Fall 2021

Prescription Labels: Get to Know Them

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Prescription Labels: Get to Know Them

by

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A project submitted to the faculty of
Gardner-Webb University Hunt School of Nursing
in partial fulfillment of the requirements for the degree of
Doctor of Nursing Practice

Boiling Springs, North Carolina

2021

Submitted by:	Approved by:
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11-10-2021	11-10-2021
Date	Date

Abstract

Low health literacy is a problem for millions of Americans resulting in increased use of healthcare resources resulting in poor health outcomes. The older adult population is continuing to grow and is the largest user of healthcare. Use of pharmaceutical regimens to manage chronic illnesses is the most commonly used treatment modality. Unfortunately, people with low health literacy may have trouble understanding and following their providers instructions. It can be difficult to read directions on over the counter and prescription medication bottles. Community-based health educational programs benefit the maintenance of older adult health. The purpose of this project was to increase the health literacy in reference to reading prescription labels through an interactive educational presentation. The sample size was 22 older individuals attending a community-based senior center. Participants were asked to voluntarily complete a survey upon completion of the presentation regarding their new-found knowledge. The results of the surveys indicated that in-person training was beneficial and brought awareness for current evidence-based education for increasing health literacy.

Keywords: community, health programs, prescription labels, health literacy, older adults

Acknowledgements

All thanks, glory, and praise to my Lord and Savior Jesus Christ, for the multiple ways He helped and guided me and for the people He placed beside me during every step of this journey. He prepared each step, equipped me with unending calmness in the valleys, and walked with me through everything. I would not have completed this project without His strength and grace.

My unending gratitude and deepest appreciation are expressed toward my scholarly project Chair, Dr. Kathy Williams DNP, RN, for her patience, support and mentoring along the way. I could not have asked for a better Chair, Christian, or human to walk this journey with me. You inspire me to keep pushing through life, not just school. Thank you for allowing Him to use you in my life and for all that you have done to help me through this project. My "Daisy".

A special thank you to Carrie Miller, Senior Services program coordinator and educator. I was entirely dependent on your ongoing, open communication during a global pandemic where human interaction was absolutely impossible early on in the project. Your dedication and commitment via email saved my sanity. You were a blessing during every step, and I can truly say that you are doing the Lord's work.

To my close classmates, each of you taught me so much along the way. I am so thankful that the Lord brought us together on this journey and I look forward to seeing how He continues to bless and equip us for His glory. You have a special place in my heart. We are finally finished.

A heartfelt thank you goes to my family. Thank you for encouraging me every step of the way. Your support, prayers, and presence have helped carry me through.

Nicklaus, you can do anything you set your mind to. Mom, you are my beacon and my strength. To my late father, your little girl is a Doctor of Nursing Practice.

Table of Contents

List of Figures

List of Tables

Problem Recognition

Health literacy is a key contributing factor to healthcare disparities in the United States (U.S.). Current research shows that people from all populations are lacking health literacy (HL), regardless of educational proficiencies (Parnell, 2015). Historically, many felt HL skills were dependent purely upon individual skills and abilities while others expressed that they were dependent upon the skills or abilities of the "system" or health care organization (Parnell, 2015). According to the U.S. Department of Education, 32 million adults in the U.S. cannot read; of those who can read, do so on average at a 7th to 8th-grade level (Bemker & Ralyea, 2018). Adults and their caregivers need dependable and clear health information to help manage and prevent disease as well as follow recommendations from public health consortiums such as the Centers for Disease Control and Prevention (CDC). On average, adults age 65 and older have lower HL than adults under the age of 65 (U.S. Department of Health and Human Services [DHHS], Oct. 8, 2020). This issue is often related to poor physical function, limited daily activities, pain, and poor mental health status. The aging population and those with chronic illnesses are at an increased risk for low HL and having undesirable outcomes related to low HL. The natural aging process coupled with low or deteriorating HL can compromise an aging adult's capacity to use health information correctly.

The National Assessment of Adult Literacy (NAAL) indicates the following about older adults' HL skills: 71% of adults older than age 60 had difficulty in using print materials, 80% had difficulty using documents such as forms or charts, 68% had difficulty with interpreting numbers and doing calculations (Centers for Disease Control and Prevention [CDC], 2019). The need to improve the aging adult's HL is undeniable.

The inability to make smart decisions about adherence to a prescribed treatment regimen can affect a person's outcome. As shared in Healthy People 2020, patients with low HL also tend to use the emergency department more often and are more likely to return to the emergency department after 2 weeks (DHHS, Oct. 8, 2020). Several factors such as poverty, race/ethnicity, disability, and age can also play a role in low HL. Studies have found that older adult Medicare beneficiaries with low HL have higher medical costs, increased emergency room visits and hospital admissions, and decreased access to health care (DHHS, Oct. 8, 2020). It is important for doctor of nursing practice (DNP) prepared advanced practice nurses (APNs) to ensure that nurses and care providers with whom they work understand and appreciate the impact low HL may have on all patients, but especially those with chronic conditions (Bemker & Ralyea, 2018). It is essential to create awareness and initiate discussions around HL to introduce change in educational practices and guidelines to improve the health outcomes of the aging population.

Identified Need

In the 1970s, the term HL was becoming more recognizable. According to Parnell (2015), the term HL was first used in 1974 to describe how health information impacts the educational system, the health care system, and mass communication, and was used as a goal to be established for grades kindergarten through 12. The original definition measured HL in a literal sense of the word and explained how well a person could read and understand words or information in a medical context. In 1992, the National Assessment of Adult Literacy (NAAL) survey was completed in the U.S. and measured the ability of adults to use written information for everyday tasks and focused on reading, writing, and arithmetic (Parnell, 2015). Over time, the definition of HL implied how well

an individual could apply this information rather than simply understand what was being said. In 2003, the U.S. Department of Education, National Center for Educations Statistics completed the NAAL that included a specific section to measure health literacy that focused on the ability to read, understand, and apply health-related information in English (Parnell, 2015).

The complexity of HL and its definition makes it a challenging issue to address. Healthy People 2010 and 2020 defined HL as: "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (U.S. Department of Health and Human Services [DHHS], Dec. 3, 2020). Healthy People 2030 has taken the definition of HL a step further and now includes personal and organizational HL. The DHHS (Dec. 3, 2020,) definitions are as follows:

- **Personal health literacy** is the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and action for themselves and others (How does Health People define health literacy? section); and
- **Organizational health literacy** is the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others (How does Healthy People define health literacy? section).

The new definitions: (1) emphasize people's ability to use health information rather than just understand it, (2) focus on the ability to make "well-informed" decisions rather than "appropriate" ones, (3) incorporated a public health perspective and, (4) acknowledge

that organizations have a responsibility to address health literacy (DHHS, Dec. 3, 2020, third heading).

The U.S. Department of Health and Human Services (DHHS) (July 24, 2020) has expressed support of the National Action Plan to Improve Health Literacy. This plan seeks to engage multiple partners with improving HL including those in politics, health care professionals, organizations, communities, families, and individuals. According to DHHS (July 24, 2020), the Action Plan is based on two core principles:

- All people have the right to health information that helps them make informed decisions; and
- Health services should be delivered in ways that are easy to understand and that improve health, longevity, and quality of life (para. 1).

Additionally, the Action Plan contains the following seven goals that will improve HL and strategies for achieving them:

1. Develop and disseminate health and safety information that is accurate, accessible, and actionable.
2. Promote changes in the health care system that improve health information, communication, informed decision-making, and access to health services.
3. Incorporate accurate, standards-based, and developmentally appropriate health and science information and curricula in child-care and education through the university level.
4. Support and expand local efforts to provide adult education, English language instruction, and culturally and linguistically appropriate health information services in the community.

5. Build partnerships, develop guidance, and change policies.
6. Increase basic research and the development, implementation, and evaluation of practices and interventions to improve health literacy.
7. Increase the dissemination and use of evidence-based health literacy practices and interventions. (U.S. Department of Health and Human Services [DHHS], July 24, 2020, para. 2)

As a nation, we can improve HL by focusing on these issues and working together to improve ease of access, value, and safety of health care thus reducing costs and improving the health and quality of life of millions of people in the U.S.

Problem Statement

There is a decreased HL awareness among aging adults and there is poor utilization of appropriate methods and interventions to safeguard understanding of health information. Many healthcare providers and clinicians do not utilize suggested HL strategies and interventions making it difficult when communicating with their patients resulting in poor interaction and confusion of medical information once the patient leaves their presence. This issue must be addressed by clinicians and those educating patients to improve HL and decrease the significant negative ramifications for patients and families, healthcare organizations, and the communities at large.

Supportive Literature

A literature search was conducted to identify research regarding the impact of HL in an aging population residing in the community. The search spanned 2015 to 2021. Inclusion criteria were aging adults, community, and HL education. These search terms were identified as producing the most relevant research for the project. Research was

performed in urban settings, subsidized housing, and curricula for medical schools. The summation of this research led to several concepts regarding HL. The first of these findings is that HL has more implications than any one definition can imply, and this has led to multiple definitions of HL. Approximately half of Americans have inadequate or marginal HL, and the risk for lower HL increases with age; and furthermore. they utilize more healthcare and have higher prescription expenses (Bonderski et al., 2018). Much of the current literature is aimed at developing comprehensive models and practices of HL and factors impacting the health of older individuals.

Evidence also shows that among older adults, low HL has been identified as a risk factor for decline in physical function, hospital admissions, and all-cause mortality (Smith et al., 2018). Smith et al. (2018) shared those older individuals who experience social isolation are also more dependent and often rely on other networks to assist them with navigating health information and decision making. Bonderski et al. (2018) shared that poor health outcomes among patients with lower HL appear to be due in part to problems related to understanding information needed for self-care. Social isolation and low HL can be attributed to a large majority of people who have difficulty seeking and understanding medical information.

There is consistent evidence regarding HL and its impact on the aging person and health outcomes. Research by the CDC (2019), Chesser et al. (2016), Smith et al. (2018), and Bonderski et al. (2018) agree that contributing factors such as race, age, socioeconomic status, cognition, and education level play a large role in low HL. Literature reveals that low HL is a concern for the aging population in the community.

Literature Review

In order to develop a thorough and comprehensive understanding of health literacy, resources from ProQuest, PubMed, EBSCOhost databases, CINAHL, MEDLINE, and Google Scholar were utilized. Searches were primarily limited to the information published in 2015 or later but also some earlier articles that shared collective information from the 1970's inception of the term HL. Over 10,000 articles were available with exclusively searching the term HL. To better identify appropriate articles, the keywords for the searches included: community, older adults, elderly, health promotion, health programs, and health literacy. These search terms were identified as producing the most relevant research. Furthermore, Boolean searches were utilized to link various combinations, expand searches, and strengthen the number of articles that met the search criteria.

The search period spanned from 2015-2021, with the majority of selected studies falling during 2018-2020. Inclusion criteria were English language and focused on community-based health promotions programs geared toward aging adults. Studies conducted in hospitals, homebound patients, and home-based interventions were excluded. Nine studies and six evidence-based guidelines served as evidence for this project. The nine studies represented a total of 14,687 study participants 45-years of age and older. Study sample sizes ranged from 73-7,731. More female participants were reported than males. Studies presented programs conducted in both rural and urban areas of the United States, one in Korea, London, and Canada.

The literature supports that community-based education and health promotion programs designed for older adults produced benefits for participants (Agarwal et al.,

2018; Albright et al., 2017; Bonderski et al., 2018; Chesser et al., 2016; Han et al., 2015; Kim & Oh, 2020; Parnell, 2015; Shotwell et al., 2018; Smith et al., 2018; Yamashita et al., 2020). Program topics varied per program offered but a noted trend appeared. Topics were comprised of three main themes: disease management, psychosocial issues, and education.

Disease Management Themes

Disease management and accessing health care were featured in several studies. Participation in HL education and health promotion programs demonstrated improved adherence to cardiovascular medications, improved health outcomes, patient satisfaction, direct cost reduction, and making better health care decisions (Albright et al., 2017; Bonderski et al., 2018; Chesser et al., 2016). Alright et al. (2017) also elaborated on the impact that low HL had previously been linked with both lower recognition of symptoms of depression and lower likelihood to seek mental health treatment in young adults. Based on these findings, knowledge of patient HL levels may have important mental and physical healthcare implications in elderly adults (Albright et al., 2017).

Psychosocial Issue Themes

Four studies addressed the psychosocial issues which included social isolation, cognitive impairment, and stress management (Agarwal et al., 2018; Han et al., 2015; Shotwell et al., 2018; Smith et al., 2018). Agarwal et al. (2018) noted that as the population of older adults continues to grow, the appropriate resources must be available to both improve and support HL level of the population. Agarwal et al. (2018) added that future health research should gather information on the HL levels of target populations to ensure more equitable health services. Shotwell et al. (2018) identified that HL, or the

ability to obtain, process, synthesize, and apply health information, and health autonomy, or the extent to which one desires to exercise control over decisions are independently known to influence health outcomes. Findings in this study shared that the extent to which interventions focusing on improving HL simultaneously enhance levels of autonomy is unknown, and should be explored (Shotwell et al., 2018). Han et al. (2015) and Smith et al. (2018) share that social isolation and low HL are risk factors for mortality and those persons with mild cognitive impairments also exhibit poorer financial and HL.

Education Themes

Three studies focused on the impact of education in HL and outcomes. Hohn et al. (2019), Kim and Oh (2020), and Yamashita et al. (2020) are in agreement that HL should be discussed in future research to decrease low HL of patients. Hohn et al. (2019) shared that the link between low HL and poor health is no longer disputed and furthermore, adult basic education and many community health organizations share a common mission and commitment to serving vulnerable populations. Kim and Oh (2020) and Yamashita et al. (2020) agree that systemic assistance and interventions specialized for older patients and their healthcare providers need to be developed and tested to improve clinical practice and patient HL and that sharing research findings should be useful for government agencies and providers interested in targeting health communications and disparities. Parnell (2015) surmises that it will take more than individual skills to change health behavior and ultimately address the health and prevention challenges we currently face and will continue to face in the future.

Needs Assessment

Population

The targeted population for this project is community-dwelling adults living in a small, rural county in North Carolina who have multiple risk factors and chronic diseases which they may have difficulty managing, as well as limited resources in the community that can help them maintain their own wellness (Event Coordinator/Educator II, Senior Services, personal communication, February 6, 2021). According to County Health Ranking and Roadmaps (2021), older adults in the county comprise 21.7% of the total population. They are not reaching preventative goals in healthcare and have increased health risk factors such as smoking, obesity, physical inactivity, excessive drinking, and have a life expectancy of 78.9 % (County Health Rankings and Roadmaps, 2021). This county has an estimated 88% high school completion and 57% have some college; 31% of older adults in North Carolina are uninsured, in this county, there are 16% that are uninsured; furthermore, 4,152 residents have had preventable hospital stays; only 52% have mammography screenings and 58% have received flu vaccinations (County Health Rankings and Roadmaps, 2021).

Sponsors and Stakeholders

Sponsors of this project include both the director and event coordinator/educator at the Senior Services center as well as pharmacists at drugstores within the county. Stakeholders include all participants of the program and those family members and significant others in attendance. Any employee or volunteer at the Senior Services Center with an interest in HL can be identified as a stakeholder.

Organizational Assessment

An assessment conducted of the center shows that this is well located and accessible by many residents of the county. The center also offers scheduled classes and presents these on a monthly calendar for ease of understanding what topics are being offered. An analysis of strengths, weaknesses, opportunities, and threats (SWOT) has been completed:

Strengths:

- Well established center for older adults
- Support from community and residents
- Offer multiple educational resources
- Partnership with public health
- Strong funding

Weaknesses:

- Staff availability and participation limitations
- Pandemic limitations of in-person participation
- Lack of qualified/available resources to teach classes

Opportunities:

- Expand collaboration and relationships with resources regarding HL
- Technology advances to share information in multiple formats
- Colleges perform public health and nursing clinical rotations at the center
- Consistent programming with supportive topics for aging population

Threats:

- Lack of shared vision and understanding of necessity

- Decreased workforce
- Residents interest level in overcoming HL
- Public transportation for residents

Available Resources

Available resources include a dedicated, physically accessible environment and classroom setting for in-person classes. Audio and visual technology are readily available to assist with learning and teaching participants who might have physical limitations and/or disabilities. The employees of the center are dedicated to offering education that include multiple topics directed at the population of residents in attendance. Pharmacists in the county are also available for further education if needed.

Desired Outcomes

Desired outcomes and expectations will include creating a better sense of HL and therefore establishing overall better health for the population served. Participants will benefit from the program and be better prepared to engage in more in-depth conversations with their healthcare providers to create a better understanding of what is expected once they leave the office. With a sense of autonomy and increased HL and understanding, aging residents can create happier and healthier lifestyles.

Project Team Members

The team selection for this project is important to a successful outcome. The following individuals will be on the team: the project leader, the project chair, practice partners, and clinical experts. With the collaboration of the team members, the project will be thorough, comprehensive, and beneficial to the participants.

Cost/Benefit

Cost/benefit analysis supports that a community with education programs/classes that increase HL of aging seniors will assist with disease management and better outcomes. The increase in HL generates a reduction in admissions and prolonged hospitalizations, emergency room visits, and an increase in medication compliance. With improved HL, aging residents will also be better prepared to care for illnesses while decreasing preventable exacerbations of chronic illnesses. Healthy aging adults will benefit by the potential of not requiring an increase in medications, procedures, nor an increase in frequent provider visits.

There is a decreased HL awareness among aging adults and there is poor utilization of appropriate methods and interventions to safeguard understanding. Many healthcare providers and clinicians do not utilize suggested HL strategies and interventions making it difficult when communicating with their patients, resulting in poor interaction and confusion of medical information once the patient leaves their presence. This issue must be addressed by clinicians and those educating patients to improve HL and decrease the significant negative ramifications of patients and families, healthcare organizations, and the communities at large. Benefits for the participants in this project will increase their autonomy and confidence when addressing concerns with their own clinicians. Addressing and raising awareness of low HL will increase the relationship between patients and clinicians allowing recommended strategies and interventions that will ensure optimal health outcomes.

Goals

The goal of this project was to strengthen the HL of aging adults by presenting information to them that will aid in understanding topics of health and well-being. With the use of educational aids, they will be able to read, comprehend, and understand information and ask for clarification to promote HL.

Desired Outcomes

The following outcomes of the project will positively impact and support the HL of aging adults in the community:

- Desired outcomes and expectations will include creating a better sense of HL and therefore establishing overall better health for the population served.
- Participants will benefit from the program and be better prepared to engage in more in-depth conversations with their healthcare providers.
- With a sense of autonomy and increased HL and understanding, aging residents can create happier and healthier lifestyles.

Mission Statement

The project mission was to improve the quality of HL of the Senior Services Center participants by promoting evidence-based practices with the help of standardized guidelines provided by Healthy People 2030 and CDC.

Theoretical Underpinning

With health care costs rising, health promotion has been of increasing interest not only to health care workers but also to the aging general public seeking assistance with their health routine and demands. A noteworthy fact is that health promotion is not just about disease prevention. Health promotion describes behaviors an individual can

perform to bring longevity and quality of life even as they age. Therefore, it is critical that health promotion be explored in this population. Nola Pender's Health Promotion Model (HPM) is similar in construction to the health belief model but is not limited to explaining disease-prevention behavior (Tomey & Alligood, 2006, p. 455). The original HPM was presented in the first edition of the text, *Health Promotion in Nursing Practice*, published in 1982 (Tomey & Alligood, 2006, p. 453).

The HPM offers a conceptual framework that allows nursing direct care towards improved health and increased functional ability. The model is an attempt to depict the multifaceted natures of persons interacting with the environment as they pursued health (Tomey & Alligood, 2006, pg.459). The major concepts are individual characteristics and experiences, behavior-specific cognitions and affect, and behavior outcomes. The model links the three major concepts in a general linear fashion towards the overall goal of the health-promoting behavior. Each concept in the model applies to an exact area of patient assessment or achievement. Pender gives a description of each of the concepts. Health-promoting behavior is acknowledged as the definitive outcome of the model. Perceptions of self and influences on the individual directly influence obligation to a plan of action which then leads to the health-promoting behavior. It is assumed that a person can actively seek to regulate behavior, use self-reflection, and initiate behaviors that adjust their environment. The model has implications for application by emphasizing the importance of individual assessment of the factors believed to influence health behavior changes (Tomey & Alligood, 2006, p. 461).

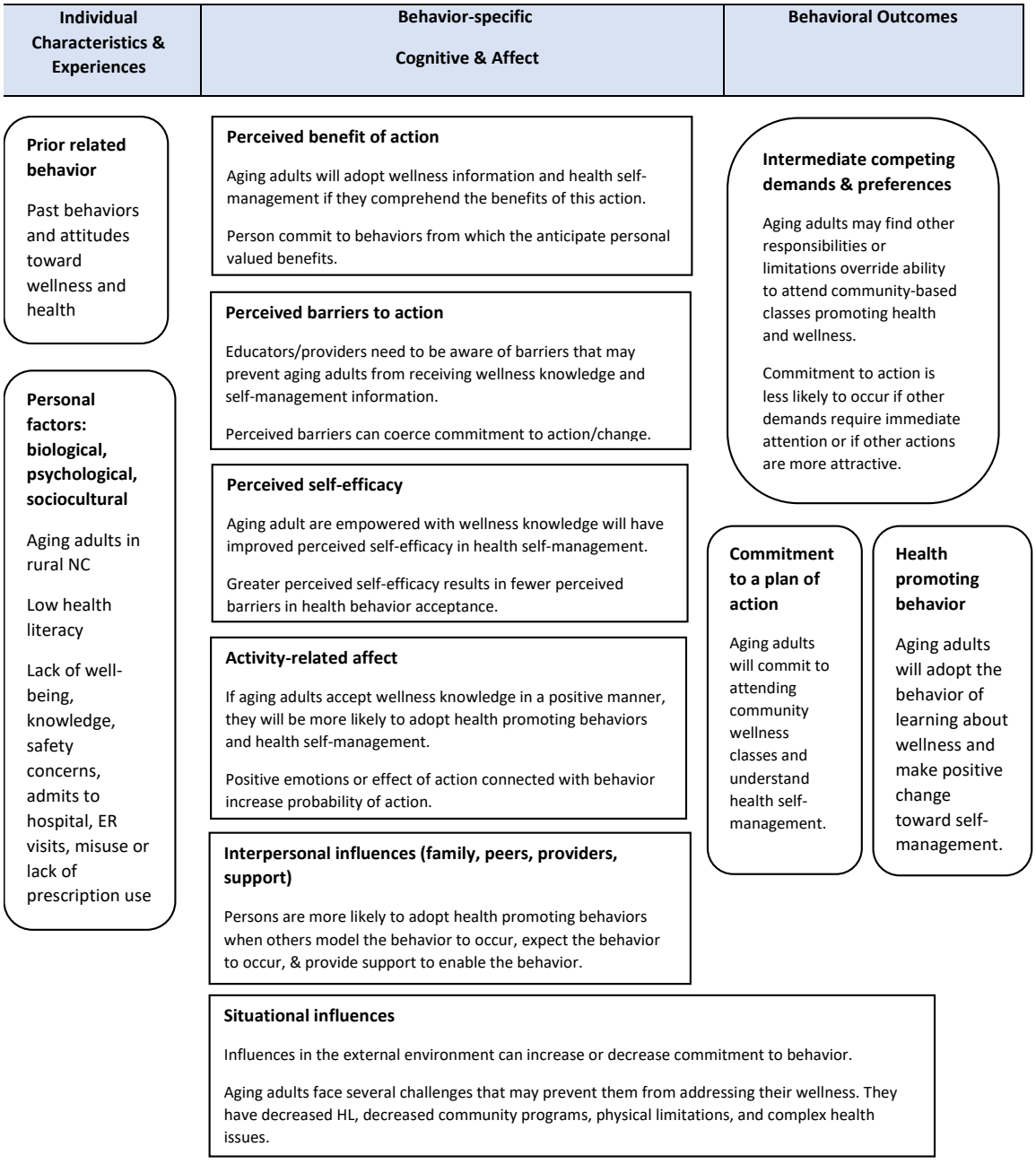
The Health Promotion Model is an appropriate guide for the project that will address HL in the aging population. Figure 1 reflects the CT alignment related to the project.

Figure 1

CT Reflecting Alignment of HPM Concepts with HL Project

Theory to Application Diagram

Health Promotion Model (HPM) Applied to Health Literacy in Aging Adults



Work Planning

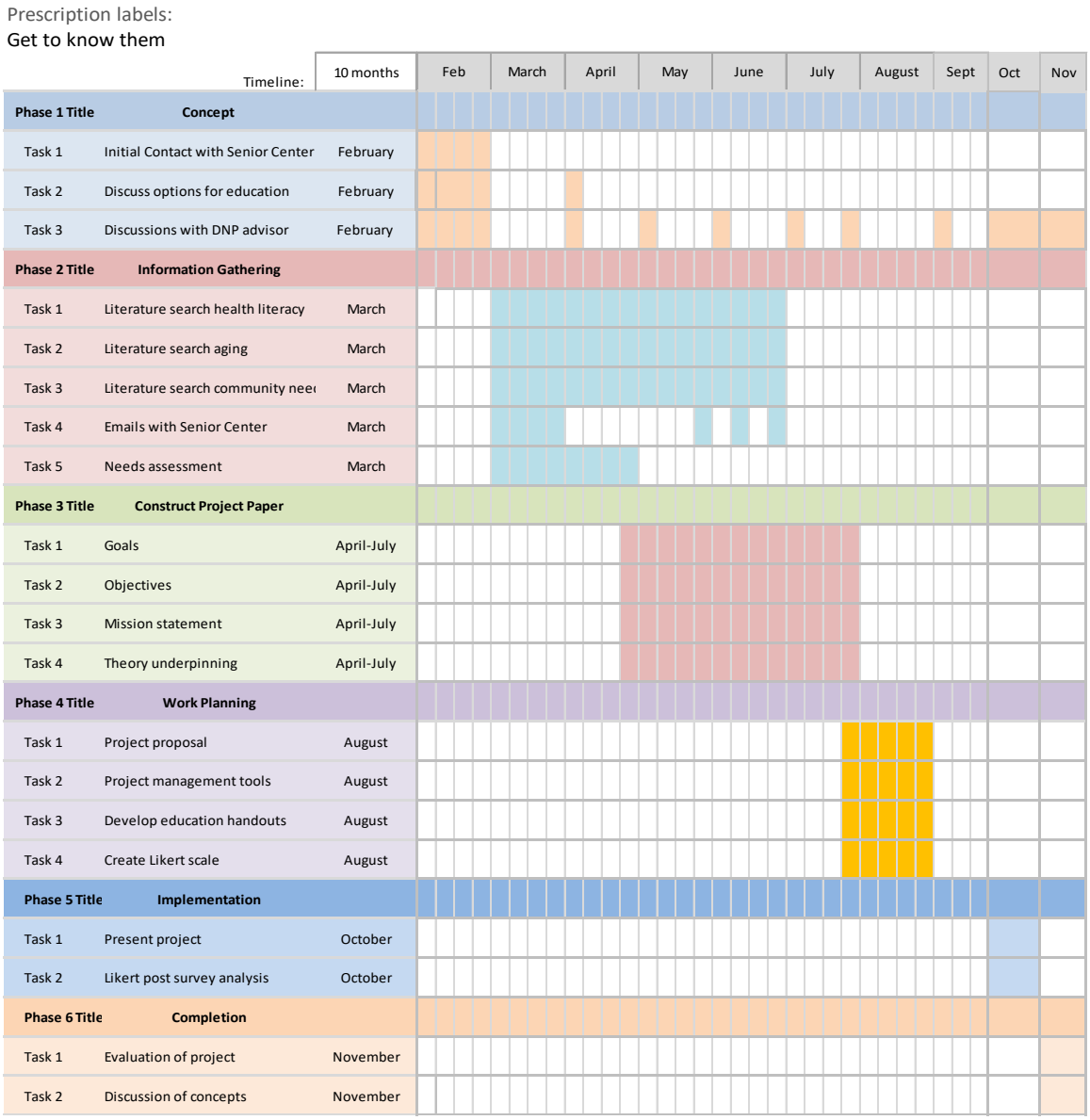
The success of the project depends on the innovative approach to accomplish the work activities needed for successful project completion. Development of project management tools which included milestones, timeline, and a budget will be needed for the implementation of this project plan. Management tools will provide the structure needed to help keep the project plan on track and ensure project success. The DNP project, *Prescription Labels: Get to Know Them*, aims to strengthen the HL of aging adult participants at the Senior Services Center by presenting information to them that will aid in understanding topics of health and well-being.

Project Management Tool

Promoting evidence-based practices through an educational intervention to improve the quality of HL among the aging adults of the Senior Services Center is outlined in a Gantt Chart. This chart provides an estimation of the time that each step occurred. The task outlined was applied over a period of 10 months. Planning and development of the project began in February 2021 with data compilation starting in October 2021. See Figure 2 for a detailed plan of progression displayed in the Gantt Chart.

Figure 2

Project Gantt Chart



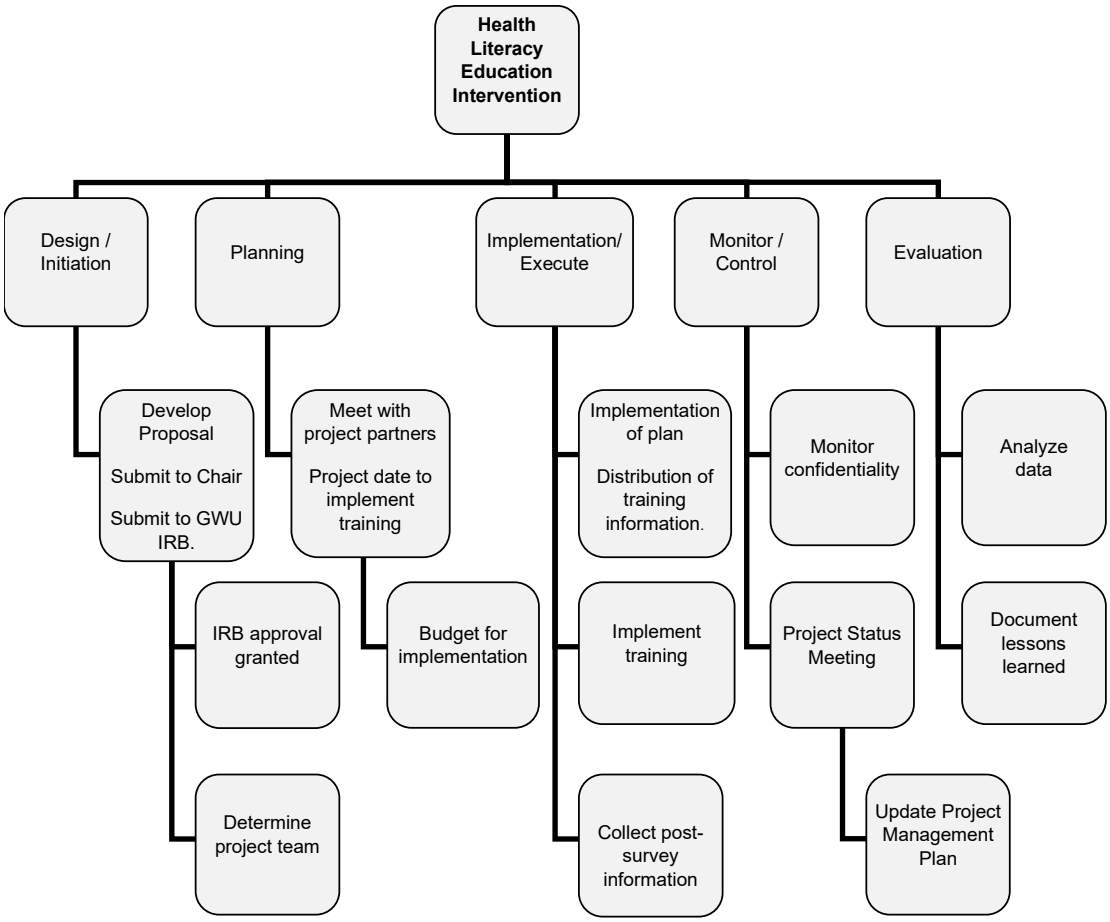
Timeline

The Work Breakdown Structure (WBS) is an approach to ensure that the project is effectively executed. This structured approach is required to complete the objectives of this project as seen in the WBS below. Detailed steps that must be completed before

project implementation can be seen in this WBS which provides the framework for how the interventions, implementation, and evaluations are developed. See Figure 3.

Figure 3

Work Breakdown Structure



Budget

The budget for promoting evidence-based practices through an education intervention included minimal costs. This scholarly project will be budget neutral, that is, all costs will be covered by the project leader. Significant time spent on the project will be centered around gathering information and sharing education. The use of standardized

guidelines provided by Healthy People 2030 and CDC are of no charge. In kind donations, which are contributions or donations of service and time are also included in the cost analysis.

The potential benefits for implementing this project outweigh the cost, as increasing HL awareness among aging seniors could lead to improved communication and better health outcomes. See Figure 4 for a detailed budget.

Figure 4

Quality Improvement Project Budget

Type of Expense	Costs
Project Lead involvement	$0
100 Color printed copies @.53	$53.00
Magnifying glasses (2packs of 48cnt)	$44.00
Use of Likert scale/tool	$0
Use of Senior Service classroom	$0
Total	**$97.00**

Conclusion

The Gannt Chart indicates the time frame of when tasks are to be completed for the project and the WBS indicates what activities need to be completed. These tools estimate the critical path duration of the project as well as identify the critical activities that must be considered toward project completion. These tools help to define how the project will be monitored, controlled, and executed. The project manager would ensure that the resources in place, such as the budget and personal time, be appropriate to allow the programs' activity to be produced. The budget contains calculating direct and indirect

costs needed. This work planning activity points to steps that are necessary to meet the objectives of this project by indicating the specific activities and resources needed for the completion of the project.

Evaluation

Planning for Evaluation

Project intervention will be the implementation of an in-person education presentation with a focus on providing education about medication labels and HL. The dependent variables of this project are the participants' feelings about their current HL level and understanding of how it can impact their health, well-being, and outcomes and will be evaluated by data obtained from the Health Literacy Survey. The survey was developed by the project leader and validated, and reviewed by a pharmacist and the project chair. Descriptive analysis of data collected will be reported.

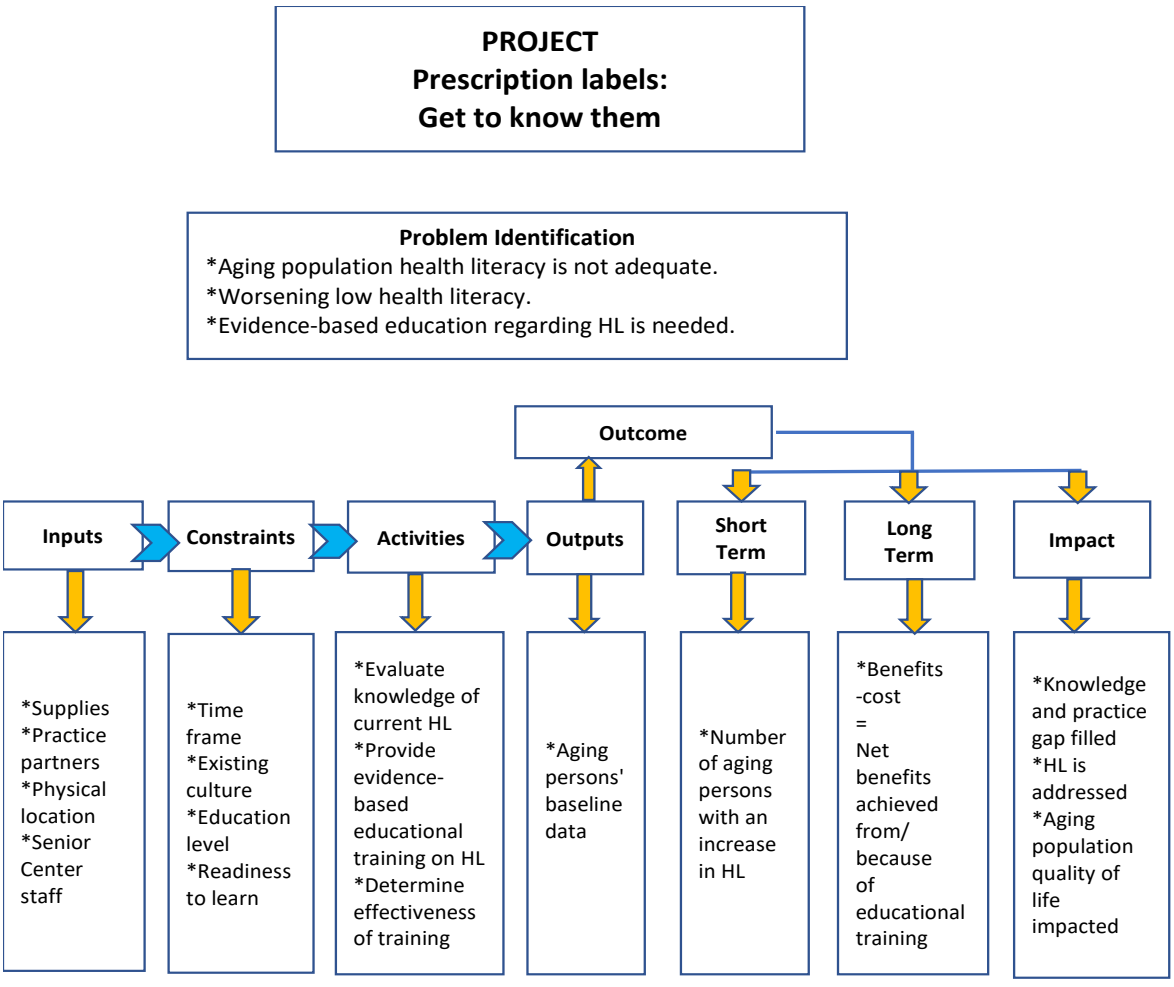
Examination of HL in the aging population will help ensure that this population embraces the ability to understand healthcare information that is presented to them. According to Nola Pender (1996), barriers to learning can result from various sources: personal values, beliefs, and attitudes; lack of motivation; poor self-concept; or inadequate cognitive or psychomotor skills. Furthermore, failure to identify and realistically deal with barriers can result in frustration and a lack of satisfaction for clients when they evaluate progress toward their self-care goals (Pender, 1996). The goal of this project was to explore and expand the education of HL and influence the aging population to seek clarification of the information presented to them by their providers, nurses, or pharmacists that are not clearly understood. The interaction for self-care education brings the professional expertise of nurses and other health care professionals

together with the health care knowledge and goals of the client, either individual or group (Pender, 1996). When interpreting the outcome of this DNP project, the data collected from the Health Literacy Survey should be aligned with current evidence, which indicates a direct correlation between the lack of HL and the quality of life of the aging population.

The following is a Quality Improvement (QI) chart with a look at measures needed for accomplishing the project interventions and plan. It includes what changes are needed, what plan is necessary to make these changes, how the plan is initiated, and the plan results that were obtained. See Figure 5.

Figure 5

Quality Improvement Project Chart



To obtain successful sustainability of the outcomes of this QI project, ongoing education that revisits HL information will need to remain in the community. This will allow for continued improvements in the aging populations' ability and inclination to seek further growth in their own HL which will increase better health and outcomes. The recognition that older persons who are aging in the community will also benefit from community-based centers to help them monitor, manage, and care for chronic health problems and their physical and cognitive limitations also led to the development of adult day services (Golant, 2017). Healthcare providers, nurses, pharmacists, community centers, and multiple other entities play such an integral role in the education and individualized care of the aging population. Moving forward, HL will remain an important topic in today's healthcare environment as well as those providing care in the community.

Implementation

Threats and Barriers

This DNP quality improvement project reflects an area of care that is critical to a person's understanding of low health literacy and safe medication administration. Major concepts concerning the gap in health literacy as it relates to older persons in the community were identified. The magnitude of the problem is focused on low health literacy in older persons as it relates to understanding prescription labels. The mechanism to address this identified issue is through education on how to interpret the information placed on prescription labels.

Consistent with the literature, several barriers to a QI project completion can exist. With the inception of the quality improvement project, locating a community site to

present this DNP project was the first challenge to overcome. Finding a facility or organization that was willing to approve the implementation of this project was a significant barrier; facilities were facing closures due to Covid 19 restrictions which limited outside presenters inside of community buildings. Ultimately, interest was gained from a community senior services facility located in the piedmont area of North Carolina. Communication was initiated with the Director and the Activities Manager at the community center, and after intense collaboration, permission was extended for implementation of the quality improvement project. Ethical considerations were addressed through application to the educational Institutional Review Board. Project approval through the Institutional Review Board (IRB) at the educational institution was granted.

Monitoring of Implementation

The project leader held primary responsibility for the implementation of the project. After obtaining approval from the community center and the institutional review board, this project was conducted at the Senior Services Center. This center provides in-person education classes to elders in the community. This quality improvement project aimed to improve the understanding of prescription labels. After the project received final approval, an announcement was made on the monthly calendar shared with the community. With the assistance of the project's practice partner, the calendar was distributed in emails, on the center's website, and postings at the community center.

The participants received a paper copy of the informed consent. The project was presented over 45 minutes involving the use of handouts and a PowerPoint. Once the presentation was completed, the participants were invited to complete the Health Literacy

Survey that consisted of six questions assessing the project. There were no incentives offered or given for participation in this education project. Participation in the project and completion of the Health Literacy Survey was strictly voluntary.

Project Closure

At the completion of the project implementation, the Health Literacy Survey which represented quantitative data regarding the perceptions of the participants allowed for the descriptive method to be used to draw inferences from the data. Of the 22 participants, all completed the post-survey and there was no missing data. The center's Activity Manager strongly supported that the project was a success and was supportive of the approach chosen as an opportunity to educate the participants. The presentation presented an in-depth explanation of prescription labels and further HL which may directly result in safer use of medications for chronic illnesses faced by the aging population and also create improved outcomes.

Conclusion

HL education specific to how to read prescription labels will help aging adults in the community become confident in knowing questions to ask their provider as well as their community pharmacists. Through education, the participants will know the questions to ask about the use of their medication which can impact and improve health outcomes related to various chronic illnesses. Increasing HL will promote health and wellbeing.

Interpretation of Data

Quantitative Data

This quality improvement project was conducted using a descriptive quantitative design approach to examine the health literacy of elders in the community setting. The Health Literacy Survey written by the project leader was used as a post-survey method that investigated the comprehension and perceptions of the participants after a 45-minute PowerPoint presentation. The surveys were anonymous, participants did not include their names or any identifying data. Data collected had no personal identifies. A convenience sample of 22 participants at the Senior Service community center in rural North Carolina was used for this study. The initial invitation was shared with all persons who attend activities at the community center via an electronic calendar. A total of 22 individuals participated in the educational offering. To evaluate the project's effectiveness in improving the health literacy of participants, all six questions on the Health Literacy Survey were analyzed. There was no missing data. The table below reflects participants responses. See Table 1.

Table 1

Health Literacy Survey Results

Question	Yes	Maybe	No
After this presentation are you more comfortable discussing your needs with your doctor/pharmacist regarding medication?	20	2	0
Do you feel you understand more about taking medication after this presentation?	19	2	1
Has the presentation helped you understand the importance of reading prescription labels?	22	0	0
Do you feel more confident in seeking information about your prescription medication?	19	2	1
Will you ask for assistance if you do not understand directions on a medication container?	19	2	1
Do you understand the importance of taking medications as prescribed?	22	0	0

N=22 (with no missing data)

Upon completion of the project, 91% of participants felt more comfortable discussing needs regarding their medication. Participants reported 86% felt they understood more about taking their medication, were more confident about seeking information about their prescription medication, and that they will ask for assistance if they do not understand the direction on the medication container. Survey results indicated that 100% of the participants felt the presentation helped them understand the importance of reading prescription labels and that they understood the importance of taking medications as prescribed.

The project results indicated that participants had an increase in understanding of the importance of health literacy when reading prescription labels. The perception of

participants' ability and attitude during and after the presentation were supportive of having learned something new during the presentation.

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