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Original Article

Factors Associated with Attitude and Knowledge Toward Hospice Palliative Care Among Medical Caregivers☆

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SUMMARY

Background: The present study aimed to explore the attitude and knowledge toward hospice palliative care among medical caregivers in Taiwan.
Methods: A cross-sectional questionnaire survey was conducted among medical staff attending a hospice palliative care conference.
Results: Overall, 163 of 232 questionnaires were valid. Based on the results, 54.9% of opinions on who has the right to sign a Hospice Palliative Care Declaration for an autonomous patient was consistent with the Taiwan Hospice Palliative Care Article; 91.4% of opinions on whether a life-sustaining therapy has been authorized to withhold was consistent with the article, compared with only 28.3% of opinions on whether a life-sustaining therapy has been authorized to withdraw. The capability of medical staff to provide these three procedures was varied (Cochran's $Q = 121.150$, $p < 0.001$). The medical staff who were aged > 32.5 years (odds ratio = 0.41; 95% confidence interval, 0.22–0.90; $p < 0.01$), and whose work experience was >9 years (odds ratio = 0.52; 95% confidence interval, 0.27–0.97; $p < 0.05$) tended to approach patients' informed consent of Hospice Palliative Care Declaration precisely.
Conclusion: Life and work experience improve the accuracy of medical staff in providing hospice palliative care. A culture-based, case-oriented continuing education program and a timely revision of the Hospice Palliative Care Article are recommended to increase the consistency between the principle and the practice of hospice palliative care.

1. Introduction

It is widely accepted that patients' autonomy guides medical care[1–3]. Since the 1960s, this principle has also been applied to hospice palliative care[2,4]. However, medical uncertainty—such as the definition of medical futility, the legality of withholding and withdrawing therapy, and artificial nutrition termination—has been a challenge for patients and medical staff when making decisions for end-of-life (EOL) care[2,4]. Additionally, fear, sense of guilt, and preference differences among the patients and their family

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members further increase the conflict during hospice palliative care[1]. Medical professionals are expected to deliver the most benefit to patients. Hence, equipping medical staff with knowledge for hospice care and skill to resolve conflict is crucial to provide patients with good EOL care[1,2,5].

The Natural Death Act worldwide has ensured patients' dignity in EOL[6–8]. In 2000, the Taiwan Hospice Palliative Care Article, based on the spirit of the Natural Death Act, was legislated to guide medical staff in resolving conflict in hospice palliative care[7,9,10]. According to the World Health Organization, palliative care is defined as active total care for patients with incurable diseases. Therefore, quality of life is the aim of hospice palliative care[11–13]. Recent data have shown that legal support for EOL decision-making ameliorates the burden on patients, their families, and medical caregivers, which improves the quality of EOL care[12,14,15]. Several studies have also shown that accurate decision making enhanced patients' satisfaction with their EOL[14,16].

Accordingly, this study was aimed to explore the attitude and knowledge toward hospice palliative care among medical caregivers, and the accuracy associated factors in clinical practice.

2. Materials and methods

2.1. Study population

The target population consisted of 600 health professionals in Taiwan, who attended national conferences regarding the topic of hospice palliative care in 2010. Before the courses began, the questionnaires were sent to the participants. The study was examined and approved by the Human Research Ethics Committee.

2.2. Measurements

The questionnaire was based on the Taiwan Hospice Palliative Care Article, which was legislated in Taiwan in May 2000[7], and revised in November 2002. The content of the article is that "When a cure is not possible for a disease confirmed by two doctors, the patient has the right to request Do-Not-Resuscitate." Revision of the article further defines the differences in authorization between the requirement of withholding and withdrawing a life-sustaining therapy while the patient is in hospice palliative care. To the end of the study, 2010 October 31, withholding a therapy can be authorized by patients and their legal representatives, whereas withdrawing a therapy can only be determined by the patients themselves.

The questionnaire was designed and tested for content validity by a panel composed of five medical personnel specializing in hospice palliative care. The main theme of this study was the attitude and knowledge toward hospice palliative care among medical caregivers, therefore, the questions were designed to evaluate how they provided hospice palliative care, which was centered on the following issues: withholding and withdrawing life-sustaining therapy, patient autonomy, the definition of no cure diseases, the definition of an optimal duration for a foreseeable death of a disease, and what procedures life-sustaining management should include. In this study, we focused on the first part of the questionnaire.

The responses to the questionnaire were then graded and scored as 1 = strong agreement to 5 = strong disagreement. To evaluate the medical caregivers' hospice palliative practice accuracy, the choice of each question was further dichotomized into two categories: consistency versus inconsistency. The medical staff who chose strong disagreement or disagreement for each question tended to stick to the Taiwan Hospice Palliative Care Article during hospice palliative practice; hence, these two choices were categorized as consistency; by contrast, neutral, agreement, or strong agreement were categorized as inconsistency.

The content validity index[17] of the final version of this questionnaire was 0.99, which is based on the option of the five review panelists. Reliability was assessed using the test–retest method. Among the registered nurses specializing in intensive care, 93.33% (28/30) gave the same response to the questionnaire in two separate administrations within 2 weeks[18].

2.3. Statistical analysis

Data management and statistical analysis were performed using SPSS version 17.0 (SPSS Inc., Chicago, IL, USA). A frequency distribution was used to describe the demographic data and the distribution of each variable. Goodness-of-fit test was used to evaluate the equality between two categories of each question. Cochran's Q test analyses were used to assess the differences of the consistency rate between the options of medical staff and the law among these questions. Odds ratios (ORs) with 95% confidence intervals (CIs) and chi-square test were used to review the correlation between the consistency rate of each question, and the demographic variables—including age, years of work experience, sex, work task, work specialty, ward type, education level, religious affiliation, and location of facility.

3. Results

3.1. Demographic properties

In total, 232 of 600 (38.6%) participants agreed to fill out the questionnaires, of which 163 (163/232 = 70.2%) were considered valid. Among these individuals, the average age was 34.2 ± 6.7 years; the majority comprised nurses (95.0%); their specialties covered internal medicine, surgery, gynecology, pediatrics, and hospice care; their work experience ranged from 6 months to 36 years; 93.8% of them came from northern Taiwan; and 53.9% had a specific religious belief.

3.2. Opinions of medical staff on hospice palliative practice and the consistency between opinions of medical staff and Taiwan Hospice Palliative Care Article

The results of the questionnaire revealed that 89 of 162 (54.9%) participants disagreed with the idea of obtaining an informed consent of Hospice Palliative Care Declaration from a legal representative of an autonomous patient. With a Hospice Palliative Care Declaration signed by a legal representative of an unconscious patient, 149 of 163 (91.4%) participants disagreed to operate a cardiopulmonary resuscitation on this patient; 46 of 162 (28.3%) participants disagreed to withdraw a life-sustaining therapy from this patient (Fig. 1).

The study results discovered that 54.9% of opinions on who has the right to sign a Hospice Palliative Care Declaration for an autonomous patient was consistent with the Taiwan Hospice Palliative Care Article, when the patient is autonomous; 91.4% of opinions on whether a life-sustaining therapy has been authorized to withhold was consistent with the article; only 28.3% of opinions on whether a life-sustaining therapy has been authorized to withdraw was consistent with it (Fig. 1). The results showed that the participants have a different capability of providing different hospice palliative care procedures (Cochran's $Q = 121.150$, $p < 0.001$; Fig. 1).

3.3. Factors influencing hospice palliative care performance among medical staff

The study showed that the gynecology and pediatric specialists tended to have lower accuracy compared with the other groups