



Association between knowledge and attitudes towards advance directives in emergency services

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Abstract:

Background: The integration of patient advance directives into routine consultations in emergency care settings has become increasingly important, facilitating personalized care and honoring patients' healthcare values and preferences. This study aims to evaluate the knowledge levels, attitudes, and associated factors among nursing and medical professionals regarding advance directives in emergency care settings.

Methods: This observational, descriptive, and cross-sectional study was conducted in an emergency department and emergency medical service facility. Data collection occurred adhering to STROBE guidelines.

Results: A total of 173 healthcare professionals participated. The majority (91.3%) reported insufficient information about advance directives, with 74% not integrating them into their regular practice. Multinomial analysis revealed a significant association between working in the emergency medical service and holding favorable attitudes towards consulting and implementing advance directives in practice (OR 2.49 [95% CI 1.06–5.88]; $p=0.037$), particularly in complex scenarios (OR 3.65 [95% CI 1.58–8.41]; $p=0.002$). Working during afternoon and night shifts predicted higher scores for attitudes in complex scenarios.

Conclusion: The study highlights the relationship between healthcare professionals' knowledge of advance directives and their attitudes toward implementing them in emergency care settings, indicating a need for enhanced education and training to improve adherence to patients' care preferences.

Background:

Recent years have seen significant scientific and technological advancements that have positively impacted life expectancy. Improved global healthcare has led to a rise in demand for emergency care services, particularly among older adults, patients with complex chronic conditions, those with psychiatric comorbidities, and individuals from lower socioeconomic backgrounds. The World Health Organization projects a substantial increase in the population aged 60 and above by 2050, comprising individuals with complex pathologies requiring urgent care. This demographic shift poses challenges to healthcare systems, with increased utilization of emergency departments potentially causing service saturation. The complex health assessments necessitated by aging populations are compounded by cognitive impairments, limiting patient involvement in decision-making. (Moe et al., 2016)

Patient autonomy and respect for their values and preferences are central to modern healthcare. Comprehensive, person-centered care has been shown to reduce hospitalizations and enhance patient and professional satisfaction. Recognizing the importance of these principles, various medical societies emphasized the benefits of advance directives (ADs) in 2013. ADs enable individuals to outline their medical preferences for future care, guiding healthcare decisions in their absence. (John, 2016)

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Despite the significance of ADs, challenges exist in their implementation, including lack of knowledge among healthcare professionals, unclear registration procedures, and normative complexities. These barriers not only impede patient autonomy but also raise ethical and legal concerns. They may lead to defensive medical practices or therapeutic futility, compromising patient dignity and autonomy. (Stein et al., 2013)

In Spain, legal frameworks such as the General Health Law and the Oviedo Convention emphasize patient autonomy and advance care planning. Despite regional variations in AD legislation, Spain maintains a person-centered care model with a national registry for ADs. (Abelsson & Lindwall, 2017)

Understanding healthcare professionals' knowledge and attitudes towards ADs is crucial for aligning care with patient preferences and reducing unnecessary clinical interventions. However, existing studies often overlook comparative analyses between emergency departments and services. Therefore, this study aims to assess nursing and medical professionals' knowledge and attitudes towards ADs in these settings and explore correlated and predictive variables. (Gloss, 2017)

Methods:

Study Design, Settings, and Subjects:

This study adopted an observational, descriptive, and cross-sectional design conducted in the Emergency Department. The study adhered to the guidelines outlined in the 'Strengthening the reporting of observational studies in epidemiology' (STROBE).

The study included nursing and medical professionals associated with both services and institutions, holding valid employment contracts during the survey period, and opting to participate voluntarily. Excluded were professionals in the 'recycling' phase, those primarily working with pediatric populations, and graduate students in internships. The instrument was distributed by service coordinators in person or online via institutional mail.

Ethical Considerations and Sample Size Calculation:

The study obtained approval from the Clinical Board of Emergency Medical Services and the Ethics Committee. Consent was secured from nursing and medical directors of both institutions, and participants were briefed on the study's nature and their voluntary participation. Confidentiality was maintained by anonymizing collected data.

The sample size calculation utilized non-probabilistic convenience sampling, targeting 190 professionals with an estimated confidence level of 95% and an expected proportion of losses of 15%. A final sample of 173 nursing and medical professionals, achieving a participation rate of 91%, completed the questionnaire either on paper or electronically.

Questionnaire Development:

Data collection spanned using the "Knowledge and attitudes of health professionals in the process of living will declaration process" questionnaire. This instrument, with reliability ranging from 0.5 to 0.88 and a pre-retest stability of 0.2, comprised forty-one items across seven blocks assessing knowledge and attitudes towards Advance Directives (ADs). Sociodemographic and professional data were also collected.

Statistical Analysis:

Data analysis utilized SPSS V.24.0 and R V.4.0.1 software. Normality of continuous variables was assessed using QQ plots and the Shapiro-Wilks test. Categorical variables were analyzed using Chi-square or Fisher's exact test, while continuous variables were analyzed using Student's t-test or ANOVA. Multinomial logistic regression models were constructed to evaluate associations between significant variables and attitudes towards ADs, adjusting for covariates. Statistical significance was set at $p < 0.05$.

Results

The study included 173 participants, comprising 119 nurses and 54 physicians, with a median age of 40 years (interquartile range 33.0–47.0). Among the participants, 48 were men and 125 were women. Around 57% ($n = 99$) worked in the hospital's emergency department, 43% ($n = 74$) in the emergency medical service, 45% ($n = 78$) worked morning shifts, and 39% ($n = 67$) had over fifteen years of experience.

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Regarding knowledge, a significant proportion demonstrated awareness about AD declarations not replacing informed consents (53%), ADs' validity, the ability of admitted individuals to make AD declarations (72%), and the importance of health professionals providing AD information to patients (57%). However, gaps were notable, with many professionals unaware of AD planning (43%) and various documentation, registration, and consultation aspects of ADs.

Attitudinally, 74% of professionals had not integrated AD consultation into their routine practice. Nurses showed a greater tendency (68%) than physicians (46%) to respect patients' rights for appropriate care and felt the responsible physician had a moral duty to follow ADs (65% nurses vs. 40% physicians). Additionally, 58% of nurses and 49% of physicians considered ADs very useful for healthcare.

The relationship between knowledge levels and attitudes (APA and ACS) showed that those familiar with ADs, including their documentation and practical use, tended to score more favorably. Multivariable analysis indicated a significant association between service type and a predisposition to consult patients' ADs. Emergency medical service affiliation correlated with more favorable attitudes in both practical and complex scenarios compared to the hospital emergency department. Age and experience did not significantly affect attitudes.

In conclusion, there were notable gaps in professionals' knowledge and attitudes regarding ADs, highlighting the need for enhanced education and integration of AD consultation into emergency services.

Discussion

AD Management in Emergency Services

The findings of this study underscore the ongoing inadequacy in specific knowledge and skills related to AD management within emergency services, aligning with prior research. However, this study introduces novel insights into the predictors of positive attitudes towards ADs. (Desmedt et al., 2016)

Attitudes towards ADs

Consistent with findings by previous researchers, nursing and medical professionals exhibited a strong inclination to honor patients' autonomy in decision-making and recognized ADs as crucial for clinical decision-making. Nonetheless, gaps persisted in understanding ADs, their practical registration processes, and the governing norms. This emphasizes the imperative of raising awareness among emergency professionals regarding the significance of AD familiarity in aligning care decisions with individuals' wishes and minimizing ethical and legal dilemmas. (Nolte & Pitchforth, 2014)

Association with Knowledge Levels

A notable finding is the correlation between professionals' AD knowledge and their attitudes and scores on relevant scales. This suggests that better-informed professionals are more inclined to consult patient ADs, respect their preferences, and integrate ADs into routine consultations. Conversely, lack of knowledge may lead to varied responses in similar clinical scenarios, potentially jeopardizing patient rights and autonomy. (Booth & Lehna, 2016)

Impact of Shifts and Workload

Two novel findings emerge regarding professionals' attitudes towards ADs. Firstly, professionals in emergency services showed more positive attitudes towards patient ADs compared to those in emergency departments, possibly due to their experiences with critical and end-of-life care. Secondly, professionals on evening and night shifts in emergency services and departments were more inclined to respect patient ADs in complex, high-risk situations such as cardio-respiratory arrest. This may be attributed to lower workload and fewer consultations during these shifts, facilitating AD utilization in decision-making. (Rietjens et al., 2017)

Implications for Practice

In conclusion, professionals working evening/night shifts and in emergency medical services demonstrated greater readiness to consult and respect patient ADs, highlighting the need to consider these variables in improving AD management strategies. This can enhance patient-centered care, decision-making efficacy, and mitigate conflicts arising from AD-related uncertainties.

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