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Review Article

Financial Health Literacy and Community-Dwelling Older Adults: A Concept Analysis

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Aim. To examine and clarify the concept financial health literacy (FHL) within the context of aging and healthcare. *Background*. Older adults have a high chronic disease burden and low financial and health literacy levels which often leads to high healthcare costs and poor self-management. Clarification of the concept FHL is necessary to better support nursing care and successful self-management. *Design*. Concept analysis using literary synthesis. *Data Sources*. Electronic databases were used to find scientific literature (i.e., PubMed, CINAHL, and Business Source Complete), and online dictionaries were used to find basic definitions. *Review Methods*. Walker and Avant's eight-step method was used as a guide to construct a concept analysis of FHL. Clinical, aging, financial, and economic studies were reviewed to determine defining attributes, antecedents, and consequences of FHL on the older adult's health. *Results*. FHL is defined as the knowledge, skills, and ability to make decisions that allow an individual to manage finances to optimally meet healthcare-related and household expenses, including resources to self-manage health, and plan for short-term, long-term, and end-of-life healthcare. Personal context, opportunity, and access are antecedents to FHL. There are 3 defining attributes: knowledge about health and financial-related concepts, skills in health and financial planning, and healthcare and financial-related decision-making behaviors. The 4 consequences of FHL include effective healthcare utilization, effective cost management, effective self-management, and positive health outcomes. *Conclusions*. FHL is a complex, multidimensional concept. A better understanding of this concept has significant nursing implications for research, clinical, practice, education, and policy development. Older adults have unique health and financial needs due to the complexity of retirement, living on a fixed income, and self-management of chronic diseases. Development of a FHL assessment tool and intervention is needed and may be supported based on the results of this concept analysis.

1. Introduction

The concepts of health literacy (HL) and financial literacy (FL) are well-researched yet definitions of HL and FL continue to evolve. HL is the understanding and ability one has to locate and use information to make decisions that are health-related [1]. Similarly, FL is the understanding and ability someone has to manage their personal finances, including short and long-term planning [2]. Although these concepts are largely written about in silos from one another, they are naturally interconnected within the context of an increasingly complex United States (US) healthcare system. Both HL and FL are vital to the success and quality of life of individuals; however, *financial health literacy (FHL)* is a relatively new concept and there is very little literature that addresses this important synthesis. Research efforts are hindered by a lack of a common definition for FHL, and there is a need for theoretical work to establish the concept of FHL [3]. FHL is particularly important for older adults (≥65 years old) due to complexities related to aging.

Unfortunately, low HL and FL are common in older adults, which contributes to negative health outcomes and is cited as a major public health challenge [4, 5]. Notably, many of the social factors that impact health also impact literacy levels. Research suggests that individuals who lack English language skills, immigrants [6], and racial and ethnic minorities are at higher risk for low literacy levels [3, 7]. Additionally, factors that put individuals at increased risk for

low financial or HL include having low educational attainment, advanced age, and being female [3, 6, 8–10].

Adding to the challenges associated with low HL and FL, older adults have a high chronic disease burden. This has the potential for increased costs at both the individual and healthcare system levels. Approximately 70% of older adults have a diagnosis of at least 2 chronic diseases [11], and about 81% of hospital costs in the US are spent on adults with chronic disease [12]. Successful self-management of chronic disease improves health outcomes and reduces healthcare-related costs; however, it is notably complex, requiring the development of knowledge, skills, behaviors, and financial decision making, such as buying medication, navigating health insurance, and communicating with the healthcare team [13]. FHL may be one key to improving the community-dwelling older adult's ability to successfully self-manage chronic disease, yet there is limited research that explores relationships with health outcomes [8, 14].

Evidence suggests that financial constraints such as lack of financial stability, inadequate health insurance, and inability to afford healthcare along with other financial obligations are underlying barriers to effectively self-managing chronic disease [15, 16]. Further complicating this, older adults must make important, complex financial decisions that affect their health either directly or indirectly, such as determining how to budget retirement savings, choosing the best health plan and prescription drug benefits, making decisions about end-of-life care, and navigating self-management on a fixed income all within the context of rising healthcare costs [17].

Nurses are trained to provide assessments and interventions to help older adults successfully self-manage chronic disease, but incorporation of a financial perspective into the plan of care is inadequate. On average, 1 out of 3 older adults are considered economically insecure, defined as living at or below the federal poverty level, and among other factors, reportedly struggle with healthcare expenses [18]. Within a 10-year span between 2009 and 2019, annual out-of-pocket healthcare-related expenses for older adults increased 41%, averaging $6,833 per year, including costs for insurance, medications, supplies, and healthcare services. And although close to 94% of older adults have Medicare coverage, about half of their healthcare costs must be covered by alternate means since Medicare primarily covers acute care services [19]. Nurses are uniquely poised to help older adults with the complexity of self-managing chronic conditions through specialty roles such as case management and utilization review [20]; however, not enough is understood about the impact HL and FL have on successful self-management.

2. Aims

A shared understanding of FHL will provide the foundation to advance nursing practice and research on the impact of FHL on health outcomes and the ability of older adults to self-manage chronic disease. Therefore, the purposes of this concept analysis are to (1) guide development of an operational definition of FHL and (2) provide conceptual clarity by distinguishing uses of the concept in a clinical or health-related context to better support nursing care.

3. Methods

This concept analysis follows the approach described by Walker and Avant [21]. Cumulated Index to Nursing and Allied Health Literature (CINAHL), PubMed, and Business Source Complete were included in the search of scientific literature (see Table 1). The initial search of FHL yielded evidence that this is an emerging concept. Since the terms *financial* and *health* serve to specify a particular context for a type of literacy, understanding FHL requires an examination of each component of the compound term. Therefore, the search strategy was expanded in the scientific databases to also include components of the compound term as well as other terms related to the main noun and the modifiers. Search terms included "financial literacy," "health literacy," "health insurance literacy," and "financial health literacy." Key terms were used as needed to further limit the literature to the stated relevance to the population of interest and included ["older adult(s)" or "elderly" or "geriatric(s)" or "aging"] and ["community-based" or "community -dwelling" or "aging in place" or "age in place"]. Filters were applied to limit the search to English and year of publication 2006 to 2022, which yielded a total of 615 articles. This publication year was chosen because of the historical impact that implementation of Medicare Part D had on the older adult's ability to cover outpatient prescription drugs [22, 23]. To avoid duplication, Walker and Avant [21] recommend first looking for existing concept analyses when conducting the literature search. HL was the only search that yielded existing concept analyses after stated limits were applied. Therefore, in an effort to more accurately build on existing literature, the HL searches were narrowed to the identified concept analyses.

Titles and abstracts were reviewed for relevance to the stated purpose of examining FHL in community-dwelling older adults. Attention was given to literature that defined and described these key literacy terms, as well as how researchers are measuring FL and HL in older adults. Articles were included if they were applicable to older adults without dementia in a community-based setting and incorporated a HL and FL context. Duplicate articles were eliminated. A total of 32 articles were retained for analysis from the database search (see Table 1). To support defining key literacy terms and alternate uses of the concept, the grey literature was also included, for example, online dictionaries, Healthy People 2030 [24], and the National Institute for Literacy (NIL) [25].

4. Results

4.1. Uses of the Concept. This concept analysis will focus on literacy, HL, FL, and HIL in order to propose a working definition of the compound term: FHL.

4.1.1. Literacy. There are three key dimensions common to all types of literacy: knowledge, level of skill, and decision-making ability. *Literacy* is a complex concept; however, in its

Table 1: Database search strategy.

	PubMed		CINAHL		Business Source Complete	
	Initial search	After TIAB screening	Initial search	After TIAB screening	Initial search	After TIAB screening
Health literacy	184	3	105	6	63	1
Financial literacy	15	9	9	7	102	9
Health insurance literacy	68	6	45	9	19	2
Financial health literacy	4	2	3	2	1	0
Total	270	20	160	24	185	12
Number of duplicates removed	24 duplicates removed					
Total yield after removal of duplicates	32 articles retained for concept analysis					

most basic form, literacy includes knowledge and skill in reading, writing, speech, and math [26]. The NIL [25] states that beyond the basics of reading, writing, speaking, and problem solving, literacy includes the necessary proficiency to function within family units, jobs, and society; this implies the ability to use knowledge and skills for decision making. Literacy is viewed along a continuum as a means to empowerment and expansion of opportunities that can produce increased involvement in society and a better quality of life [27]. Distinct types of literacy within the context of healthcare include HL, health insurance literacy (HIL), FL, and FHL.

4.1.2. Health Literacy. The term HL is used to denote someone who has knowledge and skills in the specific area of physical and mental health [26]. Knowledge of HL includes prior experience with healthcare, familiarity with health conditions, and comprehension of health terminology [27]. Personal HL skills involve the ability to read health information, listen to and communicate with the healthcare team, access resources and navigate healthcare, and interpret and use health-related information [24, 27–29]. Decision making related to HL includes the ability to use health information to make decisions that would allow a person to take ownership of their own health [28, 29]. HL is notably dynamic across situations depending on one's capacity related to intrinsic factors (i.e., education level, resilience, and ability to base new information on what is already known) and extrinsic factors (i.e., complexity of health conditions and the healthcare system) [27, 30]. HL must also be considered from an organizational perspective, for example, by highlighting the responsibility healthcare organizations have to actively promote attainment of HL [24]. An individual may be health literate but unable to function adequately within a complex health system, thus requiring proactive interventions by the healthcare team [27]. For example, nurses can provide simplified instructions at an acceptable reading level and encourage use of patient portals.

4.1.3. Financial Literacy. The term FL is primarily written about in economics, bank marketing, and business literature and is used to denote someone who has knowledge and skills in the specific area of finance [26]. Examples of financial knowledge include knowing financial terminology, as well as basic financial concepts that make it possible to function day to day [9, 31]. Financial skills include being able to read and interpret financial-related information, manage financial resources [9, 31], and calculate finances (i.e., compound interest, risk diversification, and inflation) [32, 33]. Financial decision making includes the ability to apply financial skills and knowledge as would be needed for short and long-term financial planning, such as investing in stocks, planning for retirement, and attaining lower interest rates [9, 34]. FL implies the application of judgment and the ability to take necessary actions to manage money with consideration of one's current situation as well as what will be needed in the future [32]. Although FL originated with economists, there is important clinical relevance to older adults who experience gradual declining health that requires increased financial resources. Navigating the complexities of health insurance within the context of living on a fixed income during retirement is difficult.

4.1.4. Health Insurance Literacy. Although the terms are sometimes used interchangeably, HIL exemplifies one aspect of FL [35]. The term HIL is used to denote someone who has knowledge and skills about health insurance which is used to pay for healthcare expenses [36]. HIL is focused on the structure of health insurance benefits and an understanding of the responsibilities of cost sharing between the individual, health insurance company, and healthcare system, all of which impacts the individual's ability to participate in and access healthcare [37]. Knowledge related to health insurance includes familiarity with terminology and concepts such as healthcare settings, types of services, deductible, monthly premiums, and knowing the maximum out-of-pocket limit [22, 38]. Skills related to health insurance include the ability to compare health plans [39], navigate health insurance (i.e., able to appeal claims) [40], and exemplify document literacy (i.e., complete health insurance forms; able to read, follow, and interpret insurance documents) [22, 35]. Decision making related to health insurance requires the ability to locate and understand health plan information, make the best choices with consideration of personal finances and health status, and demonstrate the ability to use the health plan upon enrollment [22, 35, 39, 40]. Examples of sound financial decisions include selecting low-deductible plans, choosing clinicians who are in-network, and paying premiums on time [41]. HIL leads to increased utilization of healthcare, including a greater use of outpatient services and preventive care services [37].

4.1.5. Related Terms. Financial wellness, financial well-being, and financial capability, which are measured in part by one's level of FL, are related terms which incorporate both perceived and actual levels of financial wellness. Examples include being skilled with handling finances and having enough financial means to live comfortably. Skill in financial-related decision making directly affects subjective financial wellness and leads to improved self-efficacy, yet results from a recent study suggest that the older adult's financial situation is "the most important antecedent of perceived financial well-being" [42]. Research suggests that it is important to differentiate between perceived and actual levels of FL to guide FL educational programs; overconfidence in financial knowledge has been shown to lead to poor decision making, perhaps because older adults become reluctant to ask for help [34, 42].

4.1.6. Financial Health Literacy. According to Walker and Avant, literary synthesis provides new insights about phenomena through careful review of the literature which "may yield previously unrecognized concepts for study" [21]. In this concept analysis, literary synthesis of multiple sources generated an emerging working definition of a new concept. FHL emerged as a related but distinct concept from HL and FL. The commonalities and distinctions are captured in our proposed working definition and concept model (Figure 1). FHL is defined as the knowledge, skills, and ability to make decisions that allow an individual to manage finances to optimally meet healthcare-related and household expenses, including resources to self-manage health, and plan for short-term, long-term and end-of-life healthcare. A detailed summary of defining attributes and antecedents that support this definition is provided below.

4.2. Antecedents. Antecedents help to define what must be present before the concept can occur and be in place for the concept to happen [21]. The 3 categories of antecedents for FHL include (1) personal context, (2) opportunity, and (3) access.

4.2.1. Personal Context. There are multiple factors to consider with regard to the personal context of older adults. For FHL to occur, older adults must have cognitive capacity to understand treatment and financial decisions [10]. They also must have some amount of autonomy with their health and financial-related decisions [8]. Intrinsic factors include considering how education level, self-efficacy, resilience, and cultural background impact comprehension and ability [27]. Older adults must have the ability to learn new domain-specific knowledge and engage in active learning [17, 22].

4.2.2. Opportunity. Opportunity refers to the idea that the older adult has some experience with the healthcare system. Examples include communication or interaction with the healthcare team, exposure to the healthcare environment, and engaging with complex healthcare information [22, 27, 28]. The presence of healthcare needs provides the opportunity for engagement with the healthcare team [8] and exposure to healthcare terminology [39]. Navigation of the US healthcare system, which is inherently complex, also provides an opportunity to achieve FHL due to the potential knowledge and personal experience gained [27, 30, 43].

4.2.3. Access. Older adults must have access to finances and healthcare to achieve FHL, both at personal and system levels. Personally, older adults must have control of their own finances and be able to access their own financial and health records to assist with decision making. They should be able to access resources, such as support from community services and partners [8, 27], as well as information about health insurance options [38]. At the system level, price transparency related to healthcare, health insurance [35, 37], and living expenses supports FHL [8]. Additionally, information should be reliable and trustworthy [35, 37].

4.3. Defining Attributes. According to Walker and Avant [21], the defining attributes of a concept are characteristics that appear most often in relation to the concept and provide broad insight into what the concept is. Three existence statements are used to describe the defining attributes of FHL (see Figure 1).

4.3.1. Knowledge about Health and Financial-Related Concepts. Older adults with FHL possess knowledge about health and financial-related concepts. The ability to understand health and financial information includes being able to take new information and add it to what is already known, which assumes there is some level of prior knowledge [7, 29, 30]. Comprehension must extend to knowledge of what the current and future needs are, including the capacity to understand financial and health-related choices [8]. Older adults must understand costs related to healthcare, insurance, self-management, and daily living [3].

4.3.2. Skills in Health and Financial Planning. Older adults with FHL have skills in health and financial planning. Essential literacy skills include reading, basic numeracy, and oral and written skills. Problem-solving skills are necessary to engage in financial and health planning, such as navigating health insurance [22, 35] and budgeting [8]. Communication skills are also important as the older adult needs to be able to communicate their needs with their healthcare team [27–30, 44]. National and local programs exist to help older adults navigate budgeting, choosing health insurance and effective use of healthcare. For example, https://HealthCare.gov provides Consumer Assistance Programs at the state level, and https://MyMoney.gov is a site operated by Financial Literacy and Education Commission which seeks to promote financial well-being by providing tools such as budgeting worksheets and checklists to help with money management.

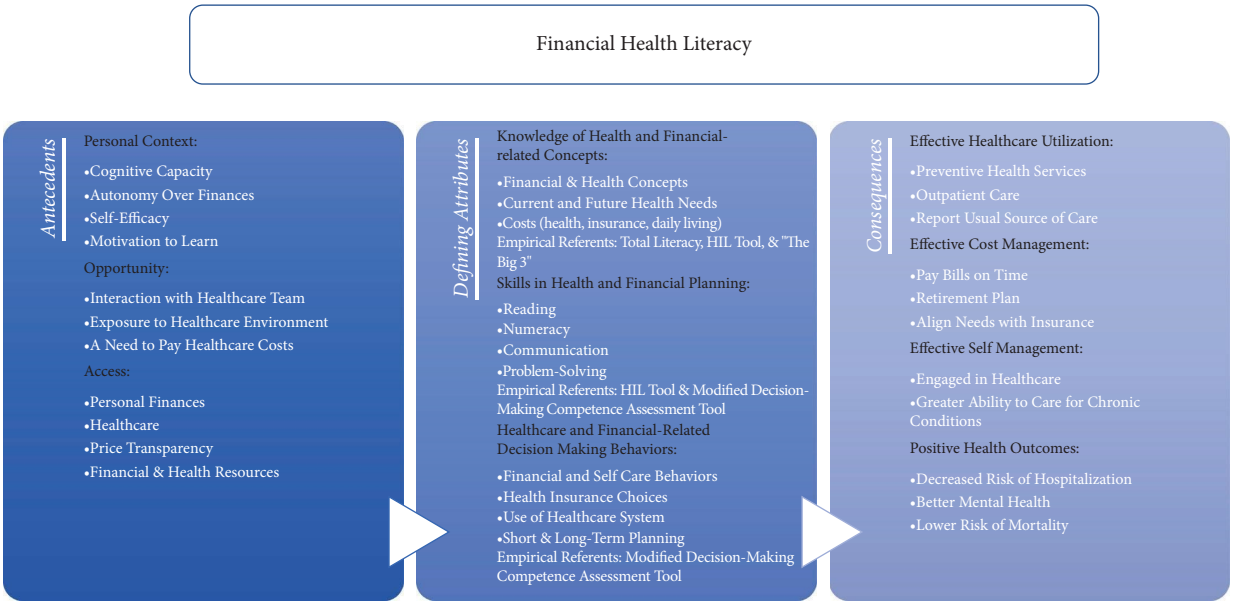

Figure 1: Conceptual model of financial health literacy.

4.3.3. Healthcare and Financial-Related Decision-Making Behaviors. Older adults with FHL participate in healthcare and financial-related decision-making behaviors. Literature supports the fact that HL, FL, HIL, and FHL require a functional component, meaning people have to be able to actively *do* something with the knowledge and skills they possess [17, 27, 28, 31, 32, 40, 41]. Therefore, the presence of FHL knowledge and skills will be evident through decision-making behaviors. Characteristics of FHL include the ability to make informed healthcare and financial-related decisions by considering one's unique needs, assessing individual situations, and weighing alternatives. It is understood that this will be a dynamic process across situations [17, 27, 35, 44]. Using financial resources wisely to make healthcare-related decisions will positively influence both health insurance choices and the use of the healthcare system, for example, by maximizing choosing and using health insurance aptly by shopping around for healthcare [22].

Financial behaviors include making sound healthcare-related financial decisions (i.e., having an adequate amount of money saved up for healthcare expenses that will be incurred after retirement); managing money (i.e., monthly premiums, copays, and covering unpredictable healthcare costs); and ensuring living expenses are paid for (i.e., creating a budget on a fixed income) [3, 8]. Financial knowledge is used to make short-term and long-term healthcare decisions related to budgeting and saving within the context of health, and research suggests that there is a relationship between using health information and financial knowledge to make informed healthcare decisions [3, 4, 8, 22].

4.4. Empirical Referents. Empirical referents are used to explain how to recognize and determine the existence of a concept [21]. Categories that clarify existence of the defining attributes of FHL include perceptions older adults have of their ability to manage finances and health-related decisions, as well as observations of outcomes by the healthcare team. Results of this concept analysis reveal a varied approach to appraising FHL such as assessment of knowledge of health and financial-related concepts after educational interventions [43], observable financial attitudes and behaviors [34], self-report of confidence [8], and competence in financial and health-related decision making [14, 23, 34]. None of these are direct measures of the attributes of FHL, but taken together, they could serve as a starting point for development of a FHL instrument. Suggested measures for the defining attributes of FHL are further summarized in Table 2.

4.5. Consequences. Walker and Avant [21] state that consequences are events that happen as outcomes of the concept. Consequences of FHL were extrapolated from related types of literacy (i.e., HL, FL, and HIL) in the empirical literature and include (1) effective healthcare utilization, (2) effective cost management, (3) effective self-management, and (4) positive health outcomes.

4.5.1. Effective Healthcare Utilization. Consequences of FHL include effective healthcare utilization, such as appropriate use of preventative health services and outpatient care [7, 27, 28, 37]. Research indicates that FL and HL are associated with a lower risk of hospitalization [28, 46]. Older adults are better able to navigate the complexity of health insurance options [35], report a usual source of care, and express more confidence about obtaining needed care [39]. Appropriate healthcare utilization can lead to improved relationships with the provider, allowing the older adult to build trust, which ideally leads to better care and improved satisfaction [29].

Table 2: Empirical referents.

Defining attributes	Instrument	Characteristics of the tool	Statistical measurement	Domain and dimensions addressed
Financial-related knowledge	Financial Literacy Scale ("The Big 3") [45]	3 items (i) Numeracy (ii) Inflation (iii) Risk diversification	Psychometric data not available	Finance domain (i) Comprehension of numeracy (ii) Comprehension of inflation (iii) Comprehension of risk diversification
Skills in health and financial planning Healthcare and financial-related decision-making behaviors	Modified Decision-Making Competence Assessment Tool [23]	3 domains (i) Health (ii) Finance (iii) Nutrition Decision style Self-perceptions Cognitive abilities	Cronbach's alpha: Decision support = 0.71 Self-efficacy = 0.86 Numeracy = 0.53	Finance domain (i) Ability to choose mutual funds Health domain (i) Ability to select and use a healthcare plan (ii) Read nutrition label
Knowledge about health and financial-related concepts	Rush Memory and Aging Project Survey [4]	32 items (i) 23 items on finance (financial literacy) (ii) 9 items on health (health literacy) Total literacy: financial literacy + health literacy (% correct averaged together)	Cronbach's alpha: total literacy = 0.77	Finance domain (i) Comprehension of savings, investments (ii) Comprehension of numeracy (iii) Comprehension of financial terms and institutions Health domain (i) Understanding of Medicare (ii) Understanding health insurance and medications (iii) Interpreting risk
Knowledge about health and financial-related concepts Skills in health and financial planning	Health Insurance Literacy (HIL) Tool [22]	27 items (i) 10 true/false items related to health insurance terminology (ii) 17 multiple choice items specific to proficiency with the Medicare health insurance system	Cronbach's alpha: Terminology = 0.75 Proficiency = 0.85	Health insurance domain (i) Knowledge/comprehension (ii) Skills Decision making (i) Proficiency using health insurance resources

4.5.2. Effective Cost Management. Older adults with adequate FHL will be able to manage costs, for example, by paying healthcare bills, effectively managing healthcare expenses [8], and not delaying or avoiding care due to cost [6, 37]. Individuals with high HIL are better able to align their needs and preferences with health insurance plans [38]. Research suggests that those with high HL have lower healthcare costs [28], and those with high FL have a reduced likelihood of excess debt and increased likelihood of planning for retirement and are better prepared for long-term care planning. Taken together, FHL reduces the older adult's vulnerability to fraud and abuse [47].

4.5.3. Effective Self-Management. Consequences of FHL include increased likelihood of engagement in behaviors that support health promotion, such as effective self-management of personal health [4] as a result of positive healthcare-related financial behaviors [17]. Implementation of a financial plan is used to support self-management of health [8], and those with adequate HL show an increased readiness to be more engaged in and responsible with their own healthcare [27]. Research supports the idea that people with high health literacy have increased self-management skills, greater knowledge about disease and treatment, and greater ability to care for chronic conditions [30].

4.5.4. Positive Health Outcomes. The potential benefit of FHL on health outcomes and successful aging [3] is evident in the research literature. For example, research suggests that older adults with higher FL and HL had better diabetes indicators and improved knowledge specific to the disease [43] and a decreased risk of hospitalization [46]. This suggests that low FHL should be treated as a potentially modifiable risk factor. Financial-related stress tends to be chronic, and there is concern that financial stress can make health worse and even accelerate death. It is important to note that lower HL levels are associated with lower FL levels [5]. Low total literacy and, in particular, HL are associated with a higher risk of mortality (i.e., two times more likely to die during follow-up). When the effects of mortality related to age versus literacy were compared, total literacy (HL + FL) predicted earlier death (i.e., over 2 years) as compared to aging even when adjusting for items such as health conditions, depression, physical activity, and income. Associations of mortality persisted for the subscale of HL but not for FL which supports the need to situate FL interventions within the context of health [5]. In contrast, higher levels of FL are associated with better mental health (less depression and loneliness) and less report of disability with mobility [14].

5. Cases

Cases serve to clarify application of the concept with real-world examples [21]. Model cases are useful to help the nursing team identify patients who have the attributes of FHL. Additional cases will help the nursing team identify patients who either have most but not all of the defining attributes of FHL (i.e., borderline cases) or have none of the defining attributes of FHL (i.e., contrary cases) and would therefore benefit from targeted interventions.

5.1. Model Case. Mr. T.S. is a 75-year-old male who is retired and living on a fixed income but does have access to financial resources through his pension (*antecedent: personal context and access*). He self-manages several chronic conditions including diabetes, arthritis, and hypertension. He regularly sees his nurse practitioner in the primary care setting (*antecedent: opportunity*) and is generally perceived as being in good health. He is able to pay his bills on time, including managing household expenses and healthcare expenses such as health insurance premiums. He makes informed healthcare-related decisions, such as filling monthly medications on time (*attributes: knowledge, skills, and decision-making behaviors in health and financial-related concepts*). His primary care team does not identify any financial-related barriers to self-management during the annual Medicare Annual Wellness Visit (AWV). He has also planned for extended retirement, including anticipated financial and health needs during end-of-life care (*consequences: effective cost management*). He demonstrates ability to maintain his health and active lifestyle using the basic services provided by primary care (*consequences: effective healthcare utilization, effective self-management, and positive health outcomes*). This model case demonstrates all attributes of FHL.

5.2. Additional Cases

5.2.1. Borderline Case. Mrs. P.K. is a 68-year-old female who lives on a fixed income and has no retirement savings. Although she demonstrates basic literacy skills and the capacity to understand costs related to her healthcare needs (*antecedent: personal context and opportunity*), she has no long-term financial plan. She possesses some skill navigating healthcare, for example, she communicates well with her primary care team, can verbalize her health needs, and has some skill budgeting (*attributes: knowledge and skills in health and financial-related concepts*). However, she has not been proactive about finding in-network providers when making appointments with her specialists which has driven up her out-of-pocket healthcare costs. Additionally, she is unsure how to access resources to better plan for and support her healthcare needs. Her primary care team identifies financial-related barriers to self-management during her Medicare AWV, and her nurse practitioner in primary care uses the ICD-10 code Z91.120 to identify her as someone who has to underdose medications due to financial hardship. She will benefit from a connection to financial assistance programs and help determining eligibility for social services. This borderline case contains most but not all of the defining attributes of FHL: *knowledge and skills in health and financial-related concepts,* but not *healthcare and financial-related decision-making behaviors.*

5.2.2. Contrary Case. Ms. J.G. is a 75-year-old female who is retired and has an adequate amount of savings (*antecedent: access*). She is projected to have rising healthcare needs due to the progression of several chronic diseases (heart failure, chronic obstructive pulmonary disease, and hypertension; *antecedent: opportunity*). However, she does not have a good understanding of her current and future self-management needs, and she has no short or long-term plans. Although her financial resources are sufficient to manage her monthly household and healthcare expenses (*antecedent: personal context*), she has no knowledge or skill about handling her finances. For example, she often pays her bills late and does not understand how to maximize use of her health insurance. Her primary care team identifies lack of self-management skills and an inability to prioritize her personal and healthcare needs. She will need continual and increasing support from her primary care team, including connection to resources and reinforcement about her self-management needs. She will likely benefit from education about budgeting, savings, how to maximize choosing and using health insurance, and end-of-life planning. This contrary case contains no attributes of FHL.

6. Nursing Implications

The potential benefit of FHL on self-management and health outcomes in older adults is evident. Knowledge gained through this concept analysis should be used to inform nursing practice, research, education, and policy.

Nurses at all levels of clinical practice play a significant role in assessing and evaluating barriers and facilitators older adults have with self-management of chronic disease. Understanding how to incorporate assessment of FHL may be a key to improving self-management interventions. Although current assessment methods for FHL of older adults in primary care are limited, a component of the Medicare's AWV requires assessment of functional or cognitive decline with the Lawton Instrumental Activities of Daily Living Scale [48]. An element of this assessment includes asking the patient about their ability to manage their own finances, which is a defining attribute of FHL. Another method that has been recently implemented to measure whether finances are a barrier to effective self-management is the ICD-10 code Z91.120 *Patient's intentional underdosing of medication regimen due to financial hardship*. Although neither of these methods specifically measure FHL, positive findings are suggestive of FHL needs that require a more in-depth nursing assessment. Methods such as the AWV and measures of financial hardship may be sensitive to identifying financial difficulties; however, it is important to note that there is low specificity in being able to accurately detect FHL.

As this concept analysis reveals, the literature and research that does exist strongly supports the need for additional research on effective FHL interventions that could impact both knowledge and confidence [49] as well as the development of validated measures [3]. There is therefore opportunity for nursing-led research to assist in the development of targeted interventions to support increased FHL in older adults. While instruments to measure related types of literacy are available, there does not seem to be a consensus for a preferred method of measurement for the attributes of FHL. For example, some researchers combined FL and HL measures to determine a total literacy score [4, 5, 14, 17, 43] while others suggested using a single question to determine level of FHL [8]. Beyond assessment of financial knowledge (i.e., mutual funds, stock options, and compounding interest) that would be found in FL tools, or strictly focusing on knowledge of health insurance, instruments should be used that better align with the older adult's ability to apply and integrate financial information within the context of managing related healthcare and household expenses [3, 8]. Instrument questions should address whether there is understanding of treatment options, ability to manage expenses related to healthcare, and ability to determine one's own health needs and communicate this to their healthcare team.

Nurses also play a pivotal role in development of policy to support older adults with their health and financial goals. At a system level, healthcare organizations must also assume some responsibility for the older adults' ability or inability to achieve their financial and healthcare goals. However, there is inherent difficulty navigating the US healthcare system due to a lack of price transparency. Nurses play a crucial role in the development of policy to best support value-based care delivery models that support cost containment and communication so that patients can make informed healthcare choices [20]. The intention of price transparency laws in healthcare is to allow consumers the ability to compare price of services to make informed decisions; however, there continues to be low compliance with reporting requirements and difficulty being able to estimate the actual healthcare costs [50]. Additionally, laws such as this presuppose there is a basic level of FL and HL in place, which should not be assumed. Nurses have a responsibility to promote price transparency and help patients navigate costs of healthcare. Nurses are uniquely poised to help in this effort due to their expertise in care coordination, patient navigation, health insurance, and ability to connect patients to financial and healthcare resources [20].

Opportunities for nurse-led interdisciplinary collaboration surrounding the concept of FHL have the potential to enhance care of older adults. FHL within the context of healthcare is of interest to multiple disciplines both within healthcare (i.e., advance practice nurse, registered nurses, social workers, and geriatricians) as well as those who are more ancillary to healthcare but still connected (i.e., economists, financial advisors, and pension advisors). Additionally, the shift to value-based care delivery models in the US healthcare system has provided opportunities for nurses to embrace expanded roles so they can practice to the full extent of their license and education level [20].

7. Conclusion

This concept analysis identified 3 defining attributes, 3 antecedents, and 4 consequences. Conceptual clarity of the meaning of FHL will inform the development of research interventions that promote the attainment of FHL in older

adults within the context of primary care settings. Development of recommendations for a standardized approach to FHL assessment and intervention for healthcare teams has the potential to produce significant cost savings for patients and health systems, especially if recommendations could be used to update existing policy surrounding how to effectively manage patients when low FHL is identified. This supports value-based care approaches to reduce costs and help nurses better manage older adults with chronic disease. And perhaps most important of all, advancing this area of research has the potential to significantly improve the older adult's ability to self-manage, achieve better health, and to live a higher quality of life.

Disclosure

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Conflicts of Interest

The authors declare that they have no conflicts of interest.

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