

## The Application of Theories in Research on Advance Care Planning (2010~2022): A Scoping Review



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**Purpose:** This scoping review aimed to identify the current state of the application of theories in research related to advance care planning and to analyze the types and characteristics of the theories applied. **Methods:** Using the scoping review methodology presented by Arksey & O'Malley, the articles published from 2010 to 2022 were searched by combining the terms "advance care planning," "theory," and "model" in five electronic databases; PubMed, CINAHL, EMBASE, KMBASE, and KISS. **Results:** Thirty-two studies were identified. Theory-based research has been actively conducted since 2019, with a total of 25 theories applied. Psychological theories were the most prevalent, accounting for 75.0% of the applications, followed by sociological theories (12.5%), public health theories (6.3%), and one nursing theory (3.1%). Theories were utilized to create a framework for data analysis, establish a philosophical underpinning, develop intervention frameworks, and derive new tools. **Conclusion:** Various theories have been applied to research on advance care planning, yet the application of nursing theory has been limited. To optimize end-of-life care and advance care planning from a nursing perspective, further research incorporating nursing theory is essential.

**Key Words:** Advance care planning; Models, Nursing theory; Philosophy; Review; Theoretical

### INTRODUCTION

As society ages and the prevalence of chronic illnesses rises, there is an increasing focus on making end-of-life decisions with dignity. In South Korea, the Act on Hospice and Palliative Care and Decisions on Life-Sustaining Treatment for Patients at the End of Life was passed in 2016 and came into effect in February 2018 [1]. This legislation aims to honor patient autonomy and protect their dignity and worth. Following this, a growing number of individuals have been drafting advance directives, promoting a culture of proactive decision-making regarding their future medical care [2]. The recommendation is that decisions to withdraw life-sustaining treatment should be made through Advance Care Planning (ACP), which includes the crea-

tion of an advance directive. However, the emphasis tends to be on the decision about life-sustaining treatment rather than on a thorough discussion about end-of-life care. As a result, the decision-making process in end-of-life situations may not fully capture the patient's values, goals, treatment preferences, and other relevant considerations [3].

Active discussions regarding the definition of ACP, factors influencing it, and its outcomes are ongoing in the United States and European countries [4-6]. Meanwhile, South Korea is still focused on highlighting the importance of ACP and seeking effective strategies [3]. Additionally, in Korea, the role of nurses in the decision-making process, particularly in the discontinuation of life-sustaining treatments, has not been clearly established. This ambiguity impedes nurses' active engagement in ACP. By

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contrast, in other countries, nurses assume a variety of roles in the ACP process, including serving as information providers, advocates, mediators, and providers of end-of-life care [7,8].

While some may equate ACP with the mere creation of advance directives, its true scope is more expansive. ACP involves preparing for future care and treatment options in anticipation of a potential loss of decision-making capacity during life's final stages. It is not limited to simple medical decisions; ACP covers a wide range of considerations that pertain to various aspects of life and health. This process includes establishing goals for end-of-life care, identifying personal values, anticipating physical changes, and considering the societal, technological, and economic resources necessary to support oneself in the event of serious illness or disability [9-12].

The process of establishing and implementing ACP involves a range of stakeholders, including patients, their families, and healthcare professionals such as physicians and nurses. This process takes place in both clinical settings and local communities and involves considering end-of-life goals and values, as well as communication and documentation. These activities are shaped by individual beliefs about death, attitudes, knowledge of ACP, cultural emotions, family support, and available medical and economic resources [13-16]. Therefore, effective ACP requires a systematic approach that is rooted in a holistic perspective, taking into account the social and environmental context in which the stakeholders are situated.

Theory, as a descriptive narrative that explains specific phenomena and offers a predictive perspective, facilitates the understanding of the structure of phenomena, thereby enabling systematic nursing care [17]. The theoretical perspective on ACP helps stakeholders grasp the dying process, presents care options at the end of life, and establishes a framework for personalized ACP that takes into account individual values [18,19]. Nurses, as healthcare professionals who are in close contact with patients, develop ongoing relationships and are ideally situated to comprehend patients' needs and preferences. They play a pivotal role in providing information about ACP, mediating conflicts between physicians and patients or their families, and acting as end-of-life care providers who honor the patient's values [20]. Furthermore, theoretical research on ACP is essential to guide nursing practices for improving the quality of end-of-life care. Active discussions and the implementation of ACP can facilitate the planning and provision of treatments that align with the patient's values and preferences throughout their lifetime. Therefore, this study aims to expand the understanding of ACP by ex-

ploring the theories and models employed in its research and offering insights for future nursing research on the topic.

This study aimed to assess the application of theories in research related to ACP, as published in both domestic and international journals from January 1, 2010 to September 25, 2022. The objective was to analyze the types and characteristics of the theories applied and to offer guidance for future research on ACP.

## METHODS

### 1. Study Design

This scoping review was conducted to explore the trends in research applying theories to ACP published in domestic and international academic journals.

### 2. Study Subjects and Data Collection

This study adhered to the five-stage framework for scoping reviews as proposed by Arksey and O'Malley [21]. The stages are as follows: (1) identifying research questions; (2) identifying relevant studies; (3) selecting studies; (4) charting the data; and (5) collating, summarizing, and reporting the results. Stages 1 through 4 are detailed in the Methods section, while Stage 5 is presented in the Results section.

#### 1) Identifying research questions

To explore trends in academic research that applies theoretical frameworks to ACP, the following research questions were formulated: "What are the trends in scholarly journal research that apply academic theories to ACP?" To comprehend the attributes of the theories utilized, the question posed was: "What kinds of theories are being applied in research on ACP, and which academic disciplines do they stem from?" To examine the application of theories in research, the inquiry was: "In what ways are theories being implemented in research on ACP?"

When formulating the research questions, criteria were set by defining the population, concept, and context. The study population included healthcare professionals, patients, caregivers, and the general public to ensure a thorough examination of the literature on ACP. Advance care planning served as the primary concept, with the context and background encompassing both clinical and community settings.

#### 2) Identifying relevant studies

The concept of ACP originated in the early 1990s, but it was not until the early 2010s that concerted efforts were made to define the concept uniformly and to implement it through legislative measures [22,23]. In South Korea, the push to institutionalize ACP gained momentum in 2010, spurred by debates over the legalization of end-of-life decisions [24]. Consequently, this study focuses on research published in both domestic and international journals within the timeframe of January 1, 2010, to September 25, 2022, aligning with the period when significant institutional developments in ACP took place.

As international databases, PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and the Excerpta Medica database (EMBASE) were utilized. As domestic databases, the Korean Medical Database (KMBASE) and Korean Studies Information Service System (KISS) were used. The search strategy for international literature included search terms such as ('advance care planning' OR 'advance care plan\*') AND ('nursing theory' OR 'theory' OR 'theory-based' OR 'model' OR 'nursing model' OR 'models, nursing' OR 'philosophy, nursing' OR 'models, theoretical'). The search strategy for domestic literature included ('사전돌봄계획' OR '사전돌봄') AND ('이론' OR '간호이론' OR '모델' OR '간호모델'). The search was conducted from September 26 to 29, 2022. The study included research on ACP that applied theories, excluding studies without theoretical application, review articles, and monographs. The language was restricted to Korean and English. Four researchers independently conducted the literature search, and the results were compared to ensure the accuracy of data collection.

### 3) Selecting studies

After conducting a literature search using various search engines, four researchers identified a total of 3,908 articles from PubMed (787), CINAHL (507), EMBASE (2,614), KISS (0), and KMBASE (0). Utilizing EndNote 20, they excluded 429 duplicate articles. The researchers then individually reviewed the titles and abstracts of the remaining 3,479 articles, excluding 3,159 that did not meet the selection criteria. The remaining 320 articles were subjected to further individual review by the four researchers. Through comparative discussions about the review results, a consensus was reached regarding the conceptualization of ACP, the methods for applying theories, the foundational basis for research design, and the academic fields relevant to the theories. Ultimately, 32 articles were selected for inclusion (Figure 1).

### 3. Data Analysis

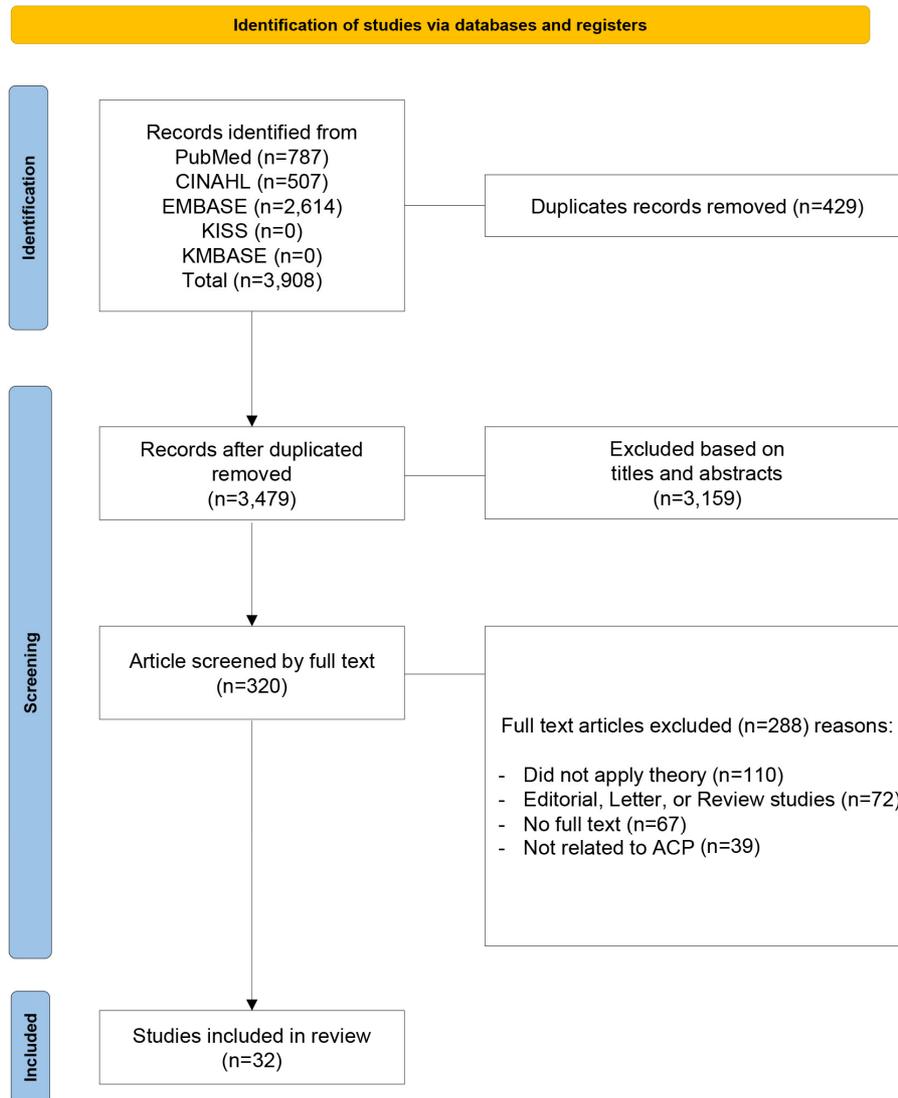
To analyze research on ACP that incorporated theoretical frameworks, the researchers conducted a review of previous studies that applied theories [23,24]. They then developed an analytical framework based on the methodologies employed in these studies. This framework encompassed the general characteristics of the studies, the attributes of the theories used, and the manner in which these theories were applied within the research. The general characteristics included the year of publication, the country where the research was conducted, the methods used in the research, and the subjects involved. Research methods were classified as quantitative, qualitative, or mixed methods. Subjects were categorized as patients and caregivers, healthcare professionals, community members, or unspecified. The attributes of the theories involved the name of the theory, the academic discipline from which the theory originated, and the field in which the research was applied. Finally, the application of theories in the research was divided into four categories: analysis based on theory-driven data through literature review, use of theory as a philosophical underpinning for the research, implementation of theory-driven interventions, and the creation of tools based on theoretical constructs.

The four researchers independently reviewed the 32 selected articles, ensuring alignment with the established analytical framework. Coding was conducted in accordance with this framework. The content analyzed was cross-verified to detect any inconsistencies, and consensus was achieved through iterative discussions.

## RESULTS

### 1. General Characteristics

Upon reviewing the literature, a total of 32 articles were selected (Appendix 1). An examination of the general characteristics of these 32 selected articles revealed the following distribution of publication years: two articles (6.3%) from 2010 to 2012, two articles (6.3%) from 2013 to 2015, three articles (9.4%) from 2016 to 2018, and 25 articles (78.0%) from 2019 to 2022, indicating a gradual increase. Over half of the selected articles were published in the United States (17 articles, 53.0%) [A1-14,A17,A22,A30], followed by seven articles (21.9%) from Asian countries, including China, Taiwan, and Japan [A15,A24-27,A29,A31], and six articles (18.8%) from European countries, including Belgium, Canada, and the United Kingdom [A18-21,A28,A32]. Additionally, two articles (6.3%) were published in Israel [A16,A23]. Regarding research methods,



ACP=advance care planning; CINAHL=Cumulative Index to Nursing and Allied Health Literature; EMBASE=Excerpta Medica database; KISS=Korean Studies Information Service System; KMBASE=Korean Medical Database.

**Figure 1.** PRISMA flowchart of the study selection process.

quantitative research was conducted in 15 articles (46.9%) [A1-4,A6,A7,A9,A10,A15,A17,A18,A22,A25,A29,A32], qualitative research in 13 articles (40.6%) [A5,A8,A11,A12,A14,A16,A20,A23,A26-28,A30,A31], and mixed methods in four articles (12.5%) [A13,A19,A21,A24]. The research subjects included 14 studies (43.8%) targeting healthcare professionals [A1,A7,A12-15,A17-19,A21,A26,A30-32], 11 studies (34.4%) targeting patients and caregivers [A2,A7,A8,A11,A16,A19,A20,A23,A24,A27,A29], and two studies (6.3%) [A7,A19] targeting both healthcare professionals and patients/caregivers. In addition, nine studies (28.1%) targeted community residents [A3,A4,A6,A9,A10,A12,A22,

A25,A28], and one study (3.1%) [A5] was conducted without specifying a target population (Table 1).

## 2. Characteristics of the Applied Theories

Out of the 32 studies reviewed, 31 (96.9%) [A1-9,A11-32] utilized a single theory, while one study (3.1%) [A10] integrated two theories. Regarding the academic disciplines of the theories used in the research, psychological theories were the most common, appearing in 24 studies (75.0%) [A1-10,A13,A15-17,A19,A23-31]. Of these, 21 studies (65.6%) [A1,A3-10,A15-17,A19,A23-29,A31] applied the behavior

**Table 1.** General Characteristics of the Included Studies (N=32)

Characteristics	Categories	n (%)
Year of publication	2010~2012	2 (6.3)
	2013~2015	2 (6.3)
	2016~2018	3 (9.4)
	2019~2022	25 (78.0)
Country	USA	17 (53.0)
	Asia (China, Japan, Taiwan)	7 (21.9)
	Europe (Belgium, Canada, UK)	6 (18.8)
	Other (Israel)	2 (6.3)
Method/Design	Quantitative	15 (46.9)
	Qualitative	13 (40.6)
	Mixed	4 (12.5)
Participants <sup>†</sup>	Healthcare providers	14 (43.8)
	Patients/caregivers	11 (34.4)
	Residents	9 (28.1)
	Not applicable	1 (3.1)

<sup>†</sup>Included duplicate values.

change theory. This theory examines factors that influence human behavior and includes various models, including the theory of planned behavior [A1,A9,A15,A16,A23,A25-27,A31], transtheoretical model [A3,A5,A6,A8,A19,A24], health behavior change theory [A28], social cognitive theory [A4,A17], social learning theory [A7], theory of reasoned action [A29], and integrated behavior model [A10]. Notably, the theory of planned behavior, which posits that attitudes toward behavior, subjective norms, and perceived behavioral control together determine an individual's behavioral intentions and actions, was the most frequently employed (in 9 studies, 28.1%) [A1,A9,A15,A16,A23,A25-27,A31]. This theory was used to explore attitudes, beliefs, and intentions regarding ACP among various study populations.

Additionally, studies that applied sociological theories accounted for 5 studies (12.5%), utilizing frameworks such as the normalization process theory and the social ecological model. These studies examined how various socio-environmental factors influence individual health behaviors [A11,A18,A21] and explored the ideal outcomes and practical challenges of interventions by examining processes such as awareness, implementation, and evaluation of ACP in health education [A14,A32]. Research incorporating public health theories comprised 2 studies (6.3%), with one study applying the interprofessional shared decision-making model to describe expert involvement in the decision-making process during ACP [A20]. Another study emphasized the importance of providing personalized interventions that reflect cultural sensitivity in public health settings, based on the cultural appropri-

ateness theory [A22]. In the field of nursing, one study (3.1%) [A12] applied Leininger's culture care theory to investigate the intent of homeless individuals to engage in ACP, considering cultural differences. The field with the highest number of conducted studies was medicine, with 13 studies (40.6%) [A3,A4,A6,A7,A13-16,A18,A21,A23,A25,A31]. This was followed by interdisciplinary research [A2,A8,A19,A20,A22,A26,A32] and nursing [A1,A12,A17,A24,A27,A29,A30], each with 7 studies (21.9%). Public health was represented by 3 studies (9.4%) [A5,A10,A28], while sociology had 2 studies (6.3%) [A9,A11]. Within interdisciplinary research, three studies (9.4%) involved collaboration between public health and medicine [A8,A20,A32], two studies (6.3%) involved nursing and medicine [A19,A22], one study (3.1%) involved nursing and public health [A26], and one study (3.1%) represented a fusion of medicine, sociology, and psychology [A2] (Table 2).

### 3. Characteristics of Topic Scope

We analyzed how theories were applied in the identified 32 studies (Table 3). The results were broadly categorized into four groups: studies that conducted data analysis grounded in theory (13 studies, 40.6%), studies that proceeded with a theoretical philosophical foundation (9 studies, 28.1%), studies that developed and applied interventions based on theory (7 studies, 21.9%), and studies that introduced tools derived from theory (3 studies, 9.4%).

In the first category, studies that conducted data analysis based on theory included research that applied theoretical frameworks during the interpretation phase of results. These studies, which conceptualized and analyzed the process of ACP or proposed decision-making models grounded in theories [A2,A4,A5,A8,A9,A15-18,A20,A23,A24,A28], employed theories such as the theory of planned behavior, the transtheoretical model, and social cognitive theory. The researchers posited that by integrating these theories, which emphasize changes in individuals' perceptions and attitudes toward ACP, they could promote active participation in the process. By analyzing research data through the lens of these theories, the studies sought to systematically outline the stages of the discussion process in ACP [A8,A18,A20] or to investigate the relationships among various factors that influence the likelihood of participating in ACP [A2,A4,A5,A9,A15-17,A23,A24,A28]. Factors such as an individual's attitude, subjective norms, preparedness for end-of-life, religious values, and others were identified as having an impact on the engagement in ACP. To improve the quality of ACP,

**Table 2.** Theoretical Characteristics of the Selected Studies

(N=32)

No	Author	Year	Methods	Research field	Theory	Discipline of theory	Country	Subjects
A1	Zhou et al.	2010	Quantitative	Nursing	Theory of planned behavior	Psychology	USA	Healthcare providers
A2	Garrido et al.	2013	Quantitative	Multi-disciplinary	Leventhal's common sense model	Psychology	USA	Patients
A3	Fried et al.	2012	Quantitative	Medicine	Transtheoretical model	Psychology	USA	Residents (older adults)
A4	Sudore et al.	2014	Quantitative	Medicine	Social cognitive theory	Psychology	USA	Residents (older adults)
A5	Ernecoff et al.	2016	Qualitative	Public health	Transtheoretical model	Psychology	USA	None
A6	Fried et al.	2016	Quantitative	Medicine	Transtheoretical model	Psychology	USA	Residents (older adults)
A7	Aslakson et al.	2018	Quantitative	Medicine	Social learning theory	Psychology	USA	Patients Caregivers Healthcare providers
A8	Al Hamayel et al.	2019	Qualitative	Multi-disciplinary	Transtheoretical model	Psychology	USA	Patients
A9	Hong et al.	2019	Quantitative	Sociology	Theory of planned behavior	Psychology	USA	Residents (adults)
A10	McAfee et al.	2019	Quantitative	Public Health	Integrated behavior model & precaution adoption process model	Psychology	USA	Residents (adults)
A11	Roscoe & Barrison	2019	Qualitative	Sociology	Goldsmith's normative theory of social support	Sociology	USA	Adult children Parents
A12	Stone et al.	2019	Qualitative	Nursing	Culture care theory	Nursing	USA	Healthcare providers Residents (homeless)
A13	Van et al.	2019	Mixed	Medicine	Kolb's experiential learning theory	Psychology	USA	Healthcare providers
A14	Candrian et al.	2020	Qualitative	Medicine	Communication theory	Sociology	USA	Healthcare providers
A15	Chan et al.	2020	Quantitative	Medicine	Theory of planned behavior	Psychology	China	Healthcare providers
A16	Kermel-Schiffman et al.	2020	Qualitative	Medicine	Theory of planned behavior	Psychology	Israel	Caregivers
A17	Singh-Carlson et al.	2020	Quantitative	Nursing	Social cognitive theory	Psychology	USA	Healthcare providers
A18	Bradshaw et al.	2021	Quantitative	Medicine	Social ecological model	Sociology	UK	Healthcare providers
A19	Combes et al.	2021	Mixed	Multi-disciplinary	Transtheoretical model	Psychology	UK	Healthcare providers Elders Caregivers

**Table 2.** Theoretical Characteristics of the Selected Studies (Continued)

(N=32)

No	Author	Year	Methods	Research field	Theory	Discipline of theory	Country	Subjects
A20	Davies et al.	2021	Qualitative	Multi-disciplinary	Nilsen's implementation theory	Public health	UK	Patients Caregivers
A21	Hafid et al.	2021	Mixed	Medicine	Normalization process theory	Sociology	Canada	Healthcare providers
A22	Jia et al.	2021	Quantitative	Multi-disciplinary	Cultural appropriateness theory	Public health	USA	Residents (adults)
A23	Kermel-Schiffman et al.	2021	Qualitative	Medicine	Theory of planned behavior	Psychology	Israel	Caregivers
A24	Li et al.	2021	Mixed	Nursing	Transtheoretical model	Psychology	Taiwan	Patients
A25	Takehita et al.	2021	Quantitative	Medicine	Theory of planned behavior	Psychology	Japan	Residents (adults)
A26	Xing et al.	2021	Qualitative	Multi-disciplinary	Theory of planned behavior	Psychology	China	Healthcare providers
A27	Yang et al.	2022	Qualitative	Nursing	Theory of planned behavior	Psychology	China	Patients
A28	Graham-Wisener et al.	2022	Qualitative	Public Health	Health behavior change theory	Psychology	UK	Residents (adults)
A29	Ke et al.	2022	Quantitative	Nursing	Theory of reasoned action	Psychology	Taiwan	Patients
A30	Kimpel et al.	2022	Qualitative	Nursing	The ecological model of active living	Psychology	USA	Healthcare providers
A31	Miao et al.	2022	Qualitative	Medicine	Theory of planned behavior	Psychology	China	Healthcare providers
A32	Pivodic et al.	2022	Quantitative	Multi-disciplinary	Theory of change	Sociology	Belgium	Healthcare providers

**Table 3.** Application of Theories

(N=32)

Variables	n (%)
Framework for data analysis	13 (40.6)
Philosophical underpinning of the study	9 (28.1)
Framework for intervention	7 (21.9)
Framework for new tools	3 (9.4)

researchers recommended a personalized approach that takes into account the individual's unique characteristics.

The second category, studies that utilized theory as a philosophical foundation, included research that used theory as a conceptual basis and designed their research accordingly. Their primary aim was to identify the characteristics that influence ACP [A1,A11-13,A25,A27,A29,A30].

A variety of theories were utilized, including the theory of planned behavior [A25-27], Leininger's culture care theory [A12], and the theory of reasoned action [A29]. These studies laid the groundwork for future intervention research by seeking to pinpoint factors that either facilitate or impede participation in ACP, taking into account theories and cultural differences [A1,A12,A13,A25-27,A29,A30]. Furthermore, by presenting participants with scenarios for different situations and exploring potential communication challenges in the ACP process through a theoretical lens, researchers have suggested intervention studies to improve future communication methods in ACP [A11].

The third category, studies that developed and applied theory-based interventions, included research that developed, applied, and evaluated interventions based on theory [A6,A7,A14,A19,A21,A22,A32]. Primarily, interventions were conducted to provide information about

advance care planning and facilitate communication. The behavior change theory was commonly utilized to assess participants' attitudes and preparedness for ACP, offering individualized feedback to encourage active discussions [A6]. Additionally, this theory helped some studies understand participants' behaviors and develop strategies for the effective implementation of ACP intervention programs [A7,A19]. Sociological theories also played a role in guiding interventions that enabled healthcare professionals to lead the establishment and progression of ACP [A14,A21,A32]. Furthermore, public health theories, such as the cultural appropriateness theory, were applied to deliver culturally sensitive interventions, which were instrumental in assessing end-of-life preferences [A22].

The last category, studies that presented theory-based tools, included research that developed and explained new tools based on theoretical approaches. This category comprised studies that created communication tools for ACP and measurement instruments to evaluate participants' intentions and attitudes toward ACP [A3,A10,A31]. Several studies utilized behavior change theory to craft specialized tools aimed at understanding participants' intentions, beliefs, and attitudes regarding ACP [A10,A31]. Additionally, one study examined the juncture at which participants' attitudes and perceptions regarding ACP shifted, generating data that could inform communication strategies [A3].

## DISCUSSION

This study aimed to understand and analyze the current status of research that applies theories to ACP, as published in both domestic and international journals over the past decade. Out of a total of 3,908 literature items identified in the search, 32 studies were found to have applied theories. In this section, we discuss the theoretical and practical implications of the research findings.

### 1. Theoretical Implications

The purpose of this study was to evaluate the extent to which current research on ACP incorporates theoretical frameworks. Among the 32 studies reviewed, only one (3.1%) utilized nursing theories. This figure is modest in absolute terms but represents a slightly higher percentage compared to earlier research that focused on the use of nursing theories in articles from specific academic journals. For instance, Ji et al. [25] reported a rate of 1.9%, and Chae et al. [26] found a rate of 1.5%. The relatively higher percentage observed in this study may be attributed to its

broader inclusion of academic journals, achieved by searching a variety of databases, unlike the narrower scope of previous studies.

Upon examining the 32 studies that applied theoretical frameworks, theories from psychology were the most prevalent, appearing in 24 studies (75.0%). These were followed by theories from sociology, public health, and nursing. Within the realm of psychology, the transtheoretical model and the theory of planned behavior were the most frequently cited, together accounting for over half of the references. Only one study was found to utilize a nursing theory, specifically Leininger's culture care theory. These findings suggest that ACP, a critical component of end-of-life care, is a concept embracing a multidisciplinary approach. This demonstrates that the concept of ACP in the field of nursing transcends the discipline itself and is interwoven with theories from various other fields [27].

ACP shares characteristics with treatment plans in end-of-life care, and both are integral to the decision-making process. Although the literature on ACP revealed limited studies applying nursing theory, with only one identified study [A12], a broader look at the field of end-of-life care shows that nursing theories have been employed in various ways. For instance, research has analyzed data using theories such as Paterson and Zderad's humanistic nursing theory to highlight the significance of communication in delivering palliative nursing care to pediatric cancer patients [28]. Other studies have used Parse's human becoming theory to structure the experience of pain in end-of-life cancer patients and their families [29]. In studies that applied theory philosophically, research drawing on Meleis' transition theory has described the experience of disease transition and self-management in short-term ovarian cancer patients [30]. Similarly, studies using Watson's human caring theory have explored the subjective experiences of end-of-life cancer patients and their caregivers [31]. Additionally, theory-based interventions have been implemented, such as using Lenz's theory of unpleasant symptoms to provide palliative interventions to patients with progressive chronic obstructive pulmonary disease, thereby improving their quality of life [32]. Moreover, the development of tools based on theory has included creating surveys to measure the core qualities of palliative care nurses, incorporating various nursing theories [33]. These examples confirm that nursing theories, from diverse perspectives, are utilized to understand the range of phenomena in end-of-life care, assess issues facing nursing subjects, and provide appropriate interventions.

In this study, ACP is highlighted as a process of discus-

sing and preparing for the end of life, regardless of whether the individual is currently ill. It involves various aspects of end-of-life care, and the process necessitates identifying and addressing potential problems that may arise during preparation and implementation. From the perspective of the metaparadigm, it is crucial to understand the current state of nursing research on ACP. The metaparadigm represents a worldview within a discipline that frames how specific phenomena are viewed and conceptualized. In nursing, the metaparadigm comprises four elements: human beings, health, environment, and nursing [17]. The literature included in this study identifies factors that influence ACP, such as individual factors [A1,A7,A15,A16,A21,A24,A25] (knowledge of ACP, attitudes and perceptions, beliefs, and values about death or end-of-life care, and personal experiences with disease) and environmental factors [A2,A12] (cultural or religious differences and economic status). These factors are consistent with previous research findings that suggest the decision-making process for ACP is shaped by various contextual factors, including individual health conditions and environmental influences [15,16]. The results indicate that the four elements of the metaparadigm can provide a comprehensive approach to ACP, taking into account diverse contexts. Therefore, to deliver high-quality nursing interventions and make a significant contribution to nursing science, it is essential to understand and explore the factors influencing the implementation of ACP identified in prior studies, as well as the ACP process from a nursing standpoint. Nursing theory, research, and practice form a cyclical structure in which theory informs the development of research questions aimed at investigating specific phenomena or situations. Research, in turn, validates and refines theory, and this iterative process improves practical applications [17]. Thus, applying nursing theory to research related to ACP contributes to the development of a distinctive framework for end-of-life care within nursing, providing a foundation for evidence-based practice and ultimately improving the quality of end-of-life nursing care.

## 2. Practical Implications

ACP is a future-oriented process that focuses on affirming and respecting an individual's values and preferences concerning life, regardless of whether they are currently ill. This approach emphasizes confirming a person's wishes rather than making decisions about life-sustaining treatments when death is near [3]. As aligning end-of-life care with a patient's preferences is increasingly acknowl-

edged as a crucial component of a dignified death, interest in ACP has grown. This has led to a surge in related research activity.

ACP is a multifaceted process influenced by individual factors, the surrounding environment, the healthcare system, and policies. Therefore, it is advisable for experts from various disciplines, such as physicians, nurses, and social workers, to collaborate in discussing and implementing this process [34]. Nurses, in particular, are pivotal in this collaboration due to their extensive contact with individuals across clinical settings and local communities. They play a vital role in delivering direct end-of-life nursing care to individuals during the dying process.

Through the theory-based intervention studies included in the literature review, it was observed that nurses positively influenced patients' or individuals' awareness and attitudes toward their advance care plans through conversations, providing information about ACP, and conducting individualized counseling. Consequently, nurses in clinical settings or local communities can assume various roles. They can serve as educators, explaining life-sustaining treatment-related information in an understandable manner; as facilitators, leading discussions about ACP or end-of-life care; as counselors, reconciling differences between individuals, their families, and physicians; and as providers of end-of-life nursing care, upholding the values of the individuals. This is consistent with previous research on the anticipated roles of nurses in the ACP process [20]. In countries such as the United States and Europe, there is an ongoing effort to expand the role of nurses in ACP to establish end-of-life care more efficiently. Therefore, it is crucial for domestic strategies in ACP to actively incorporate the role of nurses [7].

Theories are established in a range of disciplines, evolving and shaping concepts by integrating different theories, including those from other fields. This multidisciplinary approach is necessary because understanding a particular phenomenon often requires the engagement of several disciplines. The interdisciplinary nature of addressing complex issues is particularly highlighted in the current healthcare landscape, where a multidisciplinary approach is essential. In scenarios that call for interdisciplinary methods, utilizing theories from various relevant disciplines helps to expand the researcher's perspective on the subject of interest. This scoping review posits that ACP is best understood through a variety of perspectives, informed by theories from different academic domains, and it identifies factors that affect its implementation. Nursing theories, which encapsulate the values of care from the nursing standpoint, are especially crucial. Given the in-

creasing recognition of the importance and expectations of the nursing role in ACP, it is critical to actively engage in nursing-led intervention studies that apply these nursing theories.

In particular, ACP, which is closely associated with death, is an aspect of end-of-life culture that embodies the distinctiveness and identity of specific ethnic groups. Engaging in theory-based research can enhance the development of evidence-based nursing practices by providing a framework for a comprehensive interpretation of cultural nuances. Consequently, this approach increases the likelihood of achieving nursing contributions that accurately reflect cultural uniqueness, including that of the individual. At this point in time, there is a need for both academic interest and practical application to encourage active exploration of theory-based research in nursing, especially in the realm of ACP, which involves starting conversations about dignified end-of-life care.

This study is significant as it represents the first effort to systematically review the literature on the application of theory in ACP research. We identified the types of theories used in ACP research and analyzed the methods of their utilization, providing a comprehensive overview. However, this study does not explore specific interventions and their outcomes. A limitation of the literature search is that it failed to include keywords related to end-of-life nursing, advance directives, and ACP, which are often associated with ACP. The search was limited to studies that explicitly identified ACP as the primary focus, thereby omitting studies that may have incidentally addressed these topics. Despite these limitations, the study makes a valuable contribution by clarifying the prevailing trends in the application of nursing theories to ACP research and pinpointing areas where further research is needed.

## CONCLUSION

This study provides foundational data on the application of nursing theories in the field of ACP. It also contributes to identifying the need for and direction of future research on the application of domestic nursing theories related to ACP. Advance care planning is inherently multidisciplinary, and pursuing interdisciplinary approaches is a valid strategy. However, it is clear that there are unique aspects that must be addressed from a nursing standpoint. Nursing theories and concepts, grounded in the metaparadigm, empower individuals to carry out ACP at the most opportune times and in the most effective ways. This enables care choices that yield optimal benefits. Therefore, the application of nursing theories can reflect the societal

challenges posed by an aging population and lead to the development of a customized ACP model. This model would take into account the characteristics of a family-centered culture and the culture surrounding end-of-life issues.

## CONFLICTS OF INTEREST

The authors declared no conflict of interest.

## AUTHORSHIP

Study conception and design acquisition - SJ, LS, KH, LK, and JH; Data collection, analysis and interpretation of the data - SJ, LS, KH, and JH; Drafting of the manuscript - SJ, LS, KH, and JH; Critical revision of the manuscript - SJ and JH.

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