00 |
| Approach acceptance | 34.00 | 42.00 | 55.00 |
| Escape acceptance   | 17.00 | 21.00 | 26.00 |
| Neutral acceptance  | 25.00 | 29.00 | 32.00 |

DAP-R — Death Attitude Profile-Revised; Me — median; Q25 — first quartile; Q75 — third quartile

This study did not confirm any differences between the attitude towards death and the palliative care or cancer nursing specialty. It was demonstrated that the nurses participating in the postgraduate courses manifested neutral acceptance ( $p = 0.005$ ) significantly more frequently than the other respondents.

No differences were confirmed between the particular death attitude dimensions and a family history of serious cancer or experience in caring for a terminally ill family member. The nursing staff members who had been involved in a life-threatening incident demonstrated higher scores ( $p = 0.03$ ) concerning fear of death compared to the staff without such experience 26.4.

## Discussion

The aim of this study was an analysis of attitudes towards death among the nursing staff in hospices and oncology departments. Concerning approach acceptance and escape acceptance, the overall findings of the study revealed far higher scores compared to those obtained by Cardoso et al. [13] among nurses employed in various hospital departments, divided into two groups: nurses taking care of COVID-19 patients (with a high risk of death) and nurses working in other units. The mean results for the study participants regarding approach acceptance and escape acceptance were 37.16 ( $SD = 11.675$ ) and 15.42 ( $SD = 6.010$ ), respectively [13]. Compared to the findings of the present study, far lower scores for each attitude dimension were observed in the study conducted by Zhang et al. [1] among nurses working in various hospital departments. In the analysis of data collected in the group of Polish nurses, the most common attitudes were fear of death and natural acceptance of death while the least frequent dimension was death avoidance [14].

It was confirmed that neutral acceptance was more common among the nursing staff in oncology departments compared to the nurses working in hospices. The literature data concerning studies

Table 3. The differences between attitudes towards death and the workplace, gender, education, the sense of comfort during a conversation about death

|  | Fear of death  | p-value | Death avoidance | p-value | Approach acceptance | p-value | Escape acceptance | p-value | Neutral acceptance | p-value |
|--|----------------|---------|-----------------|---------|---------------------|---------|-------------------|---------|--------------------|---------|
| <b>Primary workplace<sup>†</sup></b>   |                |         |                 |         |                     |         |                   |         |                    |         |
| Oncology hospital  | 27 (22–37)     |         | 16 (11–23)      |         | 42 (34–55)          |         | 21 (17–27)        |         | 29 (26–32)         |         |
| Hospice  | 25 (19.5–31)   | 0.12    | 19 (13–21.5)    | 0.53    | 42.5 (34.5–59.5)    | 0.64    | 22 (18.5–23.5)    | 0.81    | 26 (18.5–29.5)     | 0.001** |
| <b>Gender<sup>†</sup></b>  |                |         |                 |         |                     |         |                   |         |                    |         |
| Female   | 28 (22–37)     |         | 18 (11–22)      |         | 43 (36–56)          |         | 21 (18–26)        |         | 29 (25–32)         |         |
| Male   | 22.5 (18–28.5) | 0.020   | 14 (11.5–19.5)  | 0.42    | 38 (22–45.5)        | 0.008*  | 18.5 (12.5–23)    | 0.043   | 29 (27.5–31)       | 0.85    |
| <b>Education<sup>††</sup></b>  |                |         |                 |         |                     |         |                   |         |                    |         |
| Secondary-level medical degree   | 31.5 (22–38)   |         | 20.5 (11–28.5)  |         | 45.5 (39.35)        |         | 24 (20–31)        |         | 29.5 (26.5–32)     |         |
| Bachelor degree  | 27 (22.5–34.5) | 0.27    | 18 (12–21)      | 0.049   | 44 (37.5–56.5)      | 0.079   | 20.5 (16.5–24.5)  | 0.006*  | 27.5 (23.5–30.5)   | 0.055   |
| Master degree  | 26 (21–35)     |         | 15 (10–21)      |         | 40 (31–54)          |         | 20 (17–25)        |         | 29 (25–32)         |         |
| <b>Sense of comfort during a conversation about death<sup>††</sup></b>   |                |         |                 |         |                     |         |                   |         |                    |         |
| Definitely yes   | 21 (16–29)     |         | 11 (8–20)       |         | 39 (28–50)          |         | 20 (15–23)        |         | 29 (22–33)         |         |
| Probably yes   | 24.5 (21–34)   |         | 14 (9–20.5)     |         | 45.5 (36.5–60)      |         | 21.5 (16.5–26.5)  |         | 29.5 (27.5–32)     |         |
| Difficult to assess  | 28.5 (24–33)   | 0.001** | 18 (14–22)      | 0.001** | 42 (36–55)          | 0.34    | 22 (19–25)        | 0.56    | 28 (25–31)         | 0.069   |
| Probably no  | 39 (25–43)     |         | 22 (17–26)      |         | 42 (38–55)          |         | 20 (19–26)        |         | 27 (23–30)         |         |
| Definitely no  | 42 (32.5–49)   |         | 30.5 (29.5–35)  |         | 48.5 (24–65)        |         | 25 (18–33)        |         | 27.5 (25.5–31)     |         |
| Definitely yes vs. difficult to assess (p = 0.009)<br>Definitely yes vs. probably no (p < 0.001)<br>Definitely yes vs. definitely no (p < 0.001)<br>Probably yes vs. probably no (p < 0.001)<br>Probably yes vs. definitely no (p = 0.002)<br>Difficult to assess vs. probably no (p = 0.027)<br>Difficult to assess vs. definitely no (p = 0.031)<br>Definitely yes vs. difficult to assess (p = 0.037)<br>Definitely yes vs. probably no (p < 0.001)<br>Definitely yes vs. definitely no (p < 0.001)<br>Probably yes vs. probably no (p < 0.001)<br>Probably yes vs. definitely no (p < 0.001)<br>Difficult to assess vs. definitely no (p < 0.001)<br>Probably no vs. definitely no (p = 0.022) |                |         |                 |         |                     |         |                   |         |                    |         |

† U Mann–Whitney test; †† ANOVA Kruskal–Wallis with post-hoc tests; \* p &lt; 0.01; \*\* p &lt; 0.001

involving only oncology nurses show it was a prevailing attitude [2, 15]. Zheng et al. [15] confirmed the lowest median score for escape acceptance in the group of oncology nurses. In a study aiming to assess the relationship between the attitude toward death and oncology nurses' spiritual care competence, Li et al. [2] obtained a mean score of 27.67 (SD 6.65) for approach acceptance.

The study conducted by Peters et al. [3] shows that palliative care nurses usually demonstrated a positive attitude towards death and dying while emergency care nurses reported higher scores for death avoidance and far poorer skills in coping with death compared to palliative care nurses. The palliative care nurses demonstrated high acceptance of death reality (neutral acceptance 82%). The most common attitudes revealed in studies with the nursing staff of various departments (including nurses in oncology units and palliative care institutions) were approach acceptance and neutral acceptance [16, 17]. Oncology and hematology nurses demonstrated significantly higher scores for fear of death, death avoidance, and escape avoidance compared to palliative care nurses in the study conducted by Gama et al. [18].

The study found that female nurses significantly more frequently demonstrated fear of death, approach acceptance and escape acceptance. Few studies indicated escape acceptance as a more common attitude among males [19]. Male nursing students reported higher scores for approach acceptance but lower scores for fear of death and death avoidance compared to female students [20]. It was observed that the attitudes adopted by females and males were natural acceptance and fear of death, respectively [14]. It is worth mentioning that the male group in this study constituted only 12% of the respondents so it cannot be a representative group.

It was shown that the participants' age and marital status were not associated with the nursing staff's attitudes towards death. In the study by Duran et Polat [4], hospital nurses demonstrated positive death attitudes and a low level of fear of death. Approach acceptance was high among younger nurses while a strong escape approach was observed among single individuals. Younger and older respondents more commonly reported fear of death and neutral acceptance, respectively, in the study conducted by Cybulska et al. [14] concerning marital status, a correlation with natural acceptance of death was observed.

Professional experience and continuing education are also important issues in the process of creating nurses' attitudes toward death. The study did not confirm any correlation between the duration of nurses' working lives and their attitudes towards death.

Previous experience in oncology, hospice, or palliative care in addition to the current work was associated with a higher tendency towards fear of death. A positive correlation between the duration of nurses' working life and escape acceptance was observed in the study by Duran and Polat [4]. This may suggest that the nurses developed strategies for coping with dying and death based on emotions. Consistent reports indicate that nurses who are at the beginning of their job careers demonstrate stronger fear of death and more negative attitudes toward caring for patients during their terminal stages of life than more experienced nurses [21]. The present study demonstrated that the nursing staff with the secondary-level medical degree more commonly demonstrated the attitudes of escape acceptance and death avoidance. In a study involving the nursing staff with a similar education level distribution (excluding the PhD degree), diverse attitudes toward death were not confirmed [14]. The fact that lower education and experience levels may be associated with negative attitudes was demonstrated in the study conducted by Cevik and Kav [17] among nurses working in various hospital departments (12.3% of the study participants in oncology units).

Having oncology and palliative care specialties was not connected with the participants' attitudes towards death while additional education frequently resulted in adopting neutral acceptance among the staff. The findings of the study by Gama et al. [18] show a higher level of escape acceptance among nurse specialists. Moreover, palliative care nurses reported a weaker fear of death, death avoidance and escape acceptance compared to oncology care specialists.

Death-related personal experience appears to be a factor that facilitates coping positively with new situations at work and in personal life. This suggests that longer professional experience results in a weaker fear of death and a more positive attitude to nursing care. No correlation was observed between the attitude towards death and a family history of serious cancer or the experience of caring for a terminally ill family member. Compared to the nursing staff with no experience in providing care to dying patients, the more experienced nurses demonstrated higher scores for natural acceptance in the study by Xie et al. [20]. A study aiming to analyze nurses' attitudes towards death as well as death-related experience and care provided to dying patients confirmed a less positive attitude towards delivering care to dying patients among nurses with a stronger fear of death [17]. Another factor associated with the attitude towards death that was found was the sense of comfort during a conversation about death. The highest scores were reported for fear of death which correlated with a lack

of freedom in a discussion and for death avoidance analogically associated with death fear.

The discussed issue is very important for nursing practice and further development. This study helps better understand the factors related to nurses' attitudes towards death, which is useful for planning effective nursing training strategies at the pre- and postgraduate stages.

However, the present study has its limitations. This study involves a small sample of palliative care specialists compared to oncology nurses. A purposive sampling was used which is prone to researcher bias. The study group was fairly homogenous in terms of gender. A small number of respondents participated in the study, which limits the potential to generalize the study findings for the overall population of the nursing staff in oncology departments and stationary hospices. No data were collected concerning the work environment of the nursing staff.

## Conclusions

Oncology nurses show a higher tendency towards neutral acceptance compared to the hospice staff. The respondents with a secondary level education demonstrated a higher tendency towards escape acceptance and death avoidance. Nurses with previous experience in oncology, hospice, or palliative care in addition to their current job demonstrate a higher tendency towards fear of death.

## Article information and declarations

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None.

### Data availability statement

The datasets used and/or analyzed in the current study are available from the corresponding author upon reasonable request.

### Ethics statement

The study was carried out by the Declaration of Helsinki principles. The Bioethics Committee at the Medical University of Warsaw acknowledged the study design (No. AKBE/313/2023).

### Author contributions

Study concept and design — KK (60%), EK (40%); data collection — KJ (100%); data analysis — KJ (60%), EK (40%); preparation of the original version of the manuscript: KJ (100%); literature review — KJ (60%), EK (40%); preparation and approval of the final version of the manuscript: KJ (60%), EK (40%).

### Conflict of interest

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

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### Supplementary material

None.

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