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Corresponding author:

Oluwagbemiga Oyinlola; Email: oluwagbemiga.oyinlola@mail.mcgill.ca

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Knowledge and perception of older adults toward end of life and advanced directive in Nigeria

Eniola Olubukola Cadmus, M.B.B.S., F.W.A.C.P., M.P.H., PH.D.^{1,2}, Oluwagbemiga Oyinlola, B.SC., M.S.W., M.SC.^{3,4} , Abiola Obadare, M.B.B.S., F.W.A.C.P.², Lawrence Adekunle Adebusoye, M.B.B.S., F.W.A.C.P., M.P.H., M.D.^{1,2} and Kafayat Mahmoud B.SC., M.SC., PH.D.⁵

¹Department of Community Medicine, College of Medicine, University of Ibadan, Ibadan, Nigeria; ²Chief Tony Anenih Geriatric Centre, University College Hospital, Ibadan, Nigeria; ³Medical Social Services, University College Hospital, Ibadan, Nigeria; ⁴School of Social Work, McGill University, Montreal, QC, USA and ⁵Center for Innovation in Social Science/CAS, Boston University, Boston, MA, USA

Abstract

Objectives. Older adults often have a heightened awareness of death due to personal losses. In many low- and middle-income countries, including Nigeria, conversation about end-of-life issues and advanced care planning (ACP) among older adults is gradually emerging. Our study explored older adults' knowledge and perceptions towards advanced directives and end-of-life issues in a geriatric care setting in Nigeria.

Methods. A cross-sectional study was conducted among older adults (aged \geq 60 years) in a geriatric outpatient clinic. Data were collected using an interviewer-administered, semi-structured questionnaire, tested at a significance level set at alpha 0.05.

Results. The study included 204 participants with a mean age of 71.3 ± 7.2 years, predominantly female (67.2%). Few of the participants have heard about end of life (20.1%), living will (19.1%), power of attorney (19.6%), and ACP (25.9%). About 29.9% of the respondents considered having a living will, of which about 34.4% have written one. Only 23 (11.3%) would consider discussing ACP in the future, 32 (15.7%) would discuss place of care, and 30 (14.7%) place of death. Preparedness for end of life and knowledge of ACP was higher among males, those with formal education, and those with good self-rated health (p < 0.05).

Significance of results. The study highlighted gap in awareness and engagement in ACP among older adults in a country like Nigeria. This lack of knowledge can lead to inadequate end-of-life care and unpreparedness for critical health decisions for older adults in Africa. Thus, improving awareness and understanding of ACP can empower older adults, ensuring their end-of-life preferences are respected, enhancing the quality of care, and reducing the emotional and financial burden on families.

Introduction

Death and dying are natural stages in the cycle of human life as well as in an ageing society and a reality every individual must experience at one point or the other in life. The global healthcare landscape has witnessed a paradigm shift in addressing the complexities of end-of-life care, particularly in the context of an ageing population (Afolabi et al. 2021; Sepulveda et al. 2003). Like many other nations, Nigeria is undergoing a demographic shift marked by a rise in the number of older adults (Cadmus et al. 2021; He et al. n.d.). Understanding the elements that impact older individuals' knowledge and views about end-of-life care and advanced directives as this demographic shift occurs is critical for improving the quality of life in their later years.

Advance directives are legal documents that allow individuals to express their preferences and instructions regarding medical treatment and healthcare decisions in advance, particularly in situations where they may be unable to communicate or make decisions for themselves. These directives provide a way for individuals to maintain control over their healthcare even if they become incapacitated. Advance directives can manifest in two separate yet nonexclusive forms. The living will is a written document wherein an individual outlines the healthcare treatments they decline or desire to receive if they become incapable of autonomously expressing their wishes. A power of attorney for healthcare (healthcare proxy or medical power of attorney) is a written instrument that enables an individual to designate a representative person (often a family member or close friend) to make healthcare decisions when they can no longer do so independently (Macedo et al. 2023) Unlike a living will, which outlines specific treatment



preferences, a durable power of attorney for healthcare grants more general decision-making authority to the appointed agent.

Among older adults, there is generally a high level of awareness about death due to the experience of losing a loved one and the presence of at least a morbidity (Vig et al. 2002). Although there is a plethora of evidence about knowledge and perception of older adults toward end-of-life care and advanced directives from many high-income countries (Frechman et al. 2020; Hopkins et al. 2020; Iyer and Brown 2022; Macedo et al. 2023; Moss et al. 2018; Motamedi et al. 2021; Seymour et al. 2004), there is limited information from low- and middle-income countries such as Nigeria where resources for end-of-life care intervention are limited (Cadmus et al. 2019, 2015; Jegede and Adegoke 2016; Luna-Meza et al. 2021; Nwakasi et al. 2023). Nigeria is very diverse in culture, ethnicities, and varying healthcare practices. Still, it is confronted with the challenge of aligning traditional beliefs and modern healthcare interventions in addressing the evolving needs of its ageing population (Abubakar et al. 2022; Alderwick et al. 2021; Omenka et al. 2020; Rowe et al. 2016).

Nigeria has a high cultural significance connected to ageing, and the prevalent misconceptions about end-of-life care and advanced directives have created a complex web of factors influencing the knowledge and perceptions of older adults in Nigeria (Cadmus et al. 2019; Ekore and Lanre-Abass 2016; Esther Ovebade et al. 2024) Moreover, limited public awareness campaigns and educational initiatives focused on end-of-life care have contributed to a dearth of information among older adults, their families, and healthcare providers (Cadmus et al. 2019; Oluwagbemiga 2016). Few empirical literature have focused on the lack of open conversations and awareness surrounding end of life and advanced directives in Nigeria (Cadmus et al. 2019; Omoyeni and Gwyther 2018). The socioeconomic disparities in Nigeria also play an essential role in shaping the knowledge and perception of older adults toward end-of-life care (Afolabi et al. 2021; Agbawodikeizu et al. 2019; Gureje et al. 2014). Access to healthcare resources, financial constraints, and regional variations in healthcare infrastructure contribute to diverse experiences and perspectives among older individuals across the country (Mahmoud et al. 2023).

Furthermore, the influence of religious beliefs and practices cannot be overlooked, as Nigeria is home to a population with deep-seated religious convictions (Mahmoud et al. 2023; Nwakasi et al. 2023). Thus, understanding how religious ideologies intersect with perceptions of death, dying, and end-of-life decisions is essential for developing culturally sensitive interventions that respect the diverse spiritual and religious backgrounds of older adults in Nigeria and countries with similar setups. Previous studies and qualitative analyses highlighted that older adults in Nigeria particularly those attending the hospital setting viewed end of life care and advance directive through the cultural lens of family involvement and traditional beliefs (Cadmus et al. 2019). Also, many older adults prefer to spend their final days at home surrounded by their loved ones rather in the hospital settings (Cadmus et al. 2019). The predominant perceptions among the participants bordered mainly on the arrangements for place of death, burial, and property sharing. Also, in the order of preference, the primary decision-makers in the advanced directive process are mainly the oldest male child, religious leaders, and legal practitioners (Cadmus et al. 2019).

Therefore, investigating those often overlooked factors associated with the perception of older adults toward advanced directives and end-of-life care at a geriatric care settings is considered an

Table 1. Sociodemographic characteristics of the participants

Sex Male 67 32.8 Female 137 67.2 Age group (years) 60-69 94 46.1 70-79 81 39.7 ≥80 29 14.2 Married 136 66.7 Widowed 62 30.4 Separated/Divorced 6 2.9 Educational status 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support 2 10.3 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH)	Variables	Frequency (n)	Percentage (%)
Female 137 67.2 Age group (years) 60-69 94 46.1 70-79 81 39.7 ≥80 29 14.2 Married Married 136 66.7 Widowed 62 30.4 Separated/Divorced 6 2.9 Educational status No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4	Sex		
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70-79 81 39.7 ≥80 29 14.2 Marital status Married 136 66.7 Widowed 62 30.4 Separated/Divorced 6 2.9 Educational status No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Age group (years)		
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Married 136 66.7 Widowed 62 30.4 Separated/Divorced 6 2.9 Educational status No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support 5 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) 600d 182 (89.2)	70–79	81	39.7
Married 136 66.7 Widowed 62 30.4 Separated/Divorced 6 2.9 Educational status No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	≥80	29	14.2
Widowed 62 30.4 Separated/Divorced 6 2.9 Educational status No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Marital status		
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Educational status No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) (89.2)	Widowed	62	30.4
No formal 12 5.9 Primary 28 13.7 Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) (89.2)	Separated/Divorced	6	2.9
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Secondary 78 38.2 Tertiary 86 42.2 Living arrangement Very secondary 36.7 Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	No formal	12	5.9
Tertiary 86 42.2 Living arrangement 4 2.0 Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Primary	28	13.7
Living arrangement Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Secondary	78	38.2
Alone 4 2.0 With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Tertiary	86	42.2
With spouse 75 36.7 With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Living arrangement		
With children/grandchildren 124 60.8 With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Alone	4	2.0
With friends 1 0.5 Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	With spouse	75	36.7
Financial support Self 10 4.9 Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) 69.2)	With children/grandchildren	124	60.8
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Spouse 23 11.3 Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Financial support		
Children/ Grandchildren 140 68.6 Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) Good 182 (89.2)	Self	10	4.9
Other relatives 21 10.3 Friends 10 (4.9) Self-rated health (SRH) 89.2)	Spouse	23	11.3
Friends 10 (4.9) Self-rated health (SRH) (89.2)	Children/ Grandchildren	140	68.6
Self-rated health (SRH) Good 182 (89.2)	Other relatives	21	10.3
Good 182 (89.2)	Friends	10	(4.9)
	Self-rated health (SRH)		
Poor 22 (10.8)	Good	182	(89.2)
	Poor	22	(10.8)

important step toward documenting the inevitably realities of older adults in Nigeria. Uniquely, this study move our understanding forward in the area of culturally dimensions of advanced care planning and end of life care in resource-limited context of a country like Nigeria. Empowering older adults to make informed decisions offers opportunities toward developing culturally sensitive interventions, respecting religious and social norms, ultimately benefiting older adults' end-of-life care.

Methodology

Study design

This cross-sectional study was conducted at the Chief Tony Anenih Geriatric Centre (CTAGC) outpatient clinic, University College Hospital (UCH), Ibadan. Ibadan is the capital city of Oyo State in

the southwestern area of Nigeria. It has a population of 3.6 million inhabitants, of which about 6% are aged 60 years and above (National Population Commission 2009). The CTAGC was selected because it is the pioneer purpose-built center in Nigeria, established on November 17, 2012, to give holistic care to older patients coming to UCH. While, this is one of the first geriatric center in Nigeria to offer both inpatient and outpatient services for older adults in Nigeria, the center is the only center that provides palliative care services to older adults in Nigeria (Afolabi et al. 2022; Omoyeni and Gwyther 2018).

In this study, we defined advanced directives as documented instructions by patients to ensure that their medical preferences are fulfilled if they can no longer communicate with their clinician or family members (Waite et al. 2013). The directives also include end-of-life care treatment options or preferences before death, designation of power of attorney, including health care, and decision-making regarding a living will (Hopp and Duffy 2000; Motamedi et al. 2021).

Study population

The study population included older male and female patients (aged 60 years and above) who presented at the Outpatient Clinic of the CTAGC, UCH, Ibadan. The age of the respondents was determined by asking them, using historical events ((Ogunniyi and Osuntokun 1993), the age at marriage, and the age of their first child. All male and female older patients who consented to participate in the study were included, while acutely ill older adults

were excluded. An average of 230 newly registered older patients are seen monthly at the CTAGC clinic. Patients who presented at the GOP clinic were recruited using a systematic random sampling technique.

Data collection

Data were collected using a semi-structured questionnaire. Participants were recruited through the clinical setting of the CTAGC, and older adults with cognitive impairment were excluded after been confirmed by the physician. The first section of the questionnaire obtained information on the respondents' demographic characteristics, including age, sex, ethnicity, religion, marital status, and number of children. Also, the participants' economic characteristics, including educational level, income, living arrangements, lifestyle habits, and availability of financial and social support, were obtained. Four questions were used to calculate the knowledge of advanced care planning (ACP). "Have you ever heard of ACP?" "Have you ever heard of End of Life?" "Have you ever heard of a living will?," "Have you ever heard of power of attorney?." The respondents were asked to respond yes or no to questions. The variables were summed. A positive response to any of the questions was termed good knowledge.

The survey of end-of-life care, an internationally tested scale design (Rietjens et al. 2017), was used to measure participants' knowledge and perception of dying, decision planning, care, placement, and options for enhanced care for older persons at the end-of-life stage. The respondents were asked to answer questions

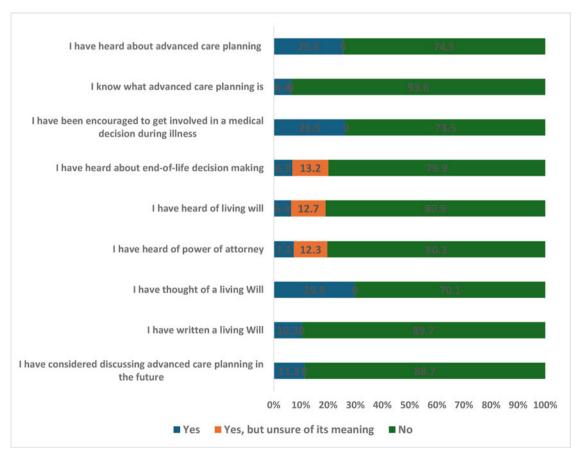


Figure 1. Information received about advanced care directives.

on a 4-point scale ranging from SA - strongly agree (4) agree on SD - strongly disagree (1).

Data analysis

Data collected were entered, cleaned, and analyzed using the Statistical Package Software SSPS (version 21). Descriptive statistics were used to describe the sociodemographic characteristics of the respondents. Appropriate charts were used to illustrate categorical variables. Chi-square statistics were used to assess the association between categorical variables and t-test to test the association between continuous variables. The values of significance were set at $p \leq 0.05$.

Results

A total of 204 participants were interviewed with a mean age of 71.3 ± 7.2 years, and the majority, 137 (67.2%), were females aged between 60–69 years (46.1%) and married. Only 12 (5.9%) participants had no formal education, while 4 (2.0%) lived alone. Financial support was mainly from their children or grandchildren 40 (68.6) (Table 1).

Figure 1 depicts the information the older persons received about advanced care directives. The majority (74.5%) have not heard about ACP. Few of the respondents (6.4%) know what it is all about, have heard about end-of-life decision-making, (20.1%), living will (19.1%), and power of attorney (19.7%). In addition, few of the participants (11.3%) have considered discussing ACP. About a third of the respondents (29.9%) thought of a living will, of which only about a third (34.4%) had written one.

Table 2 describes perceptions and beliefs regarding end of life and related issues. The most common source of information was through religious leaders (89.7%) and media (90.7%). Most respondents perceived end-of-life provisions as preparing for death (81.4%) and preparing a will or document (87.3%). Only 26 (12.7%) were willing to be included in medical experiments when dying. Table 3 shows participant's preferences toward the end of life. Most of the participants would not prefer that healthcare providers decide on their care in the end stages (90.2%). Also, most participants would prefer care within a home rather than an institution 185 (90.7%). Few participants (13.7%) were prepared to have a living will so the doctors and other healthcare professionals would know their preferences and advanced directives in the end stages of life. Also, a majority believed that older adults did not deserve less consideration than younger people (86.3%) and should not be last on the list regarding receiving medical care in the hospital (85.3%).

The respondents' wishes when they are incapable of making medical decisions at end of life are described in Table 4. Most of the participants (65.2%) desire to be able to make their own decisions at the end stages of life and agree there may be differences between their opinions and those of their family members (70.1%). Also, most participants agreed that they could lose their decision-making power due to severe illness or injury (71.1%), and would not want to burden their families with their medical treatment preferences at the end of life (70.6%). Likewise, the majority (70.6%) would prefer not to be resuscitated at the end of life. However, 144 (70.6%) felt they were healthy and did not need to consider such decisions presently.

Table 5 shows participant's medical preferences and how they would be recorded. Over half, 116 (56.9%), agreed to be put on a ventilator. Few (15.7%) agreed to be cared for in the hospital or nursing home. A similar proportion of respondents agreed

Table 2. Participant's perception preferences and sources of information regarding end of life and related issues (N = 204)

regarding end of the and retated issues (v = 204)			
Variables	Disagree n (%)	Agree (%)	
Perception about end of life			
The end of life is preparing for a world beyond	38 (18.6)	166 (81.4)	
End of life is accepting that death is already near and nothing can be done	195 (95.6)	9 (4.4)	
Preparing for end of life is when you prepare your will or document	26 (12.7)	178 (87.3)	
When an individual is at the final stage of illness/disease without hope for recovery	25 (12.3)	179 (87.7)	
End of life is for older adults in hospice care/home	27 (13.2)	177 (86.8)	
The end of life is an act of God	180 (88.2)	24 (11.8)	
We are all powerless as human beings to stop death/dying	176 (86.3)	28 (13.7)	
End of life is caused by inability to cope with physical illness or disability	33 (16.2)	171 (83.8)	
Having a poor quality of life presents untimely death	18 (8.8)	186 (91.2)	
I have a preference for quality medical care when at the stage of end of life	22 (10.8)	182 (89.2)	
I would die lonely at the stage of end of life	185 (90.7)	19 (9.3)	
Medical experiments can be done on me when I am dying	178 (87.3)	26 (12.7)	
Source of information about end of life issues			
Peers/Friends	21 (10.3)	183 (89.7)	
Pastor/Religious leaders	21 (10.3)	183 (89.7)	
Media (radio, television, newspaper)	19 (9.3)	185 (90.7)	
<u> </u>			

to verbally inform family members or acquaintances about their advanced directives (63.8%) or by making an audio or videotape recording (63.8%).

Table 6 shows the factors associated with preparedness for end of life, including male sex, higher educational status, and good self-rated health.

Discussion

The findings from the survey reveal a complex interplay of cultural, religious, and individual beliefs on older person's perceptions and preparations for the end of life. Similar to other LMIC studies, most respondents had never heard of ACP (Bar-Sela et al. 2021; Ekore and Lanre-Abass 2016; Hou et al. 2021; Lim et al. 2022; Wang et al. 2021) (Hou, Wang Lim). However, in high-income countries like Switzerland (47%), the USA (58%), and Portugal (76.3%), the level of awareness about ACP is high and may be due to existing legal regulations in the countries about advanced directives. Additionally, unlike a study in Israel, where most participants reported hospitals as their source of information (Bar-Sela et al. 2021) reported sources of information in this study were media and religious leaders. This finding may be because Nigeria is

Table 3. Participant attitude and preparedness toward the end of life (N = 204)

Variables	Disagree n (%)	Agree (%)
I prefer my doctor or other health care professional to make all the decisions about my care at the end-of-life stage	184 (90.2)	20 (9.8)
I would rather be cared for in a hospice/hospital than at home when at the end of life	185 (90.7)	19 (9.3)
I would not need a living will as my loved ones would know what to do when the end of life comes	182 (89.2)	22 (10.8)
I would like to have a living will so that the doctors and other healthcare pro- fessionals will know exactly what care I want at the end of life	176 (86.3)	28 (13.7)
I believe older people are last on the list when it comes to receiving medical care in the hospital	174 (85.3)	30 (14.7)
Younger people who are dying deserve more consideration than older people who are dying	176 (86.3)	28 (13.7)
Spiritual or religious support is very important in the end-of-life stage	175 (85.8)	29 (14.2)
I would want to be kept alive at all costs	181 (88.7)	23 (11.3)
I fear being helpless and dependent more than I fear death	181 (88.7)	23 (11.3)
I feel death and dying are more discussed in our society	89 (43.8)	115 (56.2)

known for its high level of religiosity (Ekore and Lanre-Abass 2016; Lanre-Abass 2008a).

A substantial percentage of participants do not prefer health-care providers to make decisions about their care in the end stages. This finding may be because research has shown that in the African tradition, the responsibility for decision-making during the end-of-life phase is entrusted to the family members of the individual in question. (Cadmus et al. 2019; Lanre-Abass 2008a). This practice may, however, lead to discord as events unfold (Lanre-Abass, 2008a). This view is supported in this study as participants felt that there may be a discrepancy between their wishes and those of their families.

Factors associated with ACP include being married and having a formal education. Married individuals typically have a close partner who can provide emotional support and encouragement to engage in ACP. A spouse can help with the logistical aspects of creating advanced directives, such as completing paperwork and consulting with healthcare providers. Likewise educated individuals are more likely to practice ACP for several reasons, including better health literacy, access to resources, critical thinking skills, and awareness of the benefits. Like other studies, many respondents agreed to inform family members or acquaintances about their medical preferences verbally. This decision indicates a reliance on interpersonal communication. The willingness to verbally communicate preferences reflects a sense of individual empowerment in decision-making.

In this study, participants were mainly unwilling to undergo medical experiments during the dying process. Possible reasons for this reluctance from other studies include fear, trust in medical professionals, or cultural beliefs. In addition, most

Table 4. Respondents' wishes when incapable of making medical decisions

Variable	Disagreed	Don't know	Agreed
I want to be able to make my own decision	16 (7.8)	55 (27.0)	133 (65.2)
There may be differ- ences in opinion among my family members	10 (4.9)	51 (25.0)	143 (70.1)
I hope not to burden my family with my medical treatment preferences	10 (4.9)	50 (24.5)	144 (70.6)
am aware that I could ose my decision-making power after becoming seriously ill or injured	10 (4.9)	49 (24.0)	145 (71.1)
When I am gasping for oreath, I don't want doctors packing me here and there because of their duties	10 (4.9)	50 (24.5)	144 (70.6)
I am currently healthy, and there is no need to consider such decisions	10 (4.9)	50 (24.5)	144 (70.6)
I will take it as it comes, as I have no control over my death	12 (5.9)	55 (27.0)	137 (67.1)
cannot imagine myself n such a situation	13 (6.4)	49 (24.0)	142 (69.6)
I do not want to think that I will eventually die or lose my memory	12 (5.9)	55 (27.0)	137 (67.1)
I felt that it was best to leave my future to fate or God	10 (4.9)	51 (25.0)	143 (70.1)
I believed that planning my death would mean there was no hope for me	16 (7.8)	50 (24.5)	138 (67.7)
I believe that the discus- sion on death is unlucky, and I try to avoid it.	17 (8.3)	52 (25.5)	135 (68.2)
My family will make this decision on my behalf	11 (5.4)	54 (26.5)	139 (68.1)
My doctor will make such decisions when the time is needed	13 (6.4)	54 (26.5)	137 (67.1)

participants' perception of being healthy and not needing to consider such decisions may indicate a sense of invulnerability or a belief that these decisions are not immediately relevant.

In the African culture, older persons are shown to give verbal instructions to their children concerning their care at the end of their lives. Such instructions may include avoiding prolonged hospital stays, allowing them to die on their own beds and in their children's arms at home, how to conduct the burial ceremony, where they are to be buried (Ekore and Lanre-Abass 2016; Oyinlola 2024). Regarding the preferred location of end-of-life care, participants in the study preferred care at home rather than at an institution. Few studies report older person's preferences for institutional care rather than being managed within the

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Table 5. Participant's medical preferences in advance care planning

Variable	Disagreed	Don't know	Agreed
Medical preferences of advance care planning			
Cardiopulmonary resuscitation	90 (44.1)	21 (10.3)	93 (45.6)
Artificial breathing/ Ventilation machine	64 (31.4)	24 (11.8)	116 (56.9)
Tube feeding for nutrition support	85 (41.7)	89 (43.6)	30 (14.7)
Intravenous drip	85 (41.7)	92 (45.1)	27 (13.2)
Blood transfusion	80 (39.2)	94 (46.1)	30 (14.7)
Antibiotics	77 (37.7)	97 (47.5)	30 (14.7)
Place of death	80 (39.2)	94 (46.1)	30 (14.7)
Hemodialysis	80 (39.2)	95 (46.6)	29 (14.2)
Place of care (nursing home/ hospital)	78 (38.2)	94 (46.1)	32 (15.7)
Chemotherapy	77 (37.7)	95 (46.6)	32 (15.7)
Recording of advance care planning			
Written documentation and give a copy to my healthcare provider	23 (11.3)	63 (30.9)	118 (57.8)
Verbally to family members or acquaintances	16 (7.8)	58 (28.4)	130 (63.8)
To make an audio or videotape	15 (7.4)	61 (29.9)	128 (62.7)

home (Kim et al. 2019). Likewise, few participants were willing to have a living will, indicating their preferences and directives. This lapse suggests a need for a proactive approach to end-of-life planning. Exploring the reasons behind this choice and the potential barrier to creating such documents can lead to discussions on the importance of ACP.

The fact that almost one-third of respondents have thought about living will indicate a level of contemplation about end-of-life preferences. However, the number of respondents who have actually written a will is relatively low. Unlike the Western world, Africans do not like facing the reality of death and often do not encourage the contemplation of death, be it their own death or the death of their loved ones. It is somewhat taboo to think of or discuss one's death (Lanre-Abass 2008a; Lee and Vaughan 2008). Exploring the reasons behind this discrepancy can provide insights into individuals' challenges in translating their intentions into concrete, documented plans.

About half of the participants agreed to have cardiopul-monary resuscitation and artificial ventilation. This is not surprising because Africans believe in the sanctity of life, and it should be preserved by all means possible. The average African is not likely to discontinue life-sustaining treatment once it has commenced and does not favor any artificial termination of life (Ekore and Lanre-Abass 2016; Lee and Vaughan 2008). The majority would prefer not to be resuscitated at the end of life, which also explains why the highly invasive procedures were not accepted.

Table 6. Factors associated with preparedness for the end of life

	Preparedness for	_		
Variables	Yes = 81 n (%)	No = 123 n (%)	χ^2	n
Gender	11 (70)	11 (70)	X	р
Male	34 (50.7)	33 (49.3)	5.080	0.024*
Female	47 (34.3)	90 (65.7)	-	0.024
Age group (years)	+1 (J4.3)	30 (03.1)		
60-69	41 (43.6)	53 (56.4)	1.154	0.561
70–79	29 (35.8)	52 (64.2)	_	
≥80	11 (37.9)	18 (62.1)	_	
Marital status				
Currently married	56 (41.2)	80 (58.8)	0.369	0.544
Not currently married	25 (36.8)	43 (63.2)	_	
Educational status				
No formal	3 (25.0)	9 (75.0)	14.924	0.002*
Primary	6 (21.4)	22 (78.6)	_	
Secondary	25 (32.1)	53 (67.9)		
Tertiary	47 (54.7)	39 (45.3)		
Living arrangement				
Alone	1 (25.0)	3 (75.0)	0.369	0.544
With others	80 (40.0)	120 (60.0)		
Financial support				
Self-support	4 (40.0)	6 (60.0)	0.000	0.984
Others	77 (39.7)	117 (60.3)		
Self-rated health (SRH)				
Good	61 (33.0)	121 (67.0)	32.013	<0.0001*
Poor	20 (90.9)	2 (9.1)		
SRH com- pared with age-mates				
Better	14 (58.3)	10 (41.7)	75.655	<0.0001*
Same	29 (20.7)	111 (79.3)		
Worse	38 (95.0)	2 (5.0)		

^{*}Significant at 5% significance. SRH = self-rated health.

Study limitations and strengths

This study is not without its limitations. The sample size is small and may not represent the broader population of older adults, limiting the generalizability of the findings. Also, relying on self-reported data can introduce biases, such as social desirability bias, where participants might provide responses they think are expected rather than their actual beliefs or knowledge. Older adults might have difficulties recalling past information accurately,

which can affect the reliability of the data. The cross-sectional nature of the study captures perceptions and knowledge at a single point in time, missing potential changes over time or the impact of interventions. Knowledge and perceptions of end-of-life care can vary significantly across cultural and societal contexts. Without accounting for these factors, the study might miss essential variations. Addressing these limitations in future research can enhance the robustness and applicability of findings, ultimately contributing to better end-of-life care planning for older adults.

This study despite its limitations has its strengths. The study focuses on older adults, who are the primary demographic affected by end-of-life decisions and advanced directives ensures applicability of the results to the group. Also the study was conducted in a geriatric center means participants are likely receiving specialized care, making findings particularly relevant for similar healthcare settings.

Conclusion

The study provides valuable insights into how much older adults know about advanced directives and their attitudes toward endof-life planning. Most older persons in this study were unaware of ACP, which is a significant finding. Discussing the reasons behind this lack of awareness could unveil potential barriers, such as limited access to information, cultural factors, or communication gaps within healthcare systems. The overwhelming reliance on religious leaders as a source of information suggests a strong influence of cultural and spiritual beliefs in shaping individuals' perceptions of end of life. There is a need for targeted efforts to raise awareness and understanding of advanced care directives among older persons. Engaging community leaders, religious institutions, and other community resources in disseminating information may be vital in reaching older individuals. Information obtained can guide healthcare providers in developing better communication strategies and resources to assist older adults in making informed decisions about their end-of-life care.

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Ethical approval. Ethical clearance for the study was obtained from the joint University of Ibadan /University College Hospital Ethical Review Board. Permission was also obtained from the Director of the CTAGC. Written informed consent was obtained from each participant before data collection. Respondents were allowed to sign or thumbprint the document depending on their literacy level. Data collected was kept confidential and entered on a password-protected computer accessible only to the researcher, data entry clerk and statistician. To maintain confidentiality, the names of participants were not included in the questionnaire. Only serial numbers allocated to the participants were written on the questionnaire. The questionnaire was translated into the

local Yoruba language and back-translated to English to ensure the original meaning was retained. The pretest was carried out among older persons attending other clinics within the hospital. All respondents were managed for their primary complaints.

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