Nurses’ attitudes to death: changes with the COVID-19 pandemic

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ABSTRACT

Objective: to analyze nurses’ attitudes to death in the hospital setting before and after the first critical period of the COVID-19 pandemic. Method: quantitative, cross-sectional, comparative study. Data collection was conducted in a hospital in Portugal, using the Death Attitude Profile Assessment Scale. In 2018, 900 nurses participated and, in 2020, 995. Descriptive and inferential statistical analysis was performed. Results: regarding the profile of participants in the two groups, significant differences in age (p=0.001) and professional category (p=0.008) were identified. In attitudes to death, Avoidance had a significant difference between nurses before and during the pandemic (p=0.014), and was higher in the latter moment. Conclusion: the fact that Avoidance is more recurrent after the pandemic shows the importance of preparing the teams to face death in order to ensure the quality of end-of-life care and minimize nurses’ psychological suffering.

Descriptors: Attitude to Death; Death; Nursing; Pandemics; Hospitals.

RESUMO

Objetivo: analisar as atitudes dos enfermeiros frente à morte, no contexto hospitalar, antes e após o primeiro período crítico da pandemia por COVID-19. Método: estudo quantitativo, transversal, comparativo. Coleta de dados realizada num hospital de Portugal, usando a Escala de Avaliação do Perfil de Atitudes acerca da Morte. Em 2018, participaram 900 enfermeiros e, em 2020, 995. Realizou-se análise estatística descritiva e inferencial. Resultados: quanto ao perfil dos participantes dos dois grupos, identificaram-se diferenças significativas na idade (p=0,001) e categoria profissional (p=0,008). Nas atitudes frente à morte, o Evitamento obteve diferença significativa entre os enfermeiros antes e durante a pandemia (p=0,014), sendo superior neste último momento. Conclusão: o fato do Evitamento ser mais recorrente após a pandemia denota a importância do preparo das equipes para o enfrentamento da morte, de modo a garantir a qualidade dos cuidados na fase final da vida e minimizar o sofrimento psicológico dos enfermeiros.

Descritores: Atitude Frente a Morte; Morte; Enfermagem; Pandemias; Hospitais.

INTRODUCTION

The experience of death is more difficult and painful when the surrounding circumstances are particularly sudden and distressing. The COVID-19 pandemic brought the uncertainty of dealing with the unknown established in a sudden and often lethal way, forcing adjustments in the care provided and in health professionals’ attitudes and behaviors.

In the context of the current pandemic, hospital institutions, with support of bodies in the health area, the Directorate-General for Health is an example in Portugal, had to change many of their rules to face this new challenge. Institutional changes, namely the definition of units to care for COVID-19 patients and services for the hospitalization of people with other pathologies, aimed at the best possible preparation in order to respond to the emerging needs and simultaneously provided support to professionals in the first line of care.

In addition to ensuring all the necessary personal protective equipment, promoting the organization of flows for defining support areas for the hospitalization of COVID-19 patients and people not affected by this Acute Respiratory Syndrome, and areas for patients with suspected contamination by the pathology, the hospital center under study needed a readjustment in the medical, surgical and intensive care areas, and a special reinforcement of its teams in order to guarantee a safe provision of care. In addition to the concern to ensure personnel and material resources adjusted to the needs, the obligation to test all people who needed hospitalization, regardless of the reason, sought to ensure greater safety for professionals and patients.

In Portugal, similarly to what happened in other countries, non-urgent elective surgeries were suspended during some periods. This fact reduced the number of hospitalizations and allowed the mobilization of professionals to contexts organized to ensure the care to COVID-19 patients, who, despite being in favorable clinical conditions, can often evolve negatively.

Although the fear of death and the process of dying is more evident among older patients, with a potential higher risk for morbidity and mortality among older adults, health professionals and families who have experienced and are experiencing death as a consequence of COVID-19, have faced a new reality in the approach and care during this pandemic event. Rituals have been changed, new guidelines for the grieving process have emerged and human contact has been restricted to the minimum possible in health services. Especially in cases of incurable disease at an advanced stage and in the end-of-life process, regulations emerged with the aim to safeguard people’s right to a companion, which is not always easy.

In addition to the growing number of deaths, we highlight three factors that have often contributed negatively to the experience of death and the dying process: the inexistence or reduction of time for farewells, the rapid clinical deterioration and death of patients only in company of health professionals, as well as the direct transportation of bodies to cemeteries and limitations in religious rituals.

The restriction of specific antiviral strategies, with medications under urgent investigation but without proven efficiency in the treatment of the pathology, was also observed. This reinforced the potential for mortality by the virus that has been markedly notified in the media, where the death of a person is no longer mentioned and attention is drawn to the number of deaths, which has repercussions on the social perception of the disease.

Even though concern with hospitalized patients’ feelings with experiences of fear of death and the impossibility of maintaining contact with the family emerged, it is important to understand how health professionals, namely nurses, have faced this new reality.

Each professional experiences death and the process of dying in a unique way, and their attitudes towards this event influence the care they provide. These attitudes to death can be classified as positive (approach acceptance, neutral acceptance and escape acceptance) or negative (fear and avoidance). The question within this scenario was: has the experience with COVID-19 changed nurses’ attitudes to death?

Faced with this concern, as part of a broader investigation conducted in Portugal since 2017, titled “Living death: the challenge of the nursing profession”, which seeks to create a model to support the experience of death based on the study of nurses’ attitudes in this phase of the life cycle, we deemed relevant to perform this investigation. The aim was to analyze nurses’ attitudes to death in the hospital setting before and after the first critical period of the COVID-19 pandemic.

METHOD

This is a quantitative, cross-sectional, comparative study conducted in a hospital in the North of Portugal.

Data collection of the first moment was performed in February and March 2018 and for the second moment in May 2020, after the first critical period of the COVID-19 pandemic in Portugal. Nurses working in adult inpatient services in the areas of medical clinic, surgery and intensive care were included as participants. From a universe of 1,345 nurses, the sample initially consisted of 900 nurses and at the second moment, of 995 professionals of the category, of which 540 worked in care services for patients with COVID-19. The sample calculation in the two steps considered a confidence interval of 95% and sampling error of 5%.

As a data collection instrument, a self-completion questionnaire consisting of two parts was used. One was related to the sociodemographic and professional characterization of
participants and the other part was the Death Attitude Profile (DAP) assessment scale\textsuperscript{(10)}. In total, the scale is composed of 32 closed questions with Likert-type answers ranging between 1 (totally disagree) and 7 (totally agree). The 32 items of the DAP scale are divided into five dimensions that relate to attitudes of fear, avoidance, neutral acceptance, approach acceptance and escape acceptance\textsuperscript{(10-11)}.

The fear dimension includes seven items: death is no doubt a grim experience; the prospect of my own death arouses anxiety in me; I am disturbed by the finality of death; I have an intense fear of death; the subject of life after death troubles me greatly; the fact that death will mean the end of everything as I know frightens me; and the uncertainty of not knowing what happens after death worries me.

The avoidance dimension consists of five items: I avoid death thoughts all costs; whenever the thought of death enters my mind, I try to push it away; I always try not to think about death; I avoid thinking about death altogether; and I try to have nothing to do with the subject of death.

The neutral acceptance dimension is composed of five items: death should be viewed as a natural, undeniable, and unavoidable event; death is a natural aspect of life; I would neither fear death nor welcome it; death is simply a part of the process of life; and death is neither good nor bad.

The approach acceptance dimension includes ten items: I believe that I will be in heaven after I die; death is an entrance to a place of ultimate satisfaction; I believe that heaven will be a much better place than this world; death is a union with God and eternal bliss; death brings a promise of a new and glorious life; I look to forward to a reunion with the my loved ones after I die; I see death as a passage to an eternal and blessed place; death offers a wonderful release of the soul; one thing that gives me comfort in facing death is my belief in the afterlife; and look to forward to life after death.

Finally, the escape acceptance dimension consists of five items: death will bring an end to all my troubles; death provides an escape from this terrible world; death is deliverance from pain and suffering; I view death as a relief from earthly suffering; and I see death as a relief from the burden of this life.

After data tabulation, the findings were analyzed with aid of the Statistical Package for the Social Sciences (SPSS), version 22.0. Quantitative variables were described by mean, frequency and standard deviation, and categorical variables were described by absolute frequencies. In the analysis of the association between variables, the chi-square test and the student’s t test were used to analyze the differences in attitudes to death between the first and second group of participants. The significance level adopted was 5% (p<0.05).

The study was approved by the ethics committee of the studied hospital under number 102/2017 and the amendment was approved on May 26, 2020.

**RESULTS**

Firstly, the findings present the profile of 900 nurses from the first stage of the study, followed by the 995 participants of the second stage. These data are listed in Table 1. Subsequently, the results arising from the use of DAP scale before and after the first critical period of the COVID-19 pandemic will be discussed.

In relation to data presented in Table 1, note that although the nurses who participated in the second stage of the study were in positions in the medical, surgical or intensive area during the period of questionnaire completion, 16 participants were in other areas, which was as result of the mobility of nurses to respond to the needs of COVID-19 patients.

The sociodemographic characteristics were similar between the two studied samples. Using the chi-square test, no significant differences were found between the groups of participants in relation to sex (p=0.847) and marital status (p=0.259). However, with regard to age and professional category (p=0.008), there are differences between the two groups (p=0.001). Regarding participants’ age, the median was higher at the second moment of data collection. As for professional category, at the second moment, more general care nurses and fewer specialist nurses participated.

After application of the DAP scale, it was possible to analyze attitudes to death before and after the first critical period of the COVID-19 pandemic (Table 2).

When evaluating the differences in attitudes before and after the first critical period of the COVID-19 pandemic, there was significance only in the Avoidance attitude, with an average of 17.55 and 18.32 in the first and second moments, respectively.

Figure 1 explains the variations in attitudes to death before and after the first critical period of COVID-19 in Portugal, with a very similar pattern of responses between the two groups of participants.

**DISCUSSION**

COVID-19 is one of the biggest pandemics in memory; during its daily expansion, the number of deaths continues to be high\textsuperscript{(7)} and they have often occurred in the presence of health professionals, with higher prevalence in the hospital setting.

In the present study, when analyzing the profile of participants in the two groups, differences were found in relation to age and professional category. The fact of the hospital setting of the study being the same meant that in relation to age, the median was higher in 2020 because three years passed after the first moment of data collection. Regarding professional category, the admission in a pandemic context of newly licensed nurses hence without specialization in nursing, and the mobilization of specialist nurses to other contexts, may...
Table 1. Sociodemographic characteristics of the two groups of participants in the moments before and after the first critical period of the COVID-19 pandemic. Porto, Portugal, 2018, 2020.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Participants of the 1st moment – 2018 (n / %)</th>
<th>Participants of the 2nd moment - 2020 (n / %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>689 (76.6%)</td>
<td>767 (77.1%)</td>
</tr>
<tr>
<td>Male</td>
<td>211 (23.4%)</td>
<td>228 (22.9%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25 years</td>
<td>28 (3.1%)</td>
<td>43 (4.3%)</td>
</tr>
<tr>
<td>26-35 years</td>
<td>405 (45.0%)</td>
<td>350 (35.2%)</td>
</tr>
<tr>
<td>36-45 years</td>
<td>313 (34.8%)</td>
<td>411 (41.3%)</td>
</tr>
<tr>
<td>46-55 years</td>
<td>115 (12.8%)</td>
<td>147 (14.8%)</td>
</tr>
<tr>
<td>&gt;56 years</td>
<td>39 (4.3%)</td>
<td>44 (4.4%)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/common-law marriage</td>
<td>507 (56.3%)</td>
<td>591 (59.4%)</td>
</tr>
<tr>
<td>Single</td>
<td>345 (38.3%)</td>
<td>348 (35.0%)</td>
</tr>
<tr>
<td>Divorced</td>
<td>42 (4.7%)</td>
<td>53 (5.3%)</td>
</tr>
<tr>
<td>Widowed</td>
<td>4 (0.4%)</td>
<td>3 (0.3%)</td>
</tr>
<tr>
<td>Missing</td>
<td>2 (0.2%)</td>
<td>-</td>
</tr>
<tr>
<td>Professional category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>638 (70.9%)</td>
<td>755 (75.9%)</td>
</tr>
<tr>
<td>Specialist Nurse</td>
<td>230 (25.6%)</td>
<td>219 (22.0%)</td>
</tr>
<tr>
<td>Nurse Manager</td>
<td>28 (3.1%)</td>
<td>21 (2.1%)</td>
</tr>
<tr>
<td>Missing</td>
<td>4 (0.4%)</td>
<td>-</td>
</tr>
<tr>
<td>Specialization área</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation Nursing</td>
<td>102 (11.4%)</td>
<td>102 (10.3%)</td>
</tr>
<tr>
<td>Medical-Surgical Nursing</td>
<td>69 (7.7%)</td>
<td>65 (6.5%)</td>
</tr>
<tr>
<td>Community Nursing</td>
<td>26 (2.9%)</td>
<td>26 (2.6%)</td>
</tr>
<tr>
<td>Mental Health and Psychiatric Nursing</td>
<td>22 (2.5%)</td>
<td>13 (1.3%)</td>
</tr>
<tr>
<td>Maternal Health and Obstetric Nursing</td>
<td>3 (0.3%)</td>
<td>7 (0.7%)</td>
</tr>
<tr>
<td>Child’s Health and Pediatric Nursing</td>
<td>4 (0.4%)</td>
<td>6 (0.6%)</td>
</tr>
<tr>
<td>Missing</td>
<td>4 (0.4%)</td>
<td>-</td>
</tr>
<tr>
<td>Work area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>323 (35.8%)</td>
<td>418 (42.0%)</td>
</tr>
<tr>
<td>Surgical</td>
<td>275 (30.6%)</td>
<td>279 (28.1%)</td>
</tr>
<tr>
<td>Intensive care</td>
<td>302 (33.6%)</td>
<td>281 (28.2%)</td>
</tr>
<tr>
<td>Other área</td>
<td>-</td>
<td>16 (1.6%)</td>
</tr>
<tr>
<td>Missing</td>
<td>-</td>
<td>1 (0.1%)</td>
</tr>
</tbody>
</table>

explain that in 2020, more general care nurses and fewer specialist nurses participated.

Regarding attitudes to death, avoidance is characterized by the effort not to think about death as a way to reduce stress. This attitude was significantly different before and after the first critical period of the COVID-19 pandemic. Regarding fear, approach acceptance, escape acceptance and neutral acceptance, the results reveal that the COVID-19 pandemic did not exert significant impact on these nurses’ attitudes to death.

Although the differences in these attitudes were not significant, it is noteworthy that in 2020, the average values

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>Moment of data collection</th>
<th>Average of attitudes</th>
<th>Standard deviation</th>
<th>Mean standard error</th>
<th>Means comparison test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>28.04</td>
<td>8.529</td>
<td>0.284</td>
<td></td>
<td>0.082*</td>
</tr>
<tr>
<td>2020</td>
<td>28.68</td>
<td>8.342</td>
<td>0.264</td>
<td></td>
<td>0.014*</td>
</tr>
<tr>
<td>Avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>17.55</td>
<td>7.234</td>
<td>0.241</td>
<td></td>
<td>0.273*</td>
</tr>
<tr>
<td>2020</td>
<td>18.32</td>
<td>7.098</td>
<td>0.225</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach acceptance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>36.53</td>
<td>11.845</td>
<td>0.395</td>
<td></td>
<td>0.445*</td>
</tr>
<tr>
<td>2020</td>
<td>37.16</td>
<td>11.675</td>
<td>0.370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape acceptance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>15.63</td>
<td>6.255</td>
<td>0.208</td>
<td></td>
<td>0.676*</td>
</tr>
<tr>
<td>2020</td>
<td>15.42</td>
<td>6.010</td>
<td>0.191</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral acceptance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>27.25</td>
<td>3.982</td>
<td>0.133</td>
<td></td>
<td>0.054*</td>
</tr>
<tr>
<td>2020</td>
<td>27.33</td>
<td>3.825</td>
<td>0.121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value of scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>125.00</td>
<td>22.624</td>
<td>0.754</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>126.97</td>
<td>21.928</td>
<td>0.695</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Student’s T test for equality of variances, considering p<0.05.

were higher in the fear dimension, which refers to thoughts, feelings and fear about death; in the approach acceptance dimension, which refers to religious beliefs; and in the neutral acceptance dimension, which understands death as an integral part of life(9). In the escape acceptance dimension, death is seen as the end of pain and suffering, and the average value was lower in 2020.

It is known that death is part of the life cycle and nurses, as care providers, will always be present at this stage. In this context, their attitudes are a reflection of their feelings related to the way they experience the process of dying and the moment of death(12).

However, dealing with death during a pandemic is altered by the circumstances in which it is experienced. Hospital settings have changed and the way of providing care at this moment also had to be adapted to the current reality(11). Nurses continue to be the main actors in a scenario full of changes, but whose ultimate goal remains the provision of appropriate care according to each person's needs. From the nurse’s first approach to the patient until the performance of the greatest number of interventions, with a view to minimizing the time of contact with people in a situation of COVID-19, the therapeutic touch and direct gaze started to be interposed by many personal protective equipment. When nurses are dealing with the circumstances of the context and clinical condition of each person, they provide care with a view to maintaining life, striving for quality care, but with imposed limitations. This is because, naturally, given the aggressiveness and secondary effects of the virus contamination, the end of life has been the outcome in many cases(11).

Even though nurses understand death as part of life, the reality experienced in a pandemic context has aggravated their own fear of death, as well as that of people close to them(13); therefore, beliefs become a resource for greater protection. In a previous study, the authors came across the same results, stating that beliefs constitute a facilitating strategy in coping with death and the dying process(14). The fact that many deaths experienced are not triggered by chronic diseases with aggravation of pain and suffering, but rather by unexpected exacerbations related to COVID-19, may justify the lower scores in the attitude of escape acceptance(14).

Professionals’ awareness of the seriousness of the disease, reinforced by the growing number of cases experienced in different areas of care, has generated silence on the issue. Avoiding talking about death, thereby minimizing feelings of anxiety(12), has gained emphasis on the nurses’ knowing-being, since death is a moment faced by these professionals in practically all workdays. Nurses have effectively been the professionals who most experience the moment of death with all changes in protocols and rituals, from body care to family and religious rituals(1,6).

In addition, the avoidance attitude to death can also be understood, since historically, Nursing has been at the forefront of pandemics and epidemics, supporting individuals and families in the management of serious clinical conditions, in which the main objective is to save lives. In such contexts centered on the recovery of people in situations of illness, nurses avoid death-related thoughts and if they emerge, they try to push them away.

It is a consensus that the hospital setting stands out as a stressful scenario that impacts on the mental suffering of nurs-
ing professionals\cite{15}, with aggravation of psychological suffering during the pandemic\cite{16} that brought new difficulties. In studies\cite{16-17} of nurses and doctors in hospitals, the impact of their work process in the context of the pandemic was identified, which resulted in psychological distress manifested by signs of anxiety and depression, in addition to those already intrinsic to the profession. Nurses face a scenario permeated by high workloads, with consequences in terms of physical and mental exhaustion and frustration\cite{18}.

COVID-19 proved to be a challenging and threatening situation\cite{17}. Coping efforts are aspects that depend on nurses’ individual and collective resources, among other intervening aspects, which arouses feelings of powerlessness and professional insecurity.

Since the beginning of the pandemic, the growing number of hospitalized patients with a death outcome has compelled health professionals to act on the front lines. With the need for total distance from their families, these professionals became the main resource for listening to patients’ complaints and anxieties, and simultaneously became the guarantee of psychological support for hospitalized people\cite{19}. As the months progress, the imminent exhaustion can justify the fear and avoidance attitudes adopted by these workers.

In a study\cite{20} developed by Chinese researchers, nurses who worked to fight the pandemic were compared to other...
er professionals in the category who did not work with it. It was found that the former had significantly higher levels of trauma potentially added to the empathy developed in the contact with patients affected by the new coronavirus and by the concern about colleagues acting during the pandemic. In this context, it is essential to ensure medical and psychological care for nursing professionals (21).

Regarding the aforementioned, the authors (17) suggest that workers in this professional category have coping strategies at their fingertips, including specialized institutional psychological support; differentiated, confidential and free listening actions through telephone contact or others of the worker’s choice; offer of complementary integrative therapies; relaxation exercises; offer of public mental health services, among others. In addition, institutional policies for the preparation of professionals for embrace of grieving families in the terminal period of patients and in the way they experience this process by themselves also emerge, emphasizing the changes in routines and rituals that may exist in the contexts of care provision.

CONCLUSION

When analyzing nurses’ attitudes to death in the hospital setting before and after the first critical period of the COVID-19 pandemic, we found that the pandemic significantly influenced the avoidance attitude of these professionals.

When acting on the front line in the support to individuals and families and managing serious clinical conditions in which the main objective is to save lives, nurses avoid death-related thoughts and if these emerge, they try to push them away. Regarding fear, approach acceptance, escape acceptance and neutral acceptance, the results reveal that the COVID-19 pandemic did not significantly change nurses’ attitudes. It is important to continue monitoring professionals in relation to the theme.

The study findings once again reveal the importance of training and preparing nurses for providing end-of-life care to patients. This will certainly minimize the presence of negative attitudes to death and the process of dying in different contexts of care provision, regardless of the frequency of its occurrence.

Knowing the nurses’ attitudes to death in the context of the COVID-19 pandemic by means of the performance of a quantitative study allowed the participation of a high number of professionals. However, a limitation was the fact of not conducting a mixed method study, since a qualitative approach would allow a deeper understanding of nurses’ attitudes to death and their repercussion in the provision of care.

Other limitations of the study can be identified in the scarcity of works discussing the topic. The literature is limited regarding the evidence of implications of the pandemic on the behavior of health workers, and scientific efforts are more focused on the development of effective therapeutics in the prevention and treatment of SARS-CoV2.

REFERENCES


