

## Death attitude and its associated factors in institutionalized elderly: a cross-section study in North Eastern Delta, Egypt

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**Abstract:** Death is an unavoidable, unequivocal, and universal experience, common to all. Despite the reality that it reaches every person's life at one time or another, elderly differ in the ways they view death. The aim of the study was to describe death attitude and its associated factors in institutionalized elderly in North Eastern Delta, Egypt. A Correlation cross-sectional research design was used. Elderly subjects, aged 60 and above (n = 106), were recruited from four governmental assisted living institutions in Egypt. Elderly were interviewed on attitude toward death, loneliness, life satisfaction and health status. The study demonstrated that, approach acceptance was the most reported death attitude by elderly followed by escape acceptance and fear of death. Significant moderate correlations were found between death attitude subscales and loneliness, life satisfaction, health status and number of comorbidities. Finding ways to promote a sense that social relationships are important in diminishing fear of death among elderly. Nurses should discuss issues of death periodically with elderly and their families in order to diminish the development of negative attitudes toward death.

**Keywords:** death attitude, institutionalized elderly.

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### I. Introduction

Elderly people frequency is increasing faster than any other age group, as a result of both decreasing fertility rates and longer life expectancy.<sup>1</sup> According to a report by the Central Agency for Public Mobilization and Statistics, the elderly people frequency in Egypt in 2017 reached 6.36 million people, which accounts for about 6.4% of the total population. This percentage is expected to reach 11.5 % of the total Egyptian population by 2031.<sup>2</sup> Therefore, this significance increase of elderly population percentage, requires for assertive paying attention on the health-related needs and concerns of the elderly population.<sup>3</sup> Although several studies investigated the important factors that affect the elderly health well-being in different settings, little is known about the predictors of health well-being for the specific subgroup such as institutionalized elderly population (e.g. geriatric homes).<sup>4</sup> Elderly people who are moved to live in geriatric homes are facing challenges related to new life routine and surrounding environment. Maladaptation to these changes in new living conditions may lead to several serious psychosocial health problems as anxiety, major depression, dissatisfaction with new life routines and activities, loneliness and isolation, and absence of supportive social networks and social activities. In this context, the previous recent study shown that support from close relatives and good social relationships may be considered as an effective factors against death anxiety, whereas the findings support the idea of disturbance of such relations may lead to serious psychosocial health disorders and its complications such as suicidal ideations and attempts.<sup>4,5</sup>

It is obvious that individuals at the later stage of life have an augmented question about one's existence that can't be ignored by a mortal human.<sup>6</sup> Death is the unique universal experience that affects all of elderly people in ways more than they care to know. Yet, it is very essential to be aware of the fact that old age people differ in the ways they view of death.<sup>7</sup> Most of the current researches on death attitudes have concentrated solely on individuals' anxiety or fear associated with dying and death.<sup>6, 8, 9</sup> It appears simplistic however, there is doubt to assume that elderly individuals who already have lived the large part of their lives hold a singular fear-driven attitude toward death. Conceptualizations of that, the elderly at the last stage of their lives have an acceptance and approaching attitudes should be considered. In this context, positive as well as negative attitudes as fear and avoidance of death are identified among elderly. The fear of death is characterized by dreading it, and avoidance with the attitude of doing what is not possible to think or talk about it.<sup>10,11</sup> On the other hand, positive attitude toward death denotes the acceptance of death. This positive attitude can be classified into three types; neutral, escape and approach. Neutral acceptance is characterized as the understanding that death is a

normal and natural part of life stages. Escape acceptance refers to the acceptance of death as an alternative to unbearable stressors of life. Approach acceptance focuses on the belief in a pleasant and happy life after death.<sup>9,10</sup>

The factors affecting death attitude among the elderly people is still debatable.<sup>12,13</sup> The current literature showed that is still not clear known about the limitations in the approaches that have been taken to assess death concerns in elderly people. However, several literatures suggest that individuals' death attitude, specifically among elderly people, may be anticipated by many factors such as age, gender, educational status, religious aspect, social support, physical health, psychological factors, life satisfaction, place of residence, self-esteem, and individuals' perspectives about the purpose in life.<sup>14-18</sup> Yet, peer reviewed published studies about death attitude in Egypt is still limited and are not focused on the elderly people, particularly institutionalized elderly group. Therefore, it is very important to improve our knowledge regarding this health issue. Studying of the institutionalized elderly death attitude and its predictors would help the nurses to clarify the needs for mental health services in this population group, which are targeting specific symptoms such as anxiety, fear, loneliness, and perception of life and death.<sup>4,5</sup> In addition, assessing death attitude and its related factors would be useful information for developing therapeutic and educational programs that aim to diminish death fears in elderly individuals. Moreover, the findings of such study may helpful to promote further studies in the future in enhancing personal growth or life reviews. Therefore, this study aims to describe death attitude and its associated factors in institutionalized elderly in North Eastern Delta, Egypt.

**Research questions:** This study proposed to answer the following research questions: 1) What is the participants' attitude regarding death?; 2) Are there any significant correlation between death attitudes of participants, and participants' demographical characteristics, the total number of co-morbidities, health status, loneliness, and satisfaction with life?; and 3) What are the predictors of different attitudes toward death among this study's participants?

## **II. Subjects And Method**

### **Research design:**

Correlation cross-sectional research design was used.

### **Setting:**

The study was conducted in four governmental assisted living facilities (elderly homes) in North Eastern Delta, Egypt namely; Dar El-Amal in Mansoura city (total number of residents were 29) and Dar El-Walaa in Meet Ghamr city (total number of residents were 27) both are in Dakahlia governorate, Dar Kebar Elsen in Ras Elbar city (total number of residents were 22) in Damietta governorate and El Takreem elderly home which affiliated to Mabaret El Moslemeen Association in Port Said Governorate (total number of residents were 70).

### **Subjects:**

The target population included all elderly persons of both genders who live in the above mentioned settings and fulfilling the following criteria; aged 60 years and above, able to communicate and cooperate, free from any psychiatric problems, eliminating those residents who had terminal diagnosis or had experienced a loss of a significant other within the last 6 months. One hundred and twenty residents were in elderly homes at the time of study and they were asked to participate in the study, but 6 (5%) and 8 (6.7%) of them were not interested in the study and were not fulfilling the inclusion criteria; respectively, leaving 106 (88.3%) of them completed the interview.

### **Tools:**

The structured interview schedule was designed in Arabic by researchers. It composed of five parts. The first part included **demographic and medical data** as age, gender, marital status, education level, income, and number of comorbidities. The second part was **Self-Rated Health**. It is a widely used measure of general health. Respondents were asked an internationally used question: 'How would you rate your health? And they rated their own health by using a five-point scale "very good, good, fair, bad and very bad".<sup>19</sup> The third part was **Death Attitude Profile-Revised Scale**. It developed by Wong, Reker, & Gesser (1994)<sup>10</sup> and used to measure elderly attitudes toward death. This scale is a 32-item multidimensional measure of death attitudes that incorporates five subscales: (a) Fear of death, (b) Death avoidance, (c) Neutral acceptance, (d) Approach acceptance, and (e) Escape acceptance. Fear of death consisted of the average of seven items e.g., "I have an intense fear of death." "The prospects of my own death arouses anxiety in me."; death avoidance was the mean of five items (e.g., "Whenever the thought of death enters my mind, I try to push it away." "I avoid thinking about death altogether."); approach acceptance of death was the average of ten items (e.g., "Death is an entrance to a place of ultimate satisfaction." "I believe that heaven will be a much better place than this world."); neutral acceptance of death was the mean of five items (e.g., "Death is simply a part of the process of life."; and escape

acceptance was the average of five items (e.g., "Death is deliverance from pain and suffering"). The response format is a 7-point, Likert-type scale ranging from strongly disagree (1) to strongly agree (7) for each dimension. For each dimension, a mean scale score was computed by dividing the total scale score by the number of items forming each scale. The higher scores indicating stronger endorsement of each attitude. The fourth part was **Satisfaction with Life Scale (SWLS)**. SWLS developed by Diener et al (1985)<sup>20</sup> to measure individual's evaluation of satisfaction with life as a whole. It consists of five items on a 7 point Likert scale whereas strongly agree = 7 and strongly disagree = 1. Scores range from 5 to 35 with higher scores indicating greater life satisfaction. The scale was translated into Arabic and tested for its validity and reliability by Abdallah (1998).<sup>21</sup> The reliability was assured by the Cronbach's alpha coefficient  $\alpha=0.79$ . The fifth part was **The UCLA Loneliness Scale – Version 3 (UCLA LS3)**. The UCLA LS3 developed by Russell (1996).<sup>22</sup> It consists of 20 items that measure the subjective feelings of loneliness. The UCLA LS3 was developed and revised from the original version including eleven negative or lonely items and nine positively or non lonely items. All the statements begin with a stem of "how often do you feel . . .," and each item has a 4-point Likert scale ranging from 1 (never) to 4 (always). Final scores range from 20 to 80 with higher scores indicating stronger perception of loneliness.

Death Attitude Profile–Revised scale and UCLA LS3 were initially independently translated into Arabic by researchers and tested for content validity by a jury of 5 experts in the related fields. Test-retest reliability was measured in the pilot study and interclass correlation ranged from 0.71 to 0.93 for different items. Their internal reliability was measured by means of Cronbach's coefficient alpha. It indicated that Death Attitude Profile–Revised Scale and UCLA LS3 have a reliability of 0.86 and 0.88; respectively. A pilot study was carried out on 20 elderly to evaluate the ambiguity, clarity and applicability of the tools. Consequently, the necessary modifications were done. After establishing a trustful relationship, each elderly was interviewed by the researchers. Time taken for each interview ranged from 30-45 minutes. The data collection covered a period of 6 months from July 1 to December 31, 2017.

**Ethical considerations of the study:**

Permission to conduct the study was obtained from the Ethics Committees of Mansoura and Port Said Faculties of Nursing. An official letters were issued from the Faculty of Nursing at Mansoura and Port Said Universities and forwarded to the director of each residential home administrator separately in order to obtain his approval to carry out the study. Prior to enrolment, each participant received oral information about the aim of the study and they were informed that data collected will be used only for the research purpose then verbal consent was obtained from them. It was emphasized that their participation in the study was optional. Confidentiality and anonymity of participants and their responses were assured and their rights to withdraw from the study any time without penalties was maintained.

**Data analysis:**

Data was analyzed using SPSS program version 16 (SPSS Corporation, Illinois, Chicago, USA). Qualitative variables were presented as number and percent. Quantitative variables were presented as mean (SD) as well as median (minimum-maximum); as appropriate. Spearman (ranks) correlation coefficient was used to calculate correlation between variables. Significant correlations were entered into a stepwise linear regression to find out the independent predictors of the different domains of death attitude scale. Overall and added R<sup>2</sup> were calculated. P≤0.05 was considered statistically significant.

**III. Results**

**Table 1:** Demographic characteristics of studied elderly (N=106)

|                         |                | N (%)     |
|-------------------------|----------------|-----------|
| Age (Mean ± SD) (years) |                | 68.95±6.3 |
| Men gender              |                | 48(45.3)  |
| Marital status:         | Single         | 8(7.5)    |
|                         | Married        | 6(5.7)    |
|                         | Widow          | 76(71.7)  |
|                         | Divorced       | 16(15.1)  |
| Educational level :     | Illiterate     | 28(26.4)  |
|                         | Read and write | 22(20.8)  |
|                         | Primary        | 32(30.2)  |
|                         | Preparatory    | 9(8.5)    |
|                         | Secondary      | 12(11.3)  |
| University              | 3(2.8)         |           |
| Satisfactory income     |                | 62(85.5)  |

Table 1 shows that the mean age of studied elderly was  $68.95 \pm 6.3$  years, 45.3% were men, 71.7 % were widow, 26.4% and 20.8% were illiterate or just read and write; respectively and 85.5% had satisfactory income.

**Table 2:** Descriptive statistics of the different domains of death attitude scale, life satisfaction and loneliness (N=106 )

| Domain              | Possible score<br>(min-max) | Mean $\pm$ SD   | Median (min-max) |
|---------------------|-----------------------------|-----------------|------------------|
| Fear of death       | (7-49)                      | 24.6 $\pm$ 14.3 | 32(7-49)         |
| Death avoidance     | (7-35)                      | 18.3 $\pm$ 9.5  | 20.5(5-29)       |
| Neutral acceptance  | (7-35)                      | 20.6 $\pm$ 6.3  | 19(11-35)        |
| Approach acceptance | (7-70)                      | 43.1 $\pm$ 11.2 | 39(30-70)        |
| Escape acceptance   | (7-35)                      | 25.7 $\pm$ 6.8  | 25(11-35)        |
| Life satisfaction   | (5-35)                      | 16.2 $\pm$ 9.2  | 12(5-35)         |
| Loneliness          | (20-80)                     | 53.5 $\pm$ 15.3 | 55.5(20-77)      |

Table 2 shows that the mean score of fear of death, death avoidance, neutral acceptance, approach acceptance and escape acceptance were  $24.6 \pm 14.3$ ,  $18.3 \pm 9.5$ ,  $20.6 \pm 6.3$ ,  $43.1 \pm 11.2$  and  $25.7 \pm 6.8$ ; respectively. The mean scores of life satisfaction and loneliness scales were  $16.2 \pm 9.2$  and  $53.5 \pm 15.3$ ; respectively.

**Table 3:** Correlation coefficients (r) between the different domains of death attitude scale and loneliness, satisfaction with life, demographic, health status and co morbidities.

|                                       | Fear of death | Death avoidance | Neutral acceptance | Approach acceptance | Escape acceptance |
|---------------------------------------|---------------|-----------------|--------------------|---------------------|-------------------|
| Loneliness                            | 0.34***       | 0.34***         | -0.53***           | -0.19               | 0.66***           |
| Satisfaction with life                | -0.36***      | -0.34***        | 0.36***            | 0.33***             | -0.51***          |
| Age                                   | -0.18         | -0.18           | -0.17              | 0.12                | 0.17              |
| Marital status                        | 0.07          | 0.1             | -0.01              | -0.05               | 0.002             |
| Educational level                     | 0.17          | 0.09            | -0.22*             | -0.03               | 0.19              |
| Income                                | 0.1           | 0.01            | -0.27**            | -0.02               | 0.18              |
| Health status                         | -0.01         | -0.02           | 0.33***            | -0.1                | -0.5***           |
| Number of diseases<br>(comorbidities) | 0.4***        | 0.45***         | -0.5***            | -0.4***             | 0.55***           |

\*, \*\*, \*\*\* significant r at  $P \leq 0.05$ ,  $P \leq 0.01$  and  $P \leq 0.001$ ; respectively

Table 3 reveals that there were significant moderate positive correlation between fear of death and loneliness and number of comorbidities. However a significant moderate negative correlation was found between fear of death and life satisfaction. There were significant moderate positive correlations between death avoidance and loneliness and number of comorbidities. On the other hand, significant moderate negative correlation was found between death avoidance and satisfaction with life. The table also shows that there were significant moderate negative correlation between neutral acceptance and loneliness, educational level, income and number of comorbidities whereas a significant moderate positive correlation was found between neutral acceptance and life satisfaction and health status. It appears from the table that there was a significant moderate positive correlation between approach acceptance of death and life satisfaction. In addition, there were significant moderate negative correlation between approach acceptance of death and number of comorbidities. It was noticed that escape acceptance was correlated significantly, moderately and positively with loneliness and number of comorbidities. However a significant moderate negative correlation was found between escape acceptance, life satisfaction and health status. Regarding gender, The mean scores of fear of death, death avoidance, neutral acceptance, approach acceptance and escape acceptance were  $21.0 \pm 13.0$ ,  $17.5 \pm 9.6$ ,  $22.5 \pm 6.7$ ,  $43.0 \pm 9.2$  and  $22.9 \pm 5.7$ ; respectively for males while they were  $27.0 \pm 14.9$ ,  $19.0 \pm 9.5$ ,  $19.1 \pm 5.6$ ,  $43.2 \pm 12.7$  and  $28.0 \pm 6.8$  for females. Moreover there were a significant differences between male and female mean scores of fear of death, neutral acceptance and escape acceptance where P value was found to be  $P = 0.05$ ,  $0.006$  and  $\leq 0.001$ ; respectively. (Data not shown in table)

**Table 4:** Linear regression analysis of significant independent predictors of different domains of death attitude scale

|                     |                                    | B(SE)                  | P      | Add R <sup>2</sup> |
|---------------------|------------------------------------|------------------------|--------|--------------------|
| Fear of death       | Number of diseases (Comorbidities) | 2.3(1.0)               | 0.001  | 0.017              |
|                     | Life satisfaction                  | -0.4(0.2)              | 0.023  | 0.04               |
|                     |                                    | Constant=21.2          |        |                    |
|                     |                                    | Model F=13.8, P<0.001  |        |                    |
|                     |                                    | R <sup>2</sup> =0.21   |        |                    |
| Death avoidance     | Number of diseases (Comorbidities) | 3.0(0.6)               | ≤0.001 | 0.2                |
|                     |                                    | Constant=9.7           |        |                    |
|                     |                                    | Model F =26.1, P≤0.001 |        |                    |
|                     |                                    | R <sup>2</sup> =0.2    |        |                    |
| Neutral acceptance  | Loneliness                         | -0.2(0.04)             | ≤0.001 | 0.28               |
|                     | Number of diseases (Comorbidities) | -1.3(0.4)              | 0.001  | 0.08               |
|                     | Income                             | -2.3(1.0)              | 0.026  | 0.03               |
|                     |                                    | Constant=35.6          |        |                    |
|                     |                                    | Model F =21.5, P≤0.001 |        |                    |
|                     |                                    | R <sup>2</sup> =0.39   |        |                    |
| Approach acceptance | Number of diseases                 | -3.1(0.7)              | ≤0.001 | 0.15               |
|                     |                                    | Constant=53.2          |        |                    |
|                     |                                    | Model F =51.9, P≤0.001 |        |                    |
|                     |                                    | R <sup>2</sup> =0.15   |        |                    |
| Escape acceptance   | Loneliness                         | 0.2(0.04)              | ≤0.001 | 0.44               |
|                     | Number of diseases (Comorbidities) | 1.1(0.4)               | 0.012  | 0.07               |
|                     | Health status                      | -1.3(0.6)              | 0.044  | 0.02               |
|                     |                                    | Constant=14.1          |        |                    |
|                     |                                    | Model F =38.2, P≤0.001 |        |                    |
|                     |                                    | R <sup>2</sup> =0.53   |        |                    |

R<sup>2</sup>= coefficient of determination

Table 4 shows that number of diseases and life satisfaction predict 0.21 of the variability of fear of death scale. Number of diseases predicts 0.2 of the variability of death avoidance scale. Loneliness, number of diseases, and income predict 0.39 of the variability of neutral acceptance. Number of diseases predicts 0.15 of the variability of approach acceptance. Loneliness, number of diseases and health status predict 0.53 of the variability of escape acceptance.

#### IV. Discussion

The results of this current study point out that institutionalized elderly participants did not view death as an anxiety aggravating experience. Specifically, they were more likely to view death as an approach to have better life, escape from unendurable conditions of life, and they had less fear of death. These results are similar to previous studies that were conducted in the USA. <sup>23, 24</sup> Lockart et al., (2001) <sup>23</sup> and Parker (2013) <sup>24</sup> found that approach acceptance is the most common attitude reported by elderly people, followed by neutral and escape acceptance. These findings are also consistent with the previous study by Wong et al. (1994) who concluded that elderly people attain lower mean score for fear of death than other attitudes of death. <sup>10</sup>

Attitude toward death is unique to each individual and it is influenced by many factors including satisfaction with life, psychosocial factors, loneliness, health status and demographical characteristics (including age, gender, education level, and economic status). <sup>25-27</sup>

In elderly population, usually the satisfaction of life is subject to an individual's appraisal of past life. With aging, the elderly people tend to withdraw from active society and prepare for a farewell of life and death acceptance. At this stage, the elderly people tend to review and appraise their evolutionary progress in the past. They may come in terms with death more easily if the results of evaluation bring about satisfaction with integrity of existence. This is because the individual reaches a degree of integrity whereby they consider the continuation of their individual life in the products of their creations and in the life of next generations. <sup>14, 28</sup> In this accordance, the result of the current study revealed that there is a significant negative correlation between total scores of fear of death, death avoidance, and escape acceptance subscales that related to death attitude, and satisfaction with life. Moreover, there is a significant positive correlation between total scores of neutral acceptance and approach acceptance subscales that related to death attitude and satisfaction with life. Therefore, these results suggest that more likely of the elderly participants might to accept the facts of their life with less despair and regret, and greater possibility to accept the fact of their approaching death with less anxiety and fear. Whenever, the elderly people perceive of satisfaction and meaningful in their life, in spite of the failures and hardships, then they will be able to confront the reality of their death without extreme anxiety and fear. On the

other hand, if they can't feel of meaningfulness in their lived experience and unable to accept the regrets and reality in their life conditions, death will be considered as major experience of significant psychological health issue such as anxiety, distress, and fear from end of life. Moreover, irresistible feeling regarding of end of life and become died may lead to despair, and depression.<sup>29</sup> Also, the finding of this current study is consistent with other previous studies that were showed there is a significant negative correlation between fear of death and death avoidance approach and satisfaction with life.<sup>12,30</sup> Moreover, the previous studies that were conducted in India<sup>14</sup> and Pakistan<sup>31</sup> showed similar findings. The researchers found that the elderly people who had greater levels of satisfaction with life held a more positive attitude towards aging and had lower levels of death anxiety.<sup>14,31</sup> The findings of this current study were also supported by Given and Range (1990)<sup>32</sup> who found that lower life satisfaction was associated with a high level of fear of death. Thus, having a purposeful and meaningful perception regarding the life can improve satisfaction with life. Therefore, this life satisfaction may give the elderly people a positive feeling of strong self-satisfaction and confidence to preventing them from unnecessary anxiety and developing negative death attitudes.

Supportive social network may reduce individuals' death anxiety and fear of death. Whereas, alteration of such social relations may lead to raise death awareness and concerns. Loneliness is a compound situation and it is usually developed by unpleasant emotional response to isolation. Loneliness may be mainly painful perception as it may trigger the elderly people to remind them to think about death as the eventual loneliness.<sup>33</sup> Death is the symbol of ultimate separation, isolation from human beings and aloneness. In addition to loneliness, the elderly people may also face their approaching death and how painful it could be to face the anticipation of end of life and how to confront the death alone.<sup>33</sup> These ideas in the previous studies were verified in this current study, whereas the findings revealed that there is a significant negative correlation between the total scores of neutral acceptance and approach acceptance subscales that related to death attitude, and the perception of loneliness. Additionally, there is a significant positive correlation between feeling of loneliness, and total scores of fear of death, death avoidance and escape acceptance subscales that related to death attitude. These findings were similar to the findings of the previous study, whereas Azaiza et al. (2010)<sup>34</sup> conducted that social support was negatively related to death anxiety among institutionalized elderly people. The authors also reported that sense of being with supportive family and having social network is an important approach in declining death anxiety.<sup>34</sup>

The current study's findings were verified the previous studies, which are supported the absence of relationships between demographic characteristics and the total scores of death attitude subscales.<sup>35,36</sup> Moreover, Ardelt (2003)<sup>30</sup> and Khorraei (2017)<sup>9</sup> reported that no significant relationship between demographical data (such as age, marital status), and the total scores of fear of death, death avoidance and approach acceptance subscales that related to death attitude. While, the findings of current study showed that there is a significant differences between male and female mean scores of fear of death, neutral acceptance and escape acceptance subscales where females showed higher level of fear of death, death avoidance, and escape acceptance than males. Azaiza et al. (2010)<sup>34</sup> reported that elderly women had a higher level of death anxiety than elderly men. This may reflect, to some degree, based on cultural norms in Arab countries, women are most likely to express and communicate their emotions such as fear. While, men are usually deject in doing so, and they hide their emotions as it is considered a part of their man-hood.<sup>37</sup> On the other hand, Azeem and Naz (2015)<sup>38</sup> concluded that both elderly women and men had an equal level of death anxiety. Also, Lockhart et al. (2001)<sup>23</sup> reported that gender was not a significant predictor of any of death attitudes. While, they reported that age appears as a significant predictor of death attitudes. The authors reported that being older was associated with less fear of death and a greater tendency to view death as an escape from suffering.<sup>23</sup> Death attitude may vary by culture differences and religious believes. For example, in Islamic population, religiosity was closely related to perceptions of refusing fear of death among Islamic believers and the majority of elderly people may turn to religion believes and faith of God to overcome death anxiety and fear.<sup>39</sup> Several studies were showed that elderly people with a higher educational level were less likely, to wish their life is extended, than those with lower educational level. Also, those with higher educational levels had significant association to have less fear of death.<sup>17,34</sup> In contrast, other previous research showed that the elderly people, who didn't know how to read or write, had lower level of fear of death than those who had primary and secondary education degree.<sup>35</sup>

In term of perceived health status, finding of this current study revealed that there is a significant negative relationship between health status and escape acceptance of death. However, there is a significant positive correlation between health status and neutral acceptance of death. These findings were with a previous study that conducted in the USA.<sup>23</sup> Lockart et al. (2001)<sup>23</sup> reported that health perception was significant negative correlated with fear and escape approach. Additionally, the findings of current study showed that the number of diseases (comorbidities) were significant positive correlated with fear of death, death avoidance, and escape acceptance. On the other hand, the number of diseases (comorbidities) were significant negative correlated with neutral and approach acceptance. This suggests that the institutionalized elderly people who suffer of many comorbidities had negative attitude toward death as they had more fear of death and avoid

thinking about death or view it as an escape from suffering. In this regard, Lockart et al. (2001)<sup>23</sup> found that there is a significant positive correlation between health problems, and escape acceptance. While, Ardelt (2003)<sup>30</sup> reported that subjective health was significant positive correlated with approach acceptance of death.

With regard to independent predictors of attitude toward death among institutionalized elderly, this current study showed that number of diseases and life satisfaction were significant predictors of fear of death. This finding is consistent with the results of Parker (2013)<sup>24</sup> who reported that elderly people, who had ability to find meaning of life and accept the past life, had less amount of avoidant and fearful attitudes toward death. These findings are also consistent with principles of Erikson's theory of ego integrity. Whereas, Erikson stated in his theory that the individuals who have lived a significant life and achieve ego integrity, they are able to face death without fear or anxiety.<sup>29</sup> Moreover, Roshani (2012)<sup>14</sup> concluded that aging is a stage whereas the elderly people appraises the results of their accomplishments over their lifespan, and they evaluate their past. Thus, when they noticed of significant and major accomplishments, they may experience of lower levels of death anxiety and feel satisfied. However, when the elderly people have lived a life with full pains and they unfulfilled their expectations, the aging may result in mental crisis. So, the elderly people may perceive of worthlessness of being alive and may suffer of death anxiety and fear of death.<sup>14</sup>

The physical pain of illness or the emotional suffering from grief and loss may contribute to feelings of wanting to escape from painful existence. From this standpoint, the results of the current study reflects that the number of diseases and perceived health status were significant predictors of the total score of escape acceptance subscale. Lockhart et al. (2001)<sup>23</sup> reported that perceived health status was the only significant predictor of escape acceptance attitude. Individuals with poorer perceived health status were significantly associated with having greater perception to perhaps death as an escape approach from negative existence.<sup>23</sup> In addition, the previous study that conducted in the USA<sup>40</sup>, the researchers found that self-rated health status was not a significant predictor of fear of death. Also, they reported that physical and emotional health factors were significant predictors for fear of death. Increased anxiety and higher functioning were not only predict the greater fear of death, but they were accounted as significant predictors with higher percentage of the difference in explaining death fears than other variables.

## V. Conclusion

This study demonstrated that approach acceptance was the most reported death attitude by elderly people, and it followed by escape acceptance and fear of death. The significant moderate correlation was found between death attitude subscales and loneliness, life satisfaction, health status and the number of comorbidities. Among institutionalized elderly, the number of diseases and life satisfaction were predictors of fear of death attitude while the number of diseases was the predictor of avoidance attitude and approach acceptance. Loneliness, number of diseases, and income were predictors of neutral acceptance whereas loneliness, number of diseases and health status were predictors of escape acceptance. The gerontological nurse should discuss issues of death frequently with the elderly people and their families to prevent the development of unhealthy attitudes toward death. Finding ways to foster a sense that one has a supportive social network is important in decreasing fear of death. Therapeutic techniques such as reminiscence therapy, which focuses on reviewing individual's life in attempt to make amends with their past life, and incorporate the whole of life's experiences into meaningful circumstance. Moreover, the elderly could benefit from looking to his past lived experience for the personal resources that may help in facing the dilemmas of the human condition. Qualitative studies are important to investigate the elderly people attitude toward death and meaning of death to elderly persons and their caregivers. Moreover, further studies are essential to spotlight the differences between community dwelling elderly people and those who are living in assisted living facilities.

### Limitation

Despite of the importance of the current study findings, there are few limitations. Using non-probability convenience sampling method and selection the sample from one region in Egypt will increase the selection bias of sample and results in not guaranteed representative sample. Therefore the results can't be generalized to all Egyptian population. The cross-sectional method as a study design does not clearly show the sequential relationship by time and doesn't show the causal and effect relationships between variables.

## References

- [1]. World Health Organization: <http://www.emro.who.int/egypt-infocus/geriatric-care-facilities-provide-tailored-services-for-egypts-ageing-population.html>/retrieved in 14-7-2018.
- [2]. Central Agency for Public Mobilization and Statistics (CAPMAS):[www.campas.gov.eg](http://www.campas.gov.eg) /retrieved in 14-7-2018.
- [3]. Prowle MJ, Araali NA. Meeting the escalating demands for health and social care services of elderly populations in developing countries: a strategic perspective. *American Journal of Medical Research* 2017;4(2): 127-146.
- [4]. Ferreira AR, Dias CC, Fernandes L. Needs in nursing homes and their relation with cognitive and functional decline, behavioral and psychological symptoms. *Frontiers in Aging Neuroscience* 2016;8(72): 1-10.

- [5]. Bektaş H, Körükcü O, Kabukcuoğlu K. Undercover fear of elderly people in nursing homes: Death anxiety and depression. *Journal of Human Sciences* 2017; 14 (1):587-597.
- [6]. Russac RJ, Gatliff C, Reece M, Spottswood D. Death anxiety across the adult years: an examination of age and gender effects. *Death Stud.* 2007;31(6):549–561.
- [7]. Tomer A. *Death attitudes and the older adult: Theories, concepts, and applications.* Washington, DC: Taylor & Francis, 2000.
- [8]. Neimeyer RA, Wittkowski J, Moser RP. Psychological research on death attitudes: an overview and evaluation. *Death stud* 2004; 28: 309-340.
- [9]. Khormaei F, Dehbidi F, HassanZehi E. Prediction of death anxiety based on demographic characteristics and spirituality components in the elderly. *Health, Spirituality and Medical Ethics* 2017;4(2):21-26.
- [10]. Wong P, Reker G, Gesser G. *Death Attitude Profile Revised.* In: Neimeyer R. *Death Anxiety Handbook: Research, Instrumentation and Application (Series in Death Education, Aging and Health Care).* Taylor and Francis, Washington: 1994.
- [11]. Brudek P, Sękowski M, Steuden S. Polish Adaptation of the Death Attitude Profile—Revised. *Journal of Death and Dying.* Available on <http://journals.sagepub.com/doi/abs/10.1177/0030222818754670>
- [12]. Taghiabadi M, Kavosi A, Mirhafez S, Keshvari M, Mehrabi T. The association between death anxiety with spiritual experiences and life satisfaction in elderly people. *Electronic Physician* 2017; 9( 3): 3980-3985.
- [13]. Sinoff G. Thanatophobia (death anxiety) in the elderly: The problem of child's inability to assess their own parent's death anxiety state. *Frontiers in Medicine* 2017; 4:1-5.
- [14]. Roshani K . Relationship between religious beliefs and life satisfaction with death anxiety in the elderly. *Annals of Biological Research* 2012; 3 (9):4400-4405
- [15]. Porter C, Alarcon D, and Padura A. Dwelling conditions and life satisfaction of older people through residential satisfaction. *Journal of Environmental Psychology* 2017; 49:1-7
- [16]. De Paola SJ, Griffin M, Young JR. Death anxiety and attitudes toward the elderly among older adults: the role of gender and ethnicity. *Death Studies* 2003; 27: 335- 354
- [17]. Cicirelli VC. Fear of Death in Older Adults: Predictions from Terror Management Theory. *The Journals of Gerontology* 2002;57(4): 358–366.
- [18]. Suhail K, Akram S. Correlates of death anxiety in Pakistan. *Death Stud.* 2002;26(1):39–50.
- [19]. Idler E. L., Benyamini Y. Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behavior* 1997; 38: 21-37
- [20]. Diener E, Emmons RA, Larsen RJ, Griffin S. The Satisfaction with Life Scale. *Journal of Personality Assessment* 1985; 49 (1): 71-75.
- [21]. Abdallah T. The Satisfaction with Life Scale (SWLS): Psychometric properties in an Arabic-speaking sample. *International Journal of Adolescence and Youth*1998; 7(2): 113-119.
- [22]. Russell D. UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment* 1997; 66: 20-40.
- [23]. Lockhart LK, Bookwala J, Fagerlin A, Coppola KM, Ditto PH, Danks JH, Smucker WD. Older adults' attitudes toward death: links to perceptions of health and concerns about end of life issues. *Omega* 2001; 43(4): 331-347.
- [24]. Parker DW. The relationship between ego integrity and death attitudes in older adults. *American Journal of Applied Psychology* 2013; 2(1): 7-15.
- [25]. Tsai JS, Wu CH, Chiu TY, Hu WY, Chen CY. Fear of death and good death among the young and elderly with terminal cancers in Taiwan. *J Pain Symptom Manage.* 2005;29(4):344–51.
- [26]. Zana A. Attitude to death and changes of death image in Hungarian society: Study of the differences in generational value-judgments and of the possibilities of measurement. Is death still a taboo?. *Orv Hetil.* 2009;150(25):1183–7.
- [27]. Princy y , Kang K: Life Satisfaction as a Correlate of Death Anxiety among Elderly. *Indian Journal of Health and Wellbeing* 2013; 4 (1): 121-124.
- [28]. Wong P. Meaning of life and meaning of death in successful aging. In Tomer A. *Death attitudes and the older adult: Theories, concepts and applications.* Washington, DC: Taylor-Francis,2000.
- [29]. Schultz D, Schultz S. *Stages of personality development.* 2<sup>nd</sup>ed. USA: Wadsworth, 2013.
- [30]. Ardel M . Effect of religion and purpose in life on elders' subjective well-being and attitudes toward death. *Journal of religious gerontology* 2003; 14(4): 55-77
- [31]. Saeed F, Bokhary IZ . Gender Differences, Life Satisfaction, its Correlate and Death Anxiety in Retirement. *Journal of Psychology and Clinical Psychiatry* 2016; 5(2): 1-7
- [32]. Given JE, Range LM. Life satisfaction and death anxiety in elderly nursing home and public housing residents. *Journal of Applied Gerontology*1990; 9(2): 224-229.
- [33]. Cacioppo J, Patrick W. *Loneliness: Human Nature and the Need for Social Connection,* New York : W.W. Norton & Co., 2008.
- [34]. Azaiza F, Ron P, Shoham M, Gigini I. Death and dying anxiety among elderly Arab muslims in Israel. *Death studies* 2010; 34:351-364
- [35]. Moreno RP, Solana ED, Rico MA, Fernández LM. Death Anxiety in Institutionalized and Non-Institutionalized Elderly People in Spain. *OMEGA Journal of Death and Dying* 2008; 58(1): 61-76.
- [36]. Assari S, Moghani LM. Race and Gender Differences in Correlates of Death Anxiety Among Elderly in the United States. *Iran Journal of Psychiatry Behavior Science* 2016;10(2): 20-24 .
- [37]. Abdel-Khalek AM. Death anxiety in clinical and non-clinical groups. *Death Stud* 2005; 29(3): 251-259.
- [38]. Azeem F, Naz MA. Resilience, Death Anxiety, and Depression Among Institutionalized and Noninstitutionalized Elderly. *Pakistan Journal of Psychological Research* 2015; 30(1): 111-130
- [39]. Safara M, Bhatia M.S. Relationship of religious beliefs with anxiety and depression. *Delhi Psychiatry Journal* 2008; 11(2): 177-179.
- [40]. Daaleman TP , Dobbs D. Religiosity, Spirituality, and Death Attitudes in Chronically Ill Older Adults. *Research on Aging* 2010; 32(2): 224–243

Doaa El Sayed Fadila. “Death attitude and its associated factors in institutionalized elderly: a cross-section study in North Eastern Delta, Egypt. ” *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* , vol. 7, no.6 , 2018, pp. 12-19.