

Bridging the Gap between Attitude and Action: Advance Care Planning Preferences in Older Thai Adults

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Abstract

Advance care planning (ACP) is essential for delivering high-quality end-of-life care; however, its use remains quite limited in Thailand. To explore the attitudes and preferences of older Thai adults regarding ACP within primary care environments. A cross-sectional study was conducted using structured interviews. Information on demographics, health status, attitudes, and preferences related to ACP was gathered. Multivariable analysis was used to identify factors associated with ACP attitudes and preferences. Participants aged 60 years or older recruited from the Primary Care Unit of Songklanagarind Hospital, Thailand, between June and December 2022.

Of the 250 participants, 60% had high comorbidity (Charlson Comorbidity Index > 3). Although the majority displayed strong positive attitudes toward ACP, more than 40% did not wish to create an ACP, and 37.2% preferred to delay it. Higher educational attainment (adjusted OR (aOR) = 2.17, 95% CI: 1.16–4.06) and having had previous ACP discussions (aOR = 4.08, 95% CI: 1.38–12.08) were significantly linked with more positive attitude levels. Participants with stronger attitudes had higher odds of participating in ACP (aOR = 2.81, 95% CI: 1.45–5.42). Individuals with higher education (aOR = 2.09, 95% CI: 1.1–3.98) and those whose family members had received life-sustaining treatment (aOR = 1.9, 95% CI: 1.02–3.55) were more inclined to prefer engaging in ACP. Customized educational initiatives and repeated discussions about ACP are necessary to narrow the difference between positive attitudes and actual participation among older Thai adults.

Keywords: Advance care planning, End-of-life, Thai adults, Thailand

Introduction

The worldwide growth of aging populations is contributing to higher rates of chronic illnesses and geriatric syndromes. In Thailand, almost 20% of the population is 60 years or older, and noncommunicable diseases, including cardiovascular disease, cancer, and stroke, are the primary causes of mortality [1, 2]. Comparable trends appear in Singapore, where the majority of older patients who passed away in emergency departments suffered from advanced chronic conditions. However, many died even when their illness was stable or at an early stage [3]. Social and psychological factors also increase the risk of frailty in older adults [4]. When health worsens, responsibility for decisions often moves to family members after the individual loses decision-making capacity [5, 6]. These issues demonstrate the urgent need for effective end-of-life care and advance care planning (ACP) to ensure that personal healthcare preferences are respected.

ACP allows older adults to discuss their end-of-life care wishes with family and medical staff, helping clarify their preferences and guiding treatment choices [7]. Even though ACP enjoys strong policy backing and active promotion, evidence has not consistently shown that it improves the quality of end-of-life care or ensures that care aligns with patients' goals [8, 9]. Systematic reviews suggest that ACP can modestly enhance communication between patients and physicians and improve some caregiver outcomes. Yet, its overall effects on patients and the wider healthcare system remain unclear [10–12]. In practice, ACP implementation is still limited in many

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Received: 08 September 2024; **Accepted:** 09 December 2024;

Published: 20 December 2024

How to Cite This Article: Chen W, Zhang L. Bridging the Gap between Attitude and Action: Advance Care Planning Preferences in Older Thai Adults. *J Integr Nurs Palliat Care*. 2025;5(2):321-31. <https://doi.org/10.51847/jkJa3uAPSP>

healthcare environments [5, 13]. For instance, only a small number of patients have their ACP documents available when facing a medical emergency [14], which points to the need for more research and well-focused strategies, especially in primary care.

Conversations about end-of-life care continue to be difficult for older adults, their families, and healthcare providers, particularly in Asian countries where both awareness and involvement in ACP are low [15]. In places such as Hong Kong and Singapore, fewer than 40% of older adults are aware of ACP [16], and participation is influenced by factors such as education, health status, and marital status, as well as cultural values and traditions [17–19].

In Thailand, efforts to promote palliative care and legally recognized living wills began in 2007, but awareness and use of ACP remain low among the general public and healthcare workers [20]. The Thai government, in collaboration with the Thai Palliative Care Society and other groups, introduced formal ACP standards in 2022 and included ACP in national health strategies, supported by ongoing training and provider reimbursement [20]. By 2020, ACP had been included among three key performance indicators for health service evaluation in Thailand, although its application remained mostly confined to patients already receiving palliative care [20]. Discussions about ACP are still rare within Thai families and are seldom started by doctors or family members [21, 22], which means many older adults never get the chance to share their end-of-life care wishes. This reveals an important shortfall in extending ACP beyond specialist palliative settings.

Public education about ACP remains limited in Thailand, and there is little research examining the factors that influence older adults' preferences for ACP. The present study was designed to gain insight into how older Thai people view ACP. The results can deepen understanding of ACP within Asian cultural contexts, improve clinical communication practices, and help shape future support programs for older adults. In particular, the study aimed to examine older adults' attitudes and preferences toward ACP and to determine which factors are associated with those attitudes and preferences.

Materials and Methods

Study design

A cross-sectional survey using structured face-to-face interviews was conducted at the Primary Care Unit (PCU) of Songklanagarind Hospital in Thailand from 1 June 2022 to 31 December 2022. Reporting of this study adheres to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines and checklist [23].

Participants

Individuals who attended the PCU and satisfied the eligibility requirements listed below were asked to join the study.

Inclusion criteria

1. Aged 60 years or older
2. Agreed to take part in the research
3. Not suffering from any acute emergencies such as acute stroke, hypertensive crisis, or hyperglycemia

Exclusion criteria

1. Currently receiving active cancer therapy
2. Had already prepared an ACP in the past

We decided to exclude patients who were undergoing cancer treatment, since they tend to have a greater opportunity to discuss or complete ACP during their care pathway than typical older adults [24, 25], potentially skewing the study outcomes. We also excluded older adults who had previously completed an ACP document. Even though personal preferences may shift over time with changes in health status [10], these individuals might hold distinctly different viewpoints on ACP compared with the rest of the older patients seen at the PCU.

Sample size

Sample size estimation relied on the infinite-population proportion formula, which was computed using the n4studies software.

$$n_0 = ((Z_{1-\alpha/2})^2 P(1 - P)) / d^2 \quad (1)$$

Because reliable published data on attitudes toward ACP among Thai older adults were lacking, we drew on results from our own pilot study (detailed later), which found that 18% of older respondents had a high attitude toward ACP. Accordingly, we used $P = 0.18$ and a margin of error = 0.05. The calculation was performed to

achieve a statistical power of 0.80 and yielded a minimum of 227 participants; this number was then increased to 250 to account for an anticipated 10% rate of incomplete or missing data.

Data collection

All participants underwent interviews with a pre-validated structured questionnaire. The instrument assessed knowledge, attitudes, and readiness to engage in ACP among older adults. The interviews were conducted by a trained family medicine resident under the guidance of both a geriatric psychiatrist and an experienced family medicine physician. Given the sensitive nature of end-of-life subjects, every interview took place in a secluded, quiet space. Before starting, participants received clear information that they could pause or stop the session at any time. Basic psychological support and follow-up were available if anyone felt upset; however, the vast majority described the conversation as engaging and said it helped raise their awareness of ACP. In addition, we extracted data on participants' medical background, including comorbidities and previous treatments, directly from the hospital's electronic medical record system.

Measurement and tool

The validated questionnaire prepared for this study was divided into three main sections as follows.

- (1) Demographic and general information (age, gender, religion, monthly income, education level, occupational status, marital status, household members living together, and any unfinished personal matters)
- (2) Health-related information (previous use of life-sustaining treatments, having witnessed family members receive life-sustaining treatments, experience of providing end-of-life care to family members, overall satisfaction with current health, comorbidities evaluated using the Charlson Comorbidity Index (CCI) [26], basic activities of daily living (ADL) measured with the Barthel Index [27] and instrumental activities of daily living assessed with the iADL Index [28].
- (3) Knowledge, attitudes, and preferences concerning ACP

For this research, the questionnaire measuring knowledge, attitudes, and preferences on ACP was constructed following an extensive review of relevant literature. Content validity was reviewed by a panel of three palliative care specialists—one psychiatrist and two family physicians—who assessed the relevance of each question and offered suggestions for improvement. The Item Objective Congruence (IOC) Index was determined for every single item. Items were revised and re-assessed repeatedly until each one achieved an IOC score greater than 0.5. Afterward, a pilot study was conducted with 30 older patients recruited from two PCUs within the hospital network. This pilot produced a Cronbach's alpha coefficient of 0.82, confirming satisfactory internal consistency and overall reliability of the tool.

The attitude portion of the questionnaire contained 3 general opinion items about ACP plus 15 specific statements reflecting both positive and negative attitudes. All items were rated on a 5-point Likert scale ranging from strongly agree to disagree strongly. Answers were converted into numerical values from 1 to 5, with 5 representing the strongest positive attitude. Scores on negatively worded statements were reversed before summing. The final attitude score, therefore, ranged from 15 to 75, with higher scores indicating more favorable attitudes toward ACP. To determine preferences regarding ACP, participants were asked whether they wanted to prepare one.

Data analysis

All data were first entered into Excel files and subsequently processed using R software [29]. Categorical variables were summarised by reporting frequencies and percentages. Continuous variables were expressed as mean with standard deviation (SD) and median with interquartile range (IQR). Relationships between categorical variables were examined using either the Chi-square test or Fisher's exact test. For continuous variables, the t-test or the rank-sum test was applied. Attitude scores were grouped into Low, Medium, and High categories following the Best criteria [30]. The best approach is to convert Likert-scale responses to numerical values and then divide the resulting averages into three interpretive categories. The size of each category interval was determined by subtracting the lowest possible score from the highest possible score and dividing that difference by the total number of categories.

Potential factors related to attitudes and preferences for ACP were selected based on prior literature and bivariate screening results with $P < 0.20$. These selected variables were then entered into multivariable logistic regression models to control for potential confounders. Before final modeling, multicollinearity was assessed using the Variance Inflation Factor, with a cut-off of 10 [31]. A P-value of less than 0.05 was used to define statistical significance.

Results and Discussion

Participant characteristics

During the recruitment phase, 276 individuals who met the eligibility criteria were invited to participate in the study. Twenty-six declined, yielding a final analyzed sample of 250 participants. The primary reasons for non-

participation were inconvenient appointment times (18 people) and discomfort with discussing death-related topics (8 people; these details are not displayed in the tables).

The 250 older adults in the sample were mostly female (65.6%), married (77.6%), Buddhist (96%), and not employed at the time (62.0%). Their average age was 70 years (SD = 7.3). About 80% had completed only compulsory schooling or less, and the majority had monthly incomes below the national average. More than 60% recorded a Charlson Comorbidity Index (CCI) score above 3. The most prevalent health conditions were dyslipidemia (87.8%), hypertension (62.2%), and diabetes mellitus (28.9%). Most participants (65.6%) reported being satisfied with their current health. Only 2.8% had personally experienced life-sustaining treatments, whereas 38% had observed family members receiving such treatments, and 51.6% had provided care for relatives until the time of death.

General attitudes towards advance care planning

Only 18 participants (7.2%) reported having been advised by someone to prepare an ACP. 47 participants (18.8%) had discussed ACP with family or healthcare staff. Just 27 individuals (10.8%) knew at least one person who already possessed an ACP. When asked about broad opinions on ACP, roughly 60% agreed that everyone should be informed about it (62.8%) and participate in the process (56.4%). However, only 51.6% expressed interest in learning more about ACP (data not included in the tables).

Specific attitudes towards ACP and associated factors

Table 1 displays the detailed responses to the individual attitude statements. For analytical purposes, the categories ‘Strongly agree’ and ‘Agree’ were merged, as were the ‘Disagree’ responses. More than half of the sample (57.2%) reported that unresolved personal matters left them feeling unprepared to create an ACP. Close to one-third mentioned that considering ACP raised anxiety about dying (25.2%) or caused unease within the family (27.6%). On the other hand, the great majority felt that ACP would help ensure that care aligns with their wishes (94%), ease family members’ worries (82.8%), and reduce disagreements among relatives (80.8%).

Table 1. Specific attitudes towards the advance care plan (n = 250).

Questions	Responses, N (%)		
	Agree	Neutral	Disagree
1. You prefer to make advance care planning (ACP) choices on your own	195 (82.8)	22 (7.6)	33 (9.6)
2. ACP can contribute to having a peaceful and dignified end-of-life experience	206 (82.4)	17 (6.8)	27 (10)
3. When you cannot decide, ACP guides family members to follow your care preferences	235 (94.0)	8 (3.2)	7 (2.8)
4. ACP can help prevent disagreements among family members about your treatment when you are incapacitated	207 (82.8)	19 (7.6)	24 (9.6)
5. ACP can ease your family’s stress regarding your treatment if you are unable to make decisions	202 (80.8)	23 (9.2)	25 (10)
6. You are not prepared to engage in ACP while there are unresolved matters in your life*	143 (57.2)	34 (13.6)	73 (29.2)
7. ACP encourages greater appreciation for the remaining time in your life	19 (7.6)	22 (8.8)	209 (83.6)
8. ACP discussions may trigger anxiety about death*	63 (25.2)	25 (10)	162 (64.8)
9. ACP feels like it could bring bad luck or a negative omen*	35 (14)	16 (6.4)	199 (79.6)
10. A doctor suggesting ACP might make you feel abandoned, or that treatment is being withheld	56 (22.4)	35 (14)	159 (63.6)
11. Recommendations by healthcare staff to create ACP may induce feelings of hopelessness about treatment*	55 (22.0)	25 (10)	170 (68)
12. Completing ACP could make your family uncomfortable*	69 (27.6)	15 (6)	166 (66.4)
13. You might feel uneasy if a family member completes ACP*	69 (27.6)	32 (12.8)	149 (59.6)
14. Preparing ACP seems complicated or challenging*	38 (15.2)	24 (9.6)	188 (75.2)
15. Creating ACP appears to be a waste of time*	37 (14.8)	21 (8.4)	192 (76.8)

Abbreviation: ACP = advance care planning.

* ‘Agree’ responses to these statements reflected negative attitudes towards ACP.

Attitude scores were categorized according to the Best criteria as Low (15–35), Medium (35–55), and High (>55). Because only three participants fell into the Low category, this small group was combined with the Medium group (n = 67) for subsequent analyses. More than two-thirds of all participants demonstrated high-level attitudes toward ACP. **Table 2** reveals that higher educational level (P = 0.002) and prior engagement in ACP discussions (p < 0.001) were significantly associated with higher attitude scores.

Table 2. Factors associated with positive attitudes towards ACP (n = 250).

Factors	P-value		Attitude level
	High (score > 55), N (%)	Low to Moderate (score 0–55), N (%)	
Total	180 (72.0)		70* (28.0)
Sex: Female	117 (65.0)		47 (67.1)
Age, Median (Q1, Q3)	69 (65, 74)		70 (65.2, 75)
Marital status			
Married or living with a partner	141 (78.3)		53 (75.7)
Single, divorced, widowed, separated	39 (21.7)		17 (24.3)
Have children	173 (96.1)		65 (92.9)
Living alone	9 (5.0)		3 (4.3)
Religion			
Buddhist	174 (96.7)		66 (94.3)
Muslim	6 (3.3)		4 (5.7)
Education level			
Up to compulsory schooling	90 (50)		51 (72.9)
Above compulsory schooling	90 (50)		19 (27.1)
Currently working	66 (36.7)		29 (41.4)
Income relative to the national average			
Below average	142 (78.9)		61 (87.1)
Above average	38 (21.1)		9 (12.9)
Have unresolved personal matters	31 (17.2)		15 (21.4)
Charlson comorbidity index (CCI)			
0–2	64 (35.6)		26 (37.1)
≥3	116 (64.4)		44 (62.9)
Prior experience receiving life-sustaining treatment	6 (3.3)		1 (1.4)
Satisfaction with health			
Unsatisfied	15 (8.3)		5 (7.1)
Neutral	40 (22.2)		26 (37.1)
Satisfied	125 (69.4)		39 (55.7)
Witnessed a family member receive life-sustaining treatment	70 (38.9)		25 (35.7)
Ever advised to create an ACP	14 (7.8)		4 (5.7)
Discussed ACP with others	43 (23.9)		4 (5.7)
Know someone who has an ACP	22 (12.2)		5 (7.1)

Abbreviations: ACP = advance care planning; CCI = Charlson Comorbidity Index.

Higher education and previous ACP discussions were significantly associated with higher attitude scores.

a Chi-square test.

b Rank sum test.

c Fisher's exact test.

* Three participants had a low attitude level; 67 had a medium level.

ACP preferences and associated factors

Table 3 indicates that more than 40% of the participants had no desire to create an ACP, whereas 57.6% expressed a preference to prepare one. However, among those willing to prepare it, 64.6% wanted to postpone the process. The leading reasons for refusing ACP included worries connected to death (17.9%) and trust in their children's or grandchildren's ability to make decisions on their behalf (16.8%). Participants who wanted to create an ACP most frequently mentioned reducing the burden on their descendants (29.4%) and feeling better prepared for the future (21.6%). Among those who preferred to delay, the most common explanations were waiting until nearer the end of life (49.4%) and needing additional information (23.6%).

Table 3. Participant preferences for ACP (n = 250).

Questions	Responses	N (%)
Are you willing to create an advanced care plan?	I do not wish to create one	106 (42.4)
	I want to create one, but not at this time	93 (37.2)
	I want to create one immediately	51 (20.4)

Abbreviation: ACP = advance care planning.

Over half of the sample preferred preparing an ACP, yet a large proportion wished to postpone the activity.

Table 4 reveals that the desire to engage in ACP was significantly related to younger age, having descendants, higher educational attainment, income above the national average, and possessing high attitude scores.

Table 4. Factors associated with ACP preferences (n = 250).

Factors	P-value	
	Wish to create ACP, N (%)	Do not wish to create ACP, N (%)
Total	144 (57.6)	106 (42.4)
Sex: Female	89 (61.8)	75 (70.8)
Age, Median (Q1, Q3)	68 (65, 73)	71 (66, 76)
Marital Status		
Married or living with a partner	111 (77.1)	83 (78.3)
Single, divorced, widowed, separated	33 (22.9)	23 (21.7)
Have children	141 (97.9)	97 (91.5)
Living alone	7 (4.9)	5 (4.7)
Religion		
Buddhist	140 (97.2)	100 (94.3)
Muslim	4 (2.8)	6 (5.7)
Education level		
Up to compulsory schooling	68 (47.2)	75 (70.8)
Above compulsory schooling	76 (52.8)	31 (29.2)
Currently employed	51 (35.4)	44 (41.5)
Income relative to the national average		
Below average	110 (76.4)	93 (87.7)
Above average	34 (23.6)	13 (12.3)
Have unresolved personal matters	21 (14.6)	25 (23.6)
Charlson comorbidity index (CCI)		
0–2	53 (36.8)	37 (34.9)
≥ 3	91 (63.2)	69 (65.1)
Satisfaction with health		
Unsatisfied	11 (7.6)	9 (8.5)
Neutral	34 (23.6)	32 (30.2)
Satisfied	99 (68.8)	65 (61.3)
Witnessed a family member receive life-sustaining treatment	62 (43.1)	33 (31.1)
Ever advised to create ACP	12 (8.3)	6 (5.7)
Discussed ACP with others	31 (21.5)	16 (15.1)
Know someone who has ACP	18 (12.5)	9 (8.5)
Attitude Level		
Low to moderate* (score 0–55)	26 (18.1)	44 (41.5)
High (score > 55)	118 (81.9)	62 (58.5)

Abbreviations: ACP = advance care planning; CCI = Charlson Comorbidity Index.

Having descendants, higher education, higher income, interest in ACP, and high attitude scores were significantly associated with a preference for creating an ACP.

a Chi-square test.

b Rank sum test.

c Fisher's exact test.

* Three participants had a low attitude level; 67 had a medium level.

Multivariable analysis of factors associated with ACP attitudes and preferences

Results from the multivariable analysis examining factors linked to ACP attitudes and preferences are presented in **Table 5**. Individuals whose education exceeded the compulsory level were approximately twice as likely to display higher attitude scores toward ACP. Those who had previously talked about ACP with others were four times as likely to achieve higher scores.

Table 5. Multivariable logistic regression for factors associated with attitudes and preferences of advanced care plans.

Variables	Attitude	Preference
	Adjusted OR (95% CI)	p Value
Sex	—	—
Age	—	—
Have children	—	—
Educational attainment		0.013
Up to compulsory schooling	Reference	
Higher than compulsory schooling	2.17 (1.16, 4.06)	
Presence of unfinished personal matters	—	—
Family history of life-sustaining treatment	—	—
Attitude levels		
Low to medium	—	—
High	—	—
Discussed ACP with others	4.08 (1.38, 12.08)	0.004

Abbreviations: ACP = advance care planning; CI = confidence interval; OR = odds ratio.

According to **Table 5**, participants with higher education and those who had a family member who had received life-sustaining treatment were roughly twice as likely to prefer engaging in ACP. A higher attitude toward ACP increased the likelihood of preferring engagement by nearly 3 times. In contrast, the presence of unfinished personal business substantially decreased the likelihood of engaging in ACP.

To the best of our knowledge, this is the first investigation exploring attitudes and preferences toward ACP among older adults receiving care in primary care settings in Thailand. The majority of participants suffered from chronic physical conditions (60% had CCI > 3) and displayed generally favorable attitudes toward ACP. Nevertheless, their current readiness and actual willingness to participate in ACP remained low, as over 40% expressed no desire to create an ACP at all and nearly 40% preferred to address it at a later time. These results align with earlier research showing that real-world uptake of ACP among older adults remains limited even when positive attitudes or interest are present [32–34]. Higher educational attainment, prior conversations about ACP, and having observed family members undergo life-sustaining treatments were associated with more positive attitudes and stronger preferences for engaging in ACP. Future interventions should be tailored to varying educational backgrounds, offer repeated opportunities for ACP conversations, and draw on older adults' past experiences of caring for family members.

Cultural and religious context influencing ACP in Thailand

Our findings demonstrated a clear positive relationship between stronger attitudes and greater willingness to engage in ACP (adjusted OR = 2.81, 95% CI: 1.45–5.42, P = 0.002). Most older participants acknowledged the advantages of ACP in supporting a peaceful death, which corresponds well with core Buddhist teachings widely followed in Thailand that regard death as a natural and tranquil transition [20, 35–37]. In Thai society, an ideal death is typically understood as one free from prolonged suffering or excessive medical intervention, occurring naturally after illness, and unburdened by worries thanks to prior preparation—including spiritual readiness and resolution of family affairs [36–38]. Passing away surrounded by loved ones and in a familiar environment is also highly valued [21, 38].

Given Thailand's collectivist and family-centered culture along with longstanding medical paternalism [39], family members and doctors frequently play a dominant role in treatment decisions. They may choose to shield older patients from certain information [40]. Consistent with our results, older adults often prefer to delay making end-of-life choices and entrust such decisions to their relatives and healthcare team [20, 21]. This pattern is widely recognized as a common cultural feature across many Asian societies [33, 35]. Yet, more recent studies indicate that older people still wish to receive full and honest information about their health condition [36] and to take an active part in decisions through ACP [16]. These observations match our own findings. In reality, inadequate shared decision-making frequently results in unsatisfactory end-of-life care. It creates considerable psychological and physical strain on both older individuals and their caregivers [32, 41, 42]. In the present study, older participants also believed that using ACP would help minimize conflicts and reduce anxiety for family members facing difficult choices, thereby shielding relatives from emotional, financial, and physical strain [10, 43].

Barriers to ACP adoption among older adults

Although many participants recognized substantial benefits and more than half (57.6%) expressed a desire to prepare an ACP, nearly 40% still wished to postpone the process. We observed that individuals with lower

educational levels were markedly less likely to hold positive attitudes or show interest in ACP, a pattern supported by the broader body of research on ACP participation [44]. Older adults with limited health literacy—which previous studies have linked to reduced knowledge about ACP [45]—may similarly develop less favorable views and preferences; however, health literacy was not directly measured in this study.

In contrast to some earlier reports, discussions about ACP were not universally viewed as taboo in our sample, and older adults, families, and providers did not always avoid the topic [5, 10, 46]. Common misunderstandings persist that ACP is only appropriate for people who are already seriously ill or confined to hospital environments [35], along with fears that completing ACP documents might result in receiving lower-quality care [46]. Approximately one-fifth of the older participants in our study associated being offered ACP with feelings of hopelessness or abandonment by their doctors. Previous research has noted that many older adults are reluctant to surrender personal control but are often either unfamiliar with how ACP works or unclear about their own wishes [11, 47, 48]. Nevertheless, more than 60% of our primary care participants had a CCI score > 3, indicating significant health challenges that warrant timely end-of-life planning [49]. This group of older adults attending primary care, together with their caregivers, will almost certainly confront important end-of-life decisions in the future. Addressing misconceptions and uncertainties is therefore essential to improving attitudes, boosting engagement in ACP, and avoiding suboptimal decision-making at the end of life [7, 50].

Clinical and research implications

In everyday clinical practice, persistent misunderstandings and uncertainties surrounding ACP can be effectively addressed through personalized educational programs that take into account patients' varied educational backgrounds, and by providing multiple opportunities for ongoing ACP conversations — strategies that our study showed can promote more positive attitudes and higher participation rates. To meet the demands of busy primary care settings, clinicians could incorporate short ACP discussions into routine appointments, such as annual health checks or follow-up visits for chronic conditions, and use electronic alerts or standardized prompts in medical records to revisit the topic when appropriate [11, 51]. Appointing a dedicated ACP coordinator or team member, supplying educational materials before visits, and applying structured tools or checklists can help distribute the workload and maintain continuous engagement [11, 51].

Introducing palliative care services earlier for older adults living with life-threatening illnesses — including cancer, chronic diseases, dementia, and frailty — is equally important. Palliative care specialists can deliver appropriate information and assist both patients and families in developing an ACP. However, in Thailand, fewer than 20% of individuals who need palliative care receive timely and appropriate support [20], mirroring the limited availability of such services across most low- and middle-income countries [52]. Additional studies are required to design and test culturally sensitive, well-suited ACP interventions to encourage more favorable attitudes and preferences toward ACP.

Strengths and limitations

This study recruited a substantial number of older adults from primary care settings, which helped broaden knowledge about attitudes and preferences toward ACP among older populations in an Asian setting, particularly among those living with multiple chronic conditions. Nevertheless, several limitations should be considered when interpreting the results. First, the cross-sectional design prevents any conclusions about cause-and-effect relationships. Second, structured interviews were used instead of self-completed questionnaires to accommodate expected cognitive and sensory difficulties among older participants. While this approach offered support, it may have introduced social desirability bias, especially on sensitive subjects such as ACP and end-of-life issues. In addition, we excluded older adults who were receiving cancer treatment or who had already completed an ACP. This exclusion could have created selection bias, meaning the results should be viewed with caution. Future research could include these groups to examine potential differences more closely. Finally, attitudes and preferences regarding ACP among older adults are highly diverse, and the quantitative method employed here may not have fully captured the range of these variations. Although quantitative data offer a broad picture and improve generalisability, complementary qualitative studies are required to gain deeper insights and to guide future policies and personalized strategies to promote ACP among older adults.

Conclusion

In summary, the present findings indicate that although the majority of participants displayed positive attitudes toward ACP, a notable discrepancy existed between these attitudes and their willingness to participate, with many choosing to delay or avoid the process altogether. Higher educational attainment, previous discussions about ACP, and having witnessed family members receive life-sustaining treatments were linked to more favorable attitudes and stronger preferences for engaging in ACP. These results underscore the importance of developing customized educational programs that address widespread misconceptions, accommodate diverse educational levels, and offer multiple opportunities for ongoing ACP conversations. Incorporating palliative care services for older adults

facing life-threatening illnesses is essential, yet such services remain limited in Thailand. Future investigations should aim to develop culturally sensitive ACP programs that fit well within Asian healthcare systems and address the specific difficulties older adults in this region face. Tackling these issues can enhance end-of-life care planning and ultimately improve the quality of life for older adults in Thailand and comparable environments.

Acknowledgments: We would like to express our gratitude to all participants for their time and contributions to our study. We also greatly appreciate the assistance of Kittisakdi Choomalee for data analysis.

Conflict of interest: None

Financial support: The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was financially supported by the Faculty of Medicine, Prince of Songkla University, Thailand. The funder played no role in the study design, data collection, and analysis, decision to publish, or preparation of the manuscript.

Ethics statement: This study was approved by the Human Research Ethics Committee (HREC), Faculty of Medicine, Prince of Songkla University (REC 66-094-9-4) on 11 May 2023. Eligible older patients were provided with a participant information sheet in Thai and had the opportunity to discuss any concerns or questions regarding the study.

Written informed consent was obtained from all participants before their inclusion in the study.

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