

Assessment of Health Literacy Proficiency and Awareness Among Healthcare Providers at a U.S. Army Medical Treatment Facility

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ABSTRACT

Health literacy is associated with health outcomes and impacts the delivery of healthcare services across the continuum of care. Healthcare institutions must ensure that clinical staff provides optimal care and that patients have accessible health information provided at their level of understanding. This allows patients to make their own informed decisions. Fifty healthcare providers and ancillary personnel completed a health literacy proficiency survey at Robinson Health Clinic in Fort Bragg, NC. The goal was to assess their understanding and awareness of health literacy and to identify the need to establish a health literacy program for healthcare personnel within the organization. Survey participants showed a high understanding and awareness of health literacy; however, the respondents emphasized the need for training in health literacy. Future research should focus on the organizational level of health literacy initiatives to improve patient health outcomes.

Keywords: Health Literacy, Healthcare, Survey, Organization

Evaluación de la competencia y la conciencia de la alfabetización en salud entre los proveedores de atención médica en un centro de tratamiento médico del ejército de EE. UU.

RESUMEN

La alfabetización en salud está asociada con los resultados de salud e impacta la prestación de servicios de atención médica a lo largo de la atención continua. Las instituciones de atención médica deben garantizar que el personal clínico brinde una atención óptima

y que los pacientes tengan información de salud accesible y proporcionada a su nivel de comprensión. Esto permite a los pacientes tomar sus propias decisiones informadas. Cincuenta proveedores de atención médica y personal auxiliar completaron una encuesta de competencia en alfabetización en salud en la Clínica de Salud Robinson en Fort Bragg, NC. El objetivo era evaluar su comprensión y conocimiento de la alfabetización en salud e identificar la necesidad de establecer un programa de alfabetización en salud para el personal de atención médica dentro de la organización. Los participantes de la encuesta mostraron una gran comprensión y conciencia de la alfabetización en salud, sin embargo, los encuestados enfatizaron la necesidad de capacitación en alfabetización en salud. La investigación futura debe centrarse en el nivel organizativo de las iniciativas de alfabetización en salud para mejorar los resultados de salud de los pacientes.

Palabras clave: Alfabetización en salud, Atención médica, Encuesta, Organización

评估一家美国陆军医疗机构的医疗保健提供者的健康素养水平与意识

摘要

摘要

健康素养与健康结果相关，并影响整个护理过程中医疗保健服务的提供。医疗保健机构必须确保临床工作人员提供最佳护理，并确保患者能够获得以他们的理解水平制定的健康信息。此举允许患者作出明智的决定。50名医疗保健提供者和辅助人员在北卡罗来纳州布拉格堡的罗宾逊健康诊所(Robinson Health Clinic)完成了一项健康素养水平调查。调查目标是评估参与者对健康素养的理解与意识，并识别为该组织的医护人员建立健康素养计划一事的必要性。调查参与者表现出对健康素养的高度理解与意识，但也强调了健康素养培训的必要性。未来研究应聚焦于健康素养倡议的组织层面，以改善患者的健康结果。

关键词：健康素养，医疗保健，调查，组织

Introduction

Health literacy (H.L.) is the degree to which individuals obtain, process, and understand basic health information needed to make proper health decisions (AHRQ, n.d.) The most recent definition update from the Department of Health and Human Services (HHS) for the *Healthy People* initiative provides two dimensions of H.L., personal and organizational (Santana et al., 2021). Personal H.L. is how individuals locate, understand, and use information and services to inform health-related decisions and actions for themselves and others. Organizational H.L. is how organizations empower individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others. Health literacy is linked with health outcomes and health system costs and impacts how communication is managed across the healthcare continuum. Based on these definitions and the link to health outcomes, the task of healthcare institutions is to ensure their clients/patients have access to all available information to make the best-informed decision. One main challenge for healthcare organizations is ensuring their staff, including clinicians and support staff, actively educates their patients and ensures full compliance with their health conditions.

Over fifty percent of people seeking medical care would resort to primary care providers (PCPs) as their first line of service (Ashman, Santo, & Okeyode, 2021). Therefore, it is es-

sential that PCPs have a thorough understanding of H.L. and its implications related to imaging, medication, managing expectations, and educating their patients. As shown by Hersh et al. (2015), about 80 million people in the United States have limited H.L. Because of the high number of adults with low H.L., they have more difficulty reading, understanding, and applying health information. Although U.S. adults read at an average of eight-grade level, over 75 percent of current patient education is written at either a high school or college reading level. This trend goes against the American Medical Association (AMA) and the National Institutes of Health recommendations (Rooney et al., 2021). As a result of these discrepancies, PCPs often do not account for these facts during patient care. They tend to overestimate their patients' literacy skills, assuming the information and instructions are clearly understood.

There is also the need to balance quality healthcare and optimization of resources. One of healthcare organizations' main challenges is the overutilization of medical services for people with low health literacy. A study conducted by Haun et al. (2015) revealed that, on average, the healthcare cost for veterans with low H.L. is almost double (\$37,581) of those who had adequate H.L. (\$17,033). Finding a balance between quality medical care and optimal use of resources is the main challenge for healthcare organizations. Cooperation between healthcare providers and their patients is essential for the success of care interventions (Mor-Anavy et al., 2021).

Considering the data, healthcare organizations must design and implement evidence-based programs and interventions to promote and improve health literacy. It is necessary for healthcare providers to acquire skills related to health literacy and to implement approaches, including the evaluation of health literacy and appropriate interventions. Healthcare organizations must ensure their providers and staff provide optimum individual care and service. For healthcare institutions to become highly reliable organizations, clinical and support staff must train to become health literate and culturally competent (Coleman & Fromer, 2015). Providers need to be proficient in their clinical skill set, as well as their communication skills and their understanding of H.L. (Chen et al., 2020). As healthcare institutions move into a more complex delivery system, providers must be proficient in clinical and personal communication.

Many studies focus on individual health literacy. It is equally vital to learn how essential organizations promote an equitable environment where individuals can access health information and make informed decisions. When providers train in health literacy skills, there is a change in attitudes and proficiency (Coleman & Fromer, 2015). Once providers train and develop awareness, there are notable changes in knowledge, skills, and attitudes regarding patients with low health literacy. Interventions that improve health literacy may enable individuals and communities to act on social and economic determinants of health at both the individual and com-

munity levels (Coughlin et al., 2020). With improvements in H.L., there is an improvement in resource utilization, compliance with medical advice, and involvement in decision-making.

Research on providers' assumptions and challenges when working with patients with limited H.L. is still developing. Studies conducted by Murugesu et al. (2022) and Greany et al. (2020) show the difficulties healthcare providers face with patients with low H.L. and their conceptions about it. Providers perceive difficulties in recognizing low H.L. patients and rarely use materials addressed to attend to their patient's needs. Due to these difficulties, organizational-level intervention may be necessary to advance H.L. in healthcare institutions. Improving the training of healthcare providers and professionals about patients' health literacy and their own is a priority. Healthcare providers' training is a topic that requires attention. This research aims to learn about healthcare providers' understanding and attitudes toward health literacy and cultural competence and the need for healthcare organizations to develop staff training strategies that include H.L.

Materials and Methods

Location

A cross-sectional survey was conducted on a group of medical staff at Robinson Health Clinic in Fort Bragg, North Carolina. The clinic is one of the outlying clinics of Womack Army Medical Center (WAMC), a premier medical center for the U.S. Armed Forces. Fort Bragg hosts 545,926 active-duty Soldiers and

their families (69,808), 13,493 Reserve Components and Temporary Duty students, 14,036 civilian employees, 6,054 contractors, and 121,494 retirees and family members (militaryonesource.mil, n.d.). The population in the Fayetteville Metropolitan Area is 349,000. The clinical staff includes medical doctors, physician assistants, and nurse practitioners. Ancillary personnel included nurses, medics, laboratory technicians, and technologists. Other team members invited to participate included chiropractors, optometrists, optometry technicians, and radiology technicians. The total number of providers, nurses, and clinical support staff exceeds 120 employees.

Focus Group and Selection

Respondents' recruitment came from weekly staff meetings and team huddles. Healthcare providers in this facility oversee attending to the medical needs of active-duty soldiers assigned to the 82nd Airborne Division and supporting Brigades, their families, and retiree servicemembers. Musculoskeletal injuries made a significant component of the health conditions treated by medical teams (Molloy et al., 2020). Inclusion criteria for participants in this research included clinical personnel credentialed to work at the facility, being in a direct patient care role, and understanding the English language. Clerical personnel, non-English speakers, and anyone not credentialed to work in the clinic were excluded.

Recruitment Process

The clinic administrators facilitated contacting and recruiting healthcare providers through weekly staff meetings and morning huddles. PowerPoint Presentation was used to discuss the project with the study subjects. After listening to the proposal, all coordination was done with the clinic administrators, who offered their full support. The study period took two weeks, and participants completed the survey online. Google Forms platform (Google, Inc.) was used for the online survey. Emails were sent to the participants with the link to access the survey. There was also a paperwork option for those participants who could not participate in the online survey. The total time for survey completion was five minutes, as tested prior with a group of rehabilitation providers.

Survey Instrument and Distribution

Participants' knowledge and comprehension of H.L. were assessed by adopting a survey adapted from the Agency for Healthcare Research and Quality (AHRQ, 2020). This agency is the lead Federal Government agency in charge of improving the safety and quality of healthcare for all U.S. citizens (AHRQ, 2022). It develops tools, knowledge, and data for healthcare organizations to improve services and help consumers, healthcare professionals, and policymakers make informed health decisions. The agency's main competencies are health systems research, practice improvement, and data analytics (AHRQ, 2019).

The survey focuses on asking the participants about areas of health literacy, average reading level, and suggestions about improving communication and minimizing barriers. The survey consisted of eleven questions. Five of the questions are multiple-choice, two are True or False, one is an exercise on choosing the best phrase, and one is an open-ended one. One demographic data question was included, which only asked what profession the contestant practices. HL-related questions were multiple-choice selection, True/False, choosing the best phrase, and suggestions to minimize barriers. The data were collected questionnaire developed based on a comprehensive literature review and expert opinions to assess healthcare providers' HL-related knowledge, attitude, and perceived barriers.

Online Questionnaire

Online access was available through the Google Forms Platform (Google Inc). Google Forms is a cloud-based data management tool for designing and developing web-based tools (Vasanth Raju, N., & N.S., H., 2016). The tool is freely available for anyone interested in creating web-based questionnaires. Its availability anywhere and anytime and its no-cost approach make this platform a favored tool. The survey used quantitative and qualitative analysis to analyze the data. Inclusion criteria included understanding the English language, being credentialed to work at the facility, and being in a direct patient care role. Exclusion criteria included clerical personnel, non-English speakers, and anyone not credentialed to work in the facility.

Theoretical Framework

Following other health-literacy-related articles (Greany et al., 2020), the research follows the socio-ecological model (SEM) as the theoretical basis for this research. The SEM considers the intricate interaction between individual, relationship, community, and societal factors (CDC, 2022). There is an overlapping relationship between each factor. The SEM suggests that it is necessary to act across multiple levels simultaneously. This approach is more likely to sustain prevention efforts over time and achieve population-level impact.

The clear choice of SEM as a framework for this research is the value the model puts on the closed relationship between individuals, providers, and healthcare institutions. This relationship includes materials and tools, communication skills, and health policies that influence their work systems (McCormack et al., 2017). This interaction leads to a sustainable health literacy social-ecological model (HLSEM). This evolution of the SEM could support people's access and understanding of health information, interaction with healthcare professionals, and navigation within their communities. Due to its inclusiveness, the SEM allows healthcare providers to become integral in encouraging and sustaining patients' engagement in their healthcare.

Data Analysis

A mixed qualitative and quantitative data analysis was used for this research project. Quantitative data was used to assess healthcare personnel's general

knowledge of H.L. Qualitative data analyzed common thoughts and ideas on the group's thinking on H.L. Quantitative data were converted into Statistical Package for the Social Sciences (SPSS) data files, and descriptive statistics were performed. For qualitative data, clinical personnel's understanding was collected in the survey from open comments. This research follows other investigations using a mixed-method approach (Nobles et al., 2019). Researchers used questionnaires and students' feedback to examine common health insurance knowledge terminology. Participants were informed of the study's purpose and that their information would be kept confidential in a secure location. No demographic data were collected except for healthcare role practices. No economic incentives were offered to any of the participants.

Ethics and Board Approval

The project was approved by the Institutional Review Board (IRB) of American Military University (AMU), American Public University System (APUS), Project Number 2022-070.

Conflict of Interest

The author reports no conflict of interest related to this study. The author also discloses no economic incentives or compensations derived from this study.

Results

Demographics

A total of 50 healthcare personnel completed the survey and data collection. The data of the demographic variables are shown in Table 1. Fifty-four percent were nurses (n=27), and 8 per-

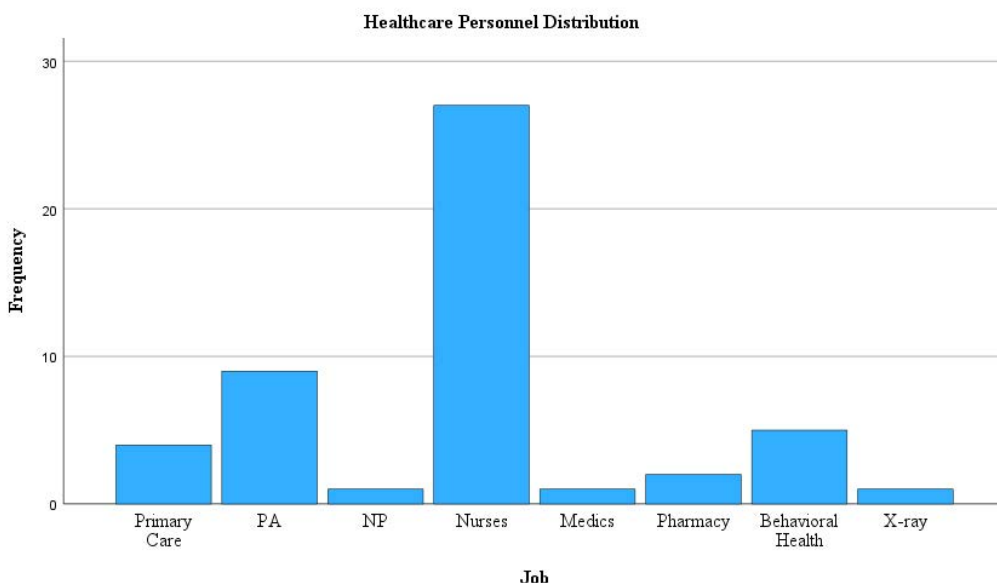


Figure 1: Personnel distribution chart

cent were Primary Care Providers, MD or D.O. (n=4). Eighteen percent were Physician Assistants, P.A.s (n=9), and 2 percent were Nurse Practitioners, N.P. (n=1). In addition, another 2 percent of respondents belonged to the X-Ray department (n=1), 4 percent from Pharmacy (n=4), 10 percent from Behavioral Health (n=5), and 2 percent of the Medics (n=1) completed the survey (see Figure 1).

The survey consisted of 11 questions, including multiple-choice, true or false, and open-ended questions. Questions 6 and 8 and 3, 5, and 10 were used to measure parameters for understanding and knowledge of H.L. Questions 9 and 11 served for qualitative analysis. The tables below show the frequency and percentages of respondents' answers.

Table 1: Questions regarding HL knowledge

Q6: What is the average reading level of US adults?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A. 4th-5th grade	13	26.0	26.0	26.0
	B. 6th-7th grade	10	20.0	20.0	46.0
	C. 8th-9th grade	20	40.0	40.0	86.0
	D. 10th-11th grade	2	4.0	4.0	90.0
	E. 12th grade	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Q8: What is the best reading level for written materials used with patients?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A. 3rd-4th grade	6	12.0	12.0	12.0
	B. 5th-6th grade	21	42.0	42.0	54.0
	C. 7th-8th grade	15	30.0	30.0	84.0
	D. 9th-10th grade	5	10.0	10.0	94.0
	E. 11th-12th grade	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

On average, most respondents correctly chose the choice on the two questions assessing health literacy knowledge (40 percent chose option C on Q6, and 42 percent chose option B on Q8). The percentage of respondents to the True/False questions was overwhelmingly correct. Most respondents (80 percent) answered False to Q3, 98 percent answered True to Q5, and 88 percent answered True to Q10.

Pearson's correlation test results show a positive correlation in health literacy awareness or knowledge (see Table 3). Health literacy knowledge was significantly associated the job performed ($p < 0.001$). Although not all respondents were medical primary care providers, the results showed a tendency among all participants that health literacy knowledge is independent of the job performed.

Table 2: Questions regarding HL awareness

Q3: You can tell how health literate a person is by knowing what grade he or she completed in school.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	10	20.0	20.0	20.0
	False	40	80.0	80.0	100.0
	Total	50	100.0	100.0	

Q5: Being anxious affects a person's ability to absorb, recall, and use health information effectively.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	49	98.0	98.0	98.0
	False	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Q10: It is a good health literacy practice to assume that each patient you communicate with has limited health literacy.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	44	88.0	88.0	88.0
	False	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

Table 3: HL Reliability Test

Correlations			
		Q6	Q8
Q6	Pearson Correlation	1	.657**
	Sig. (2-tailed)		<.001
	N	50	50
Q8	Pearson Correlation	.657**	1
	Sig. (2-tailed)	<.001	
	N	50	50

** . Correlation is significant at the 0.01 level (2-tailed).

An Analysis of Variance Testing (ANOVA) was used to validate the reliability of the True and False questions (questions 3, 5, and 10). The results are below in Table 4.

Qualitative analysis identified common themes and threads inside

the open-ended question, Q11. Respondents identified topics like asking patients what they do and do not understand, speaking to patients with less medical terminology, and encouraging them to interact more with the health-care team. Among the responses, staff

training surfaces as a topic of need. Respondents also recommended that healthcare personnel speak slowly and clearly to the patients and provide more time for patient contact. One signifi-

cant finding of the qualitative analysis was that respondents also highlighted the need to ensure that patients verbally confirmed what was discussed, including the teach-back method.

Table 4: True and False ANOVA Table

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig
Between People		5.607	49	.114		
Within People	Between Items	18.013	2	9.007	102.002	<.001
	Residual	8.653	98	.088		
	Total	26.667	100	.267		
Total		32.273	149	.217		
Grand Mean = 1.3133						

“Use lay terms. Repeat information to patient and have them relay it back to you. Write it down for them. Make sure they understand why things are being ordered.”

“Less jargon, as above. Employing Teach-back techniques to ensure pts understand the most important points.”

“Provide more time to patients. Being patient and understanding barriers to communication.”

“Ask the patient to repeat what you have spoken to see if they understood”

“YEARLY TRAINING”

“Speaking slow and clear. Offering information in the language of choice.”

“Ask patient if they have any questions or concerns”

“Put ourselves in their shoes”

“Assess health literacy as part of the appointment. Have patient repeat back instructions.”

“Ask the patient if they understand and do not feel embarrassed to ask questions.”

Figure 2: Comments from Qualitative Analysis-Q11

The findings demonstrated that healthcare personnel understands that HL is needed to help patients understand health information. They were

able to identify the best answer to communicate with their patients. In figure 3, providers identified the best phrase to communicate with patients.

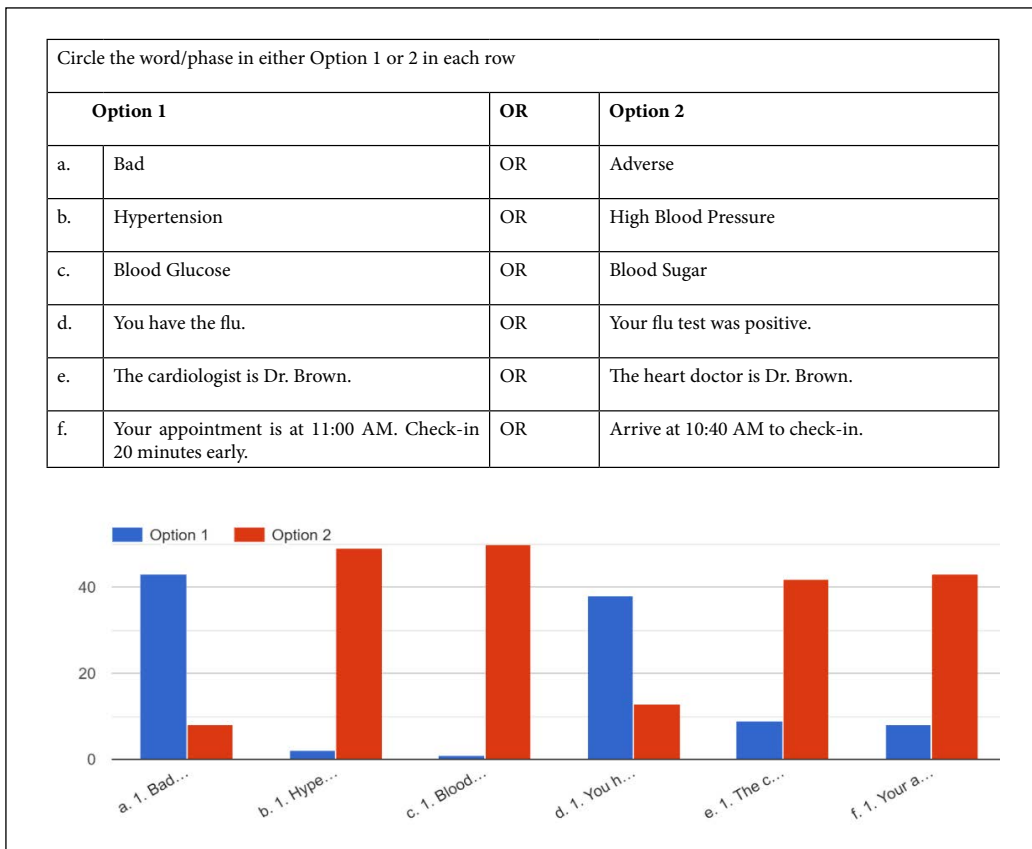


Figure 3: Understanding and Choosing the Best Communication Strategy

Discussion

Health literacy knowledge and awareness have multiple variations in healthcare.

While many studies focus on patients' health literacy skills, other tests compare the level of proficiency among healthcare personnel, most notably physicians and nurses. Furthermore, few studies researched the role of awareness in health literacy and communication (Güner & Ekmekci, 2019). Despite the best effort to improve outcomes, healthcare professionals have limited awareness and knowledge of H.L. and its impact on their patients' well-being.

Studies with different healthcare professionals used a similar model to identify perceived attitudes and knowledge (Rajah, Hassali, and Lim, 2017). In such studies, researchers used specific groups of healthcare professionals (Physicians, Nurses, and Pharmacists) and compared them. This study chose to assess health literacy as a whole and not compare groups. Since this is a topic barely discussed in day-to-day operations, gathering a baseline of knowledge and awareness of H.L. among healthcare personnel was essential. It is essential to understand the military healthcare system. For one, the military healthcare system in the United States

and the United Kingdom are multi-echelon. The military system's institutional and expeditionary healthcare levels are well-defined (health.mil, 2022; Bricknell & Cain, 2020). Both systems integrate a series of levels of care that range from self-aid, aid stations, and field hospitals on the battlefield to military hospitals and clinics.

Along the continuum of care, there is a level of autonomy not entirely typical in the civilian field. Therefore, health literacy awareness and knowledge are critical. Medics, nurses, doctors, and other specialty care services (physical and occupational therapists, dietitians, behavioral health, and others) interact more directly with themselves and their soldiers. The military health system's advantage is constantly engaging soldiers in medical readiness. Therefore, H.L. is an area of interest for the military healthcare system. Morrison, Riley, & Tolisano (2021) offer a perspective after surveying 382 subjects. Their findings were surprising, as their research showed a low percentage of military servicemembers with inadequate H.L. compared to civilians. The authors point out that healthcare is widely accessible, and soldiers must undergo mandatory health exams to maintain readiness.

The findings from the survey may be a coincidence. Consider that healthcare providers' training and competencies are similar in the military and civilian fields. However, the differences lie within science and informatics, patient-clinician partnerships, incentives, and continuous learning culture

(National Academy of Sciences, 2016). Nevertheless, it is crucial to remember the need to promote and foster better resource management in civilian and military medical care systems. The use of AHRQ tools is supported by Byrne, Whitaker, & Black (2021). In addition to the survey tool used for this research, AHRQ also has a Health Literacy Universal Precautions Toolkit. This instrument assists medical professionals in avoiding the complex language associated with medical practice. It supports the use of the teach-back technique. It advises healthcare providers to avoid embarrassing their patients by creating a shame-free environment and developing their confidence in self-care.

The success or failure of organizational health literacy depends on how institutions coordinate and place health literacy as a priority. When healthcare organizations implement health literacy programs, they need to consider the impact on both patient and organizational satisfaction. At every level, individuals and organizations must understand they might be at different stages of literacy. Goto et al. (2014, 2018) highlight the need for organizations to train healthcare providers to be health literate and identify risk factors in achieving a level of proficiency for providers and other healthcare personnel to communicate clearly with their patients and communities.

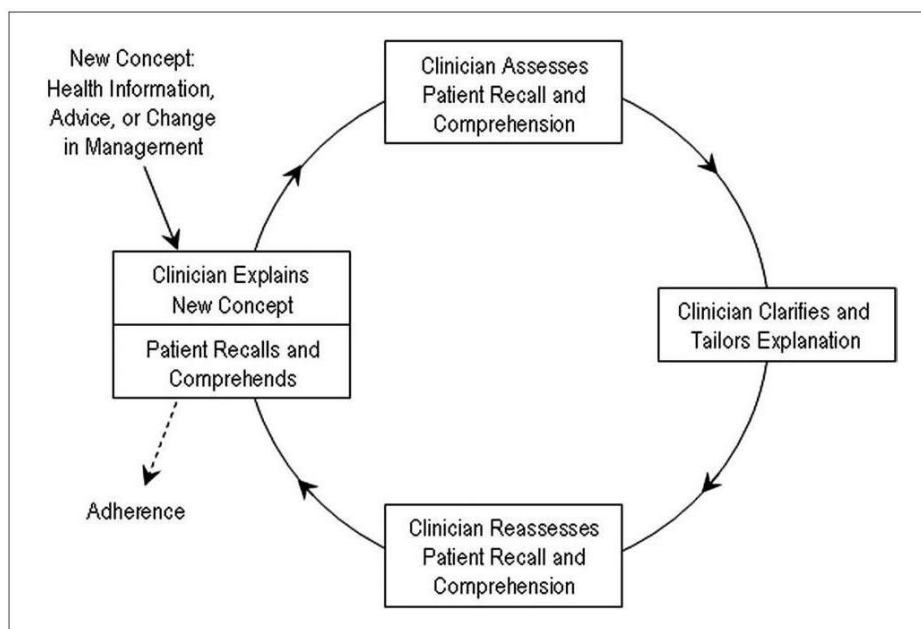


Figure 1. "Closing the loop." The interactive loop in clinician-patient education. Reprinted from Schillinger et al. *Arch Intern Med.* 2003;163:83-90⁹ with permission from the American Medical Association.

The importance of health literacy is encompassed with how healthcare organizations address compliance issues, as well as creating a patient-centered system where providers and managers do engage in assessing patients' H.L. proficiency. However, one of the main limitations that healthcare organizations experience when attempting to meet the goals of becoming a health literacy organization is when providers do not engage in either assessing their patients' H.L. or ensuring that their patients do remember instructions given regarding their care.

Schillinger et al. (2003) found a low record of providers engaging with their patients to assess their capacity to remember and understand new concepts. The authors of the study highlighted several factors influencing this type of negative feedback loop. First,

physicians do not receive training on teaching effectiveness. Second, providers tend to underestimate their patients' educational needs and tend to overestimate their efficiency in communicating. Third is that providers explicitly avoid patients' recall and comprehension out of fear of spending more time with their patients.

Thus, the imperative need to train healthcare providers to communicate with their patients is crucial if healthcare institutions want to be health literate competent. As pointed out by Kripalani and Weiss (2006), didactic training may suffice. However, the length of time will impact the ability of clinicians to integrate this skill. At the same time, short didactic sessions may serve as a basic introduction, and longer workshops and offer a more solid time for hands-on practice. Clinicians

who adopt new communication skills will need ample time to practice and become effective as they become more comfortable. Some recommendations for clear communication would include the following (Kripilani & Weiss, 2006):

1. Assess your patients' baseline knowledge before providing health information.
2. Explain things clearly using plain language. Avoid medical jargon or vague terms.
3. Emphasize 1 to 3 key points. When providing patients with a home exercise program, Physical Therapy research indicates that the number of exercises determines the level of compliance (Wiggin, 2022). Sometimes, less is better.
4. Encourage your patients to ask questions. Use an open-ended approach.
5. Use a teach-back to confirm patients' understanding of the information clearly; be specific.
6. Write down important instructions. This lets patients know exactly what they should do after their appointment.
7. Provide useful educational materials. Patients will have more time to absorb the information.

Strengths

One strength of this survey was the mixed group format used to assess respondents' knowledge and awareness. It provided an outlook

of the level of individual assessment of H.L., and each one of the respondents sees themselves considering the topic discussed. Since there were no limitations on the people invited to participate, the survey served as a barometer of H.L. assessment, despite the variety of personnel's jobs.

An additional strength of this study was the simplicity of the survey tool. Understanding potential facilitators and barriers to participating in the survey, the respondents' anonymity was secured, as only job information was asked of them. The participants were about 50 percent of the estimated number of clinical staff assigned to the clinic and the particular preferences of physicians to participate, as identified by Pentzek, Baumgart, and Hegerath (2016).

Limitations

One main limitation of this research is that it only measured individuals' H.L. knowledge and awareness. It did not measure the organization's H.L. awareness. This may be a friction point. It is not easy to think that individual H.L. (IHL) and health outcomes are independent of organizational H.L. (OHL) (Hayran & Özer, 2018). Because of the rapid increase in health-related information and the increasing complexity of healthcare, OHL is as significant as IHL as one affects the other.

The study's cross-sectional nature is another significant limitation, as it prevents assertive interpretations of

cause and effect. Therefore, conclusions based on associations from this study should be considered with caution. No data was collected regarding the organizational need to institute a health literacy program as part of the clinical staff's annual training requirements. This should be concerning, as health outcomes significantly depend on a healthcare organization's commitment to improving health literacy and communication. Healthcare organizations should prioritize research, policy, and programmatic attention in fostering health literacy and guaranteeing access to care for all.

Becoming an H.L. organization should assure patient safety, promote adherence, enhance self-efficacy, and improve outcomes (Brach, Dreyer, & Schillinger, 2014). A health-literate organization acknowledges that almost everyone copes with health literacy

challenges at some time or other and that everyone benefits from clear communication.

Conclusion

In this study, respondents demonstrated a high level of health literacy awareness on the individual level. Independent of their job practice, most respondents demonstrated a significant level of knowledge regarding U.S. adults' reading levels and health material writing. Also, respondents could make recommendations on how to improve health communication with their patients. However, the study could not answer the need for health literacy training at the organizational level. Future research should study the impact of medical providers' IHL in the overall development and sustainment of OHL, as well as patients' input in developing H.L. initiatives.

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