Health Literacy and Its Role in Relational Communication with Patients: The Study of Literature and Concepts

Submitted 10/11/21, 1st revision 01/12/21, 2nd revision 18/12/21, accepted 15/01/22

Iwona Czerska¹

Abstract:

Purpose: The article aims to present the issue of health literacy in shaping relational communication with patients. The specific goal was to review the literature on health competencies and the doctor-patient relationship.

Design/Methodology/Approach: The article bases on a literature study in healthcare, management, and health economics. The study of literature and concepts was carried out based on the desk research method, using professional, scientific databases. The article's author contributed to the development of management and quality sciences by researching the role of health literacy in doctor-patient relational communication. The area of health competencies about the behavior of patients in contact with medical professionals requires further analysis.

Findings: Health literacy enables doctors to better communicate with patients and provide them with relevant information to manage and improve their health. Health skills allow patients to control their wellbeing by making informed and wise health care choices and strengthening their relationship with their doctors.

Practical Implications: Raising health awareness should become the primary goal of many health systems to protect patients from harm. Health skills should enable the individual to extract knowledge, derive meaning from different sources, and apply new information to changing circumstances. Through health competencies, using a wide range of skills, it is necessary to improve people's ability to act on the data obtained to lead a healthier life.

Originality/Value: The presented approach to the topic organizes the information on health literacy and expands doctor-patient communication issues. Health literacy is an important concept that increasingly recognizes the basic skills needed worldwide to maintain good health and access the local health system. This publication can help promote health awareness, shape a proper doctor-patient relationship, and inspire other authors to deepen their health competencies.

Keywords: Health literacy, health competencies, doctor-patient relationship, health awareness, patient empowerment.

JEL: 100. 112.

Paper Type: Review.

Acknowledgment: "The project is financed by the Ministry of Science and Higher Education in Poland under the programme "Regional Initiative of Excellence" 2019 - 2022 project number 015/RID/2018/19 total funding amount 10 721 040,00 PLN."

¹Dr. Lecturer, Department of Marketing Research, Faculty of Management Wroclaw University of Economics and Business, e-mail: iwona.czerska@ue.wroc.pl;

1. Introduction

The modern development of medicine involves using advanced information technologies and medical tools in the treatment process, which means that most people have problems with a proper understanding of their operation. This situation forces patients to constantly search for information on modern treatment methods to understand and use the potential of these methods in their therapeutic process. On the other hand, more and more people have low medical awareness of finding, understanding, and using health information properly. Today, more than a third of people in Europe have difficulty accessing, understanding, evaluating, and using the information needed to improve or maintain health (Sørensen *et al.*, 2015).

Added to this is a complicated vocabulary of medical professionals in relational communication with patients, which significantly hinders the entire treatment process, especially in older or less educated people. Doctors use difficult industry slang, incomprehensible to most patients, and distance medics from patients who are not professional. Medical specialized vocabulary, i.e., the medical profession (medical sociolect, medical jargon), is generally difficult for the average patient (Piekot, 2021).

According to Sørensen (2019), health literacy has become a priority for health in the 21st century. It is essential for developing people's ability to manage health and navigate the health care system. More and more patients are involved in their health and the local environment's health, gaining knowledge about widely understood health care, being active participants in the healing and therapeutic process. Such a conscious, engaged patient, called: patient 2.0, health seeker or e-patient (Buccoliero et al., 2015), actively uses the internet, publishes valuable and helpful content on portals and forums for patients, uses social media. The literature also includes "empowered patient," meaning an educated, engaged, and empowered patient (Nazarko-Ludwiczak, 2021).

However, empowering patients can be perceived, on the one hand, as a big challenge, and on the other hand, it can pose a threat to the functioning of the health system. The positive aspects of patient empowerment are the possible increase in the effectiveness of healthcare through better patient compliance with therapeutic recommendations and their greater involvement in the treatment process. The negative approach to the empowered patient results from the patients' belief in their high competencies in health care, often without their confirmation of the level of health literacy (Rogala, 2020).

Health literacy improves the quality of life and reduces health inequalities. Developing these competencies can, on the one hand, strengthen and increase the population's resilience, and on the other hand, help manage health and wellbeing in complex health systems. Promoting health awareness can improve the health of

future generations and enable medical professionals and healthcare providers to establish better relational communication with patients (Sukkar, 2021).

Relational communication is the communication process related to personal relationships involving different people. As a field dealing with the study of verbal and non-verbal communication in an intimate relationship, it is a subset of interpersonal communication (Pace, 2020). Five basic principles of relational communication: relationship interaction, verbal or non-verbal signals, communication with others, variability in the communication process, linearity, or non-linearity during communication, including highs, lows, misunderstandings, and contradictions (Pace, 2020).

Burgoon and Hale (1984; 1987) outlined seven fundamental themes of relational communication, which mean messages that people communicate to one another: dominance/submission, level of intimacy, degree of similarity, task-social orientation, formality/informality, degree of social composure, level of emotional arousal and activation. These seven themes are essential in all kinds of human interaction, but especially in close relationships. Such a close relationship may include the doctor-patient relationship. The impact of relational messages is usually much more significant due to the entire treatment process influencing the patient's health and life.

Relational communication provides a framework in which the exchange content between the doctor and the patient is absorbed and interpreted. An integral part of face-to-face communication with the patient is the non-verbal channel. Posture, gesture, eye contact, tone of voice, and closeness are aspects of the patient's posture that shape the content of the message. A doctor-patient meeting during a medical visit includes both a content and a relational component. The content component contains the subject matter expressed in verbal language - for example, the patient's stories about their symptoms. On the other hand, the relational part indicates how the doctor and patient treat each other and their relationship, thus providing a framework to interpret the content (Gallagher *et al.*, 2001).

2. Research Methodology

The author has based the study on a literature and concepts study, which were issues on health literacy and communication in the doctor-patient relationship. The bibliography includes 64 works, among them scientific articles, books, specialist literature, and electronic sources from the period 1956-2021, and among these works, the most were those from 2014-2021. During desk research analysis, the author has used the following professional, scientific databases, BazEkon, ScienceDirect, Scopus, Springer, Web of Science, PubMed, ResearchGate, Google Scholar, Polish Scientific Journals Database (PSJD), gathering articles from Polish scientific journals, and The Central Euro-pean Journal of Social Sciences and Humanities (CEJSH) - publishing English-language summaries of articles published

mainly in national languages. That database devoted to social sciences and humanities dedicates to the following countries, the Czech Republic, Hungary, Poland, Slovakia, Bosnia and Herzegovina, Estonia, Latvia, Lithuania, Serbia, Slovenia, and Ukraine.

The author used these scientific databases due to their possible access by having an account in these databases. Secondly, these databases made it possible to complete the literature for this article. Finally, the last two mentioned scientific databases, Polish and European, were selected to show the contribution of native scientists to the development of social sciences and health sciences.

A study of literature and concepts was carried out based on the analyzed literature on the subject. This method was the starting point for realizing the aim of the study. Thanks to this method, the author used the knowledge obtained from various sources, analyzed, assessed, and synthesized - the study of literature and concepts allowed in the first place to organize the existing knowledge about health literacy. Secondly, the study allowed for the compilation of communication models of the doctor-patient relationship. Finally, the author critically reflected on the usefulness of health literacy in the literature on relational communication with the patient. The author has also presented the limitations of the study.

3. The Essence of Health Literacy

Health Literacy is most called health competencies or functional health knowledge (Iwanowicz, 2009). Polish literature on the subject also formulates other translations of this term: reading health, reading the meaning of health, effective health education (Kowalska *et al.*, 2017b). Health literacy means the degree to which the patient obtains and interprets basic health information and health services in the context of his ability to make decisions about his health.

According to Olejniczak (2016a), health literacy is "a set of competencies and skills in the field of health allowing minimize the occurrence and impact of health risk factors on the individual and the environment in which he functions, to good health." Liu *et al.* (2020) define health literacy as "the ability of an individual to acquire and translate knowledge and information to maintain and improve health in a manner appropriate to the context of the individual and the system." This definition covers three essential aspects: knowledge of health, healthcare, and healthcare systems; processing and using the information in different formats about health and healthcare; the ability to maintain health through self-management and cooperation with medical entities.

The skills and competencies related to health literacy include understanding medical recommendations, hospital procedures, organizing subsequent visits, and other principles of the health care system and the content contained in educational materials. In practice, a low level of health literacy means a limited awareness of

one's health condition or the treatment used, mainly due to ineffective communication between the doctor and the patient (Baska and Śliż, 2020). These people with limited health awareness may have less control over their health, especially if they lack easy access to health information. This situation means they are less informed and less likely to choose a healthy option for themselves and their family. Therefore, limited health awareness can pass down from generation to generation (Roberts, 2015).

Health literacy is the cornerstone of patient involvement in curative and preventive efforts. It represents the extent to which people can access, process, understand, evaluate, act, and communicate information to meet health requirements in promoting and maintaining health throughout life (Brainard *et al.*, 2016; Freedman *et al.*, 2009; Ratzan, 2001).

Health literacy, which describes the set of individual literacy skills, acts as an intermediary in health and clinical decision-making. Health literacy can also influence how people view their future health. Studies have shown that people with a low level of health awareness are less accurate in their risk perception (Hermans *et al.*, 2021). First, the consequence of this risk is the need to modify relational communication with patients. Second, reducing organizational requirements in the clinical environment. More support for the patient regarding hospital conditions is needed (Nutbeam and Lloyd, 2021).

Health literacy professionals can participate in public and private health, medicine, scientific knowledge, and cultural beliefs. Demographics, socio-political, psychosocial, and cultural factors determine health competencies developing throughout life (Zarcadoolas *et al.*, 2005), which predictive health literacy models confirm. The predictors of health skills were, among others: gender, age, education level, poverty status, marital status (Martin *et al.*, 2009).

4. Determinants and Levels of Health Literacy in the Context of Communication with Patients

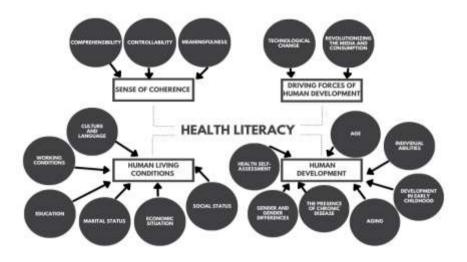
The literature on the subject points to the determinants and levels of health literacy. The primary factor, the so-called "sense of coherence," contains comprehensibility, controllability, and meaningfulness (Karski, 2011). Comprehensibility means perceiving incoming information as understandable, structured, and transparent. The second factor, controllability, allows the individual to define the area of perception in which he has the resources and means needed to adapt and maintain homeostasis in the situation of given requirements. Meaningfulness, in turn, related to the emotional and motivational sphere, indicates the areas of one's own life that affect the motivation to act (Karski, 2011).

Driving forces of human development is another determinant of health literacy, including technological change and revolutionizing the media and consumption.

They play a particular role in terms of the availability and quality of Internet communication and the creation of the information society (Kowalska *et al.*, 2017b). The authors from Poland list the following determinants of health literacy related to living conditions and human development (Cylkowska-Nowak, 2008; Kosycarz and Walendowicz, 2018; Niedorys *et al.*, 2019), age, individual abilities, gender, and gender differences, development in early childhood, marital status, culture, and language, education, working conditions, social status, economic situation, health self-assessment, aging, the presence of chronic disease.

Figure 1 shows the determinants of health literacy that determine the physical and mental state of the human body, which, in combination with each other or separately, they can have a positive or negative impact on the health of individuals, entire communities, and, consequently, on the health care system.

Figure 1. Health Literacy Determinants



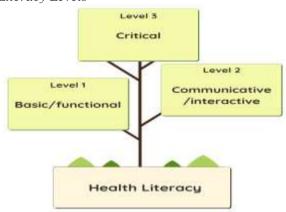
Source: Own study based on Cylkowska-Nowak, 2008; Karski, 2011; Kowalska et al., 2017b; Niedorys et al., 2019.

Health literacy is determined by having an appropriate ability to read healthily in a value-based approach. Nutbeam (2000) distinguished three such levels, illustrated in Figure 2.

The above classification illustrates the different literacy levels, gradually allowing for greater autonomy and personal empowerment. In the context of doctor-patient relational communication, moving between classes depends on the patient's cognitive development and exposure to various information within this communication. The starting point for health literacy is information, but access to it

alone does not build knowledge. Because not all information becomes news and does not immediately build knowledge, only understanding this content and analyzing it makes it helpful in acquiring health competencies (Kowalska *et al.*, 2017a), also necessary in communication between the doctor and the patient.

Figure 2. Health Literacy Levels



Source: Own study based on Nutbeam, 2000.

Functional health literacy level means basic literacy skills that are sufficient to function effectively in everyday situations and in the initial phase of establishing a relationship between a medical professional and the patient. Functional health literacy includes reading and interpreting medication and pharmaceuticals leaflets and the patient's primary health education knowledge. The second interactive level means more advanced cognitive skills in reading health. This level, together with social skills, can be used to participate in daily activities actively and in doctor-patient relational communication - to improve the patient's understanding of the information provided by the doctor about the treatment process.

The third level - critical skills are even more advanced cognitive skills that, along with social skills, the patient can use in communication with the doctor to critically analyze the content communicated to the specialist during a medical visit. Such a critical approach significantly improves communication in a relationship, which can translate into better treatment outcomes through more informed cooperation on the part of the patient in joint clinical decision-making.

Patients with limited health awareness may have limited knowledge about health, resulting in lower autonomy in self-care and decision-making in the treatment process. Conversely, patients with better health awareness may achieve better health outcomes, which over time should lead to better self-treatment, active involvement in health decision making, and more excellent coping abilities (Edwards *et al.*, 2012).

Health awareness constitutes a dynamic and multifaceted concept consisting of two dimensions. Firstly, we are dealing with personal health knowledge concerning the unique ability to navigate the health care system and function properly. This skill bases on three levels that make up an individual's functional, interactive, and critical health-related skills. On the other hand, it can use in the healing process. The health competence of the organization actively includes the health organization's ability to establish and co-create close partnerships with patients to actively involve them in the treatment process. Overall, both individual and organizational health skills are needed to support the success of patient empowerment initiatives (Palumbo, 2017).

5. Shaping the Relationship between Medical Professional and Patient - Review of Communication Models

For many years, the relationship between medical professionals and patients has been the object of much attention. In modern technical and technological changes and e-health, this issue is gaining importance. The partnerships between healthcare professionals and patients to maintain efficient communication can improve the quality and safety of healthcare. However, patient involvement in their health requires specialists to have broad skills (Vaz de Almeida and Belim, 2019).

The decision-making process in the doctor-patient relationship has changed historically and depended on a specific relationship model. Table 1 presents a comparison of the doctor-patient relationship models in the context of, among other things, the role of the doctor and the patient's activity.

Table 1. Summary of doctor-patient relationship models

	, ,				
Model	Subject of therapy	Physician's attitude	Patient's attitude	Physician's role	Patient's activity
Priestly	disease	dominant	passive	making all decisions about patient care based on their medical knowledge, without consulting the patient	full compliance with the doctor
Parsons	disease	dominant	passive	authoritative	full readiness to submit to treatment requirements
Szasz and Hollender	disease	dominant	passive / active	management / cooperation / partnership	obedient submission to treatment / cooperation in therapy / analysis of treatment methods / deciding and bearing joint responsibility for treatment
Based on the	disease	dominant	demanding	excessive control of	

			1	1	
theory of				access to medical	
conflict				services; favoring	
				wealthy patients;	desire to recover
				keeping the knowledge	
				to yourself	
Based on the ideology of consumerism	patient	partnership, advisory	active	partner, advisor, co- decision maker	active learning; conscious choice of alternative forms of assistance;
		au isory			evaluation of the results
					of therapy
Based on		supportive,			responsibility for your
health	patient	advisory	active	therapist, health	health; leading a proper
promotion		au v 1501 y		promoter	lifestyle
				information expert,	
Informative	patient	expert	active	specialist; reduced to	making decisions based
(engineering)	patient	expert	active	the status of a	on information obtained
				technician	from an expert doctor
Interpretative				advisor, interpreter,	making competent
_	patient	advisory	active	educator	decisions based on the
(interpretive)					information provided
				a teacher and friend	making decisions about
		open,		expressing concern for	the method of treatment
Deliberative		communicati		the patient, skillfully	in an atmosphere of
Deliberative	nationt	ve,	aativa	engaging the patient to	dialogue and cooperation
	patient	cooperative	active	participate in the	
				treatment process	
Partnership	patient	cooperative	active	partner in the treatment process	the ability to make independent decisions about the proposed method of treatment
		holistic	active,		
		perception of	sometimes		
		the patient,	lack of		
		paying great	willingnes		
		attention to	s to		
System and		environment	cooperate,	individual treatment,	interacting with the doctor
partnership	patient	al influences,	dysfunctio	cooperation with the	at all stages of the
		family	ns on the	patient and his family	treatment process,
		relations,	part of the	in formulating a	encouraging family
		emotional	patient's	diagnosis, planning	members to cooperate
		problems on	family	therapeutic activities	with the doctor in the
		the treatment	may		therapeutic process

		process	oppose		
		process	appear		41 41 4 1
		friendly;	active;	11-1	the patient as a partner in
		based on	cooperatin	collaborating equally	making decisions about
Collegial	patient	partnership	g equally	with the patient	the course of the
		with the	with the		treatment process
		patient	doctor		
				providing professional	
Consumption	patient as a	seller of		information, listening	risks and informed about
(economic,	client	medical	active	to the patient's wishes,	the costs of treatment
business)	CHOIL	products		and accepting their	
ousiness)				decisions	
		in strument al		paying too much	integrating minimal
		and		attention to medical	personal commitment and
Legalistic	client-	procedural	submissive	procedures and legal	trust in the doctor; based
(libertarian)	patient	treatment of	submissive	details; focusing on	more on mistrust than
		the client-		adhering to the agreed	trust
		patient		contract	
				negotiating and	the patient negotiates with
				contracting procedures	the physicians in the
				determine the content	presence of lawyers,
				of the	while some supervise the
				negotiation/contract	profitability of the system
				with the patient; the	for the patient, others - for
Negotiation				doctor wants to fulfill	the doctor; the patient
(contractual,	contract /	anticipatory,	active,	the wishes of an	wants to negotiate
contractalist)	agreement	protective	protective	undemanding patient	maximum benefits for the
				and wants to exclude	lowest possible price
				risky obligations, the	• •
				non-fulfillment of	
				which could result in a	
				trial and sentence	
				making a moral	the patient's relationship
Religious	patient	evaluative	submissive	-	to the doctor understands
				patient's behavior in the	
			, insterning	therapeutic process	religious obligation
				compliance with the	negotiates with a
Consumption- Contractalist	contract	protective, distrustful	protective,	terms of the contract	physician to enforce his
			distrustful	terms of the contract	
				(II : 1 2010 D:	demands

Source: Own study based on Benkenstein and Uhrich, 2010; Biesaga, 2004, 2005; Brody, 1987; Czerska, 2016; Gałuszka, 2012; Hui, 2005; Jacennik, 2014; Kaba and Sooriakumaran, 2007; Krajewska-Kułak et al., 2008; Moczydłowska et al., 2014; Osmólska-Bogucka, 2014; Szasz and Hollender, 1956; Veatch, 1972; Zagożdżon, 2017; Zembala, 2015.

After studying all the models of the doctor-patient relationship presented above and according to Zembala (2015), there is no ideal model for the doctor-patient relationship. Each of the models shown in the table has its advantages and disadvantages; therefore, it is impossible to learn a universal scheme and apply it in relational communication with the patient. Because creating a typical pattern of communication behavior is a challenging task in the doctor-patient relationship, the communication skills of doctors, influencing the course and effectiveness of therapy, and the health competencies of both parties are essential.

A necessary condition for building a good doctor-patient relationship and conducting practical activities in health education and prevention is to diagnose the level of health literacy in each population (Kowalska *et al.*, 2017b). As part of shaping a good and friendly relationship between a medical professional and the patient, it is essential to stimulate their involvement in the treatment process. Such behavior is in line with the idea of modern health education, which consists of creating conditions for behavior change. The doctor builds the patient's commitment, increasing his health competencies and self-esteem (Olejniczak, 2016b). Such increased patient involvement positively shapes the relationship between the doctor and the patient.

Summing up, constructive communication between the doctor and the patient, focused on both partners' needs, contributes to increased treatment effects. Its appropriate quality builds trust in this relationship. It emphasizes that the physician has a decisive influence on the communication process. Through openness and interest in the patients, he creates the conditions for supporting patient involvement. This approach enables participation in solving health problems, and thus a comprehensive approach to the patient's health situation (Krot and Rudawska, 2017).

6. Raising the Level of Health Literacy - 21 Steps

Universal guidelines based on good practices should raise the level of health literacy. These prepared guidelines should allow tips implementation at the level of each medical entity - regardless of the country or business profile (Baska and Śliż, 2020). These 21-step guidelines intend to facilitate communication and ensure that all patients understand medical messages to minimize the risk of communication errors. Secondly, these steps should facilitate orientation, both in healthcare entities and in terms of the organization and functioning of the health care system. Third, the guidelines should support patients' efforts to improve their health (Baska and Śliż, 2020).

Creating a model of medical care adapted to the physician plays a unique role in health literacy issues. The essential competencies and skills of the doctor in this area include: listening, calming pace of speech, using non-medical language in contact with the patient, creating opportunities and actively encouraging ask questions, asking patients to explain the recommendations in their own words (Baska and Śliż, 2020). Figure 3 shows 21 steps to raise the level of health literacy.



Figure 3. 21 Steps to Raise the Level of Health Literacy

Source: Own study based on Baska and Śliż, 2020; Zagożdżon, 2017.

The first step is to form an interdisciplinary team by identifying team members, bringing team members together, having subsequent meetings, and establishing routine reporting. The second step is to create a health literacy improvement plan. As part of this step, you must develop a recovery program. Health literacy assessment in primary care will help healthcare professionals test key areas influencing patient understanding. These identified aspects can help build a plan to improve health skills (Brega *et al.*, 2015). This plan should include short- and long-term goals that address health literacy challenges.

In step three, to improve patient education and health literacy, healthcare professionals need to be trained in best practices in providing educational materials. Therefore, all medical personnel should undergo regular, standardized training to increase awareness of health knowledge, its importance, and its challenges. The next step is clear and understandable communication with the patient, using simple language, avoiding medical jargon, adjusting the language in different materials/brochures, and using graphic aids when translating the examination procedure or stages of the disease.

Using plain language is one-way healthcare providers can help improve health awareness. Patients are much more likely to understand their condition, treatment plan, and recommendations when the terminology used by the medical professional is clear and understandable. Plain language can also be effective in breaking down communication barriers. Remember that a simple language for one person may not be for another (Quigley, 2019). This step is also crucial for patients with chronic

conditions as they can develop health skills over time and put them into practice, becoming more proactive in health consultations (Edwards *et al.*, 2012).

Step number five means applying the teach-back method. When using it, you should document the progress in patient education and the degree of patient involvement between visits. The teach-back way tests patients' understanding of the information given to them by their own words about what they should know or do about their health. This method allows you to see if patients can follow specific instructions. A teach-back process is a valuable tool for any medical professional and patient. This method helps the patient understand and follow the instructions (Weiss, 2008). Second, it reduces call backs and the number of cancelled meetings. Finally, patient satisfaction and outcomes are improved (Baska and Śliż, 2020; Zagożdżon, 2017).

Step number six is follow-up with patients. In this step, the patient or caregiver contacts later to check their progress since the last visit. Such observation helps identify misunderstandings and answer questions to adjust the appropriate treatment. Communication with patients between visits to the office can increase the sense of security and care for patients. Patients assess such control contact well and developing a patient observation system is also beneficial to the clinic staff to ensure the treatment process's progress (DeWalt *et al.*, 2010). Maintaining patient contact plays a vital role in healthcare. In the case of health literacy, it is about contact by phone. The effectiveness of telephone contact shapes the patient's impression of medical practice. The telephone system should be patient-friendly, essential for building health awareness. For this purpose, a suitable brochure for patients can explain when and how to contact your doctor and medical facility. The critical point is, of course, to talk to the patient about understanding the content of the message (Brega *et al.*, 2015).

The next step in increasing health competencies is conducting brown bag medicine reviews. A "brown bag review" for drugs is common to encourage patients to bring all medicines and supplements to their appointments and review them. This practice aims to establish the types of medications patients take and how they should take the medicaments (Brega *et al.*, 2015; Krot and Rudawska, 2017). As part of this step, the patient should be encouraged to record (manually or via an app). A medical professional can also cooperate with pharmacists in this area (Baska and Śliż, 2020).

Eliminating language barriers is tool number 9. These patients do not speak very well in the country's language where they are currently and receiving treatment because they often do not receive the health information they need. This approach to linguistic differences is an integral part of shaping health awareness required by law. Failure to use acceptable forms of linguistic assistance could hold the medical practice accountable. Cultural competence training is essential for medical professionals due to cultural differences, customs, and religious views. Participation in such activity is necessary because the background or beliefs of patients may affect their attitude towards treatment and medical care itself. Properly selected educational

materials tailored to the patient's abilities involve the approach to treatment. These can be forms, applications, information brochures, consents to treatments, or treatments. These materials should be developed, added, and provided with the necessary sets of information for the patient about individual disease entities - the clinical order set (Baska and Śliż, 2020).

A friendly environment for the patient is critical. The doctor appropriately greets the patient, cares for the right atmosphere during the visit, creates conditions that encourage asking questions (Weiss, 2008). Enabling the patient to ask questions is a fundamental issue in the patient's experience in the current therapeutic processes. The next step is to plan various activities with your patients. It is about setting realistic goals together, including adherence to proper dosing of prescribed medications. The physician should support patients in the process of dosing their medications. And here, assistance in using dedicated applications is invaluable, helping, among other things, to remember the time of drug dosing. Other good ideas are keeping a diary or having a special medicine box (Baska and Śliż, 2020).

In shaping proper relational communication with the patient, feedback from the patient is critical. Any feedback on his experience as a patient, contact with the doctor, and received benefits are valuable. Suggestions can collect through a questionnaire or a personal interview. Community-based resources mean places and institutions in the local community dedicated to non-medical support. Such areas should be found and indicated to the patient in the context of his social support. The results show that social support can contribute to the understanding and ability of patients to search, critically analyze, and use health information in the context of improving health literacy (De Wit *et al.*, 2018).

The last three steps are advice, support, and simplification. The patient may feel lost in navigating the health system; hence the invaluable role of a medical professional may prove to be advising on legal issues related to health insurance or the patient's rights. Then, identify resources in the local community and identify patients with appropriate resources to improve their health literacy skills. Finally, it is essential to simplify the referral system to other specialists so that the patient fully understands the procedure.

7. Discussion

The article outlines the connection between health competencies and the communication process in the medical professional-patient relationship. The studied literature in this area provided an incomplete picture of the situation. Therefore, this analysis is a preliminary diagnosis of reality to deepen it in the future.

According to the article's author, health competencies that play a significant role in making health decisions by a patient and clinical finding by a physician may also influence the perception of their future health. Hermans *et al.* (21) indicate that

people with a low level of health awareness perceive the risk associated with their own health decisions less accurately. Kim and Xie (2017) note that limited health awareness relates to demographic factors and difficulties using e-health services. They point to mobile applications that can provide interactive health services to people with low levels of health awareness. Kickbusch *et al.* (2013) found that poor health literacy results in less healthy choices, more risky behavior, poorer health, less self-control, and more significant hospitalization. Therefore, according to the author of this publication, it is essential to increase health literacy among institutions constantly. The 21 steps presented in the article support the patient and the medical professional towards a better understanding of the essence of health literacy, thus building a more conscious communication process in the relationship between them.

Jacobson and Parker (2014a) developed the Health Literacy Principles Checklist to improve communication with different audiences to understand health messages better. This list corresponds to the content in the 21 steps in the article, paying attention to the specificity of addressing the listener, using appropriate, friendly phrases, the possibility of visualizing specific results, transparency in describing the issues. In the author's opinion, these rules as a checklist in a user-friendly format can be helpful for a physician during the visit of the patients. The same authors, Jacobson and Parker (2014b), indicate in their other discussion paper the need to meet the linguistic and cultural needs of the audience. According to them, content should consider the critical determinants of the target group, such as age, education, income, gender, profession, and place of residence.

Chronic diseases also affect health literacy. Jovanić *et al.* (2018) indicate that, as with all chronic non-communicable diseases, adequate health awareness is essential in making the right decisions in treating heart failure. They argue that patients with heart failure and lower levels of health awareness have a reduced quality of life. Improved health awareness could lead to better disease management decisions and quality of life.

In this article, the author, referring to the literature, also indicated the validity of developing predictive models of health literacy that may consider various variables. Such models are valid. However, as Rowlands *et al.* (2018) argue, systems using predictive models may lack critical variables such as healthcare data. Therefore, the authors recommend developing predictive health awareness models using variables common to source health awareness data and target systems such as health services.

Health competencies determined by various variables are defined by having an appropriate skill level in a values-based approach. In relational communication between the doctor and the patient having a specific health literacy level is crucial. This situation is indicated, among other things, by Wittink and Oosterhaven (2018), who believe that their particular health literacy level determines specific patterns in patients' behavior. Because patients with critical health literacy skills are easy because they come to a medical appointment on time, are prepared for it, can clearly

articulate the specific goal of treatment, and fill out questionnaires without complaining. In addition, such patients remember the information given to them by their doctor and follow the guidelines. However, they are rare in clinical practice.

The same authors also point to patients with a low level of health awareness who have low literacy or numeracy skills to function effectively in taking care of their health. They may not follow the doctor's instructions, be late for appointments, or have difficulty understanding prescription medication directions and the labels on their tablet containers. In addition, there may be difficulties in dealing with chronic conditions daily. There may also be problems informing healthcare professionals about their health problems, as patients with low literacy levels may not know what information they need. According to the author of the article, it follows that a given level of health literacy can be consistently related to the number of hospitalizations, use of emergency care, participation in various screening tests, the correctness of taking medications, and the ability to interpret health labels and messages.

According to Mirczak (2017), health literacy level is critical in elderly patients with chronic diseases because it determines the course of the self-management process of this type of disease. Therefore, knowing the level of health literacy in chronic diseases is crucial in obtaining, assimilating, and understanding health information. A vital conclusion draws that an integral part of the patient's treatment process should be managing their own, not only chronic, disease.

This literature review has limitations. First, the timeframe for this review limits the number of studies mainly to those between 2014 and 2021. Future reviews should also include older sources in the context of historical coverage of the development of health literacy worldwide. Second, searching for articles by keywords did not always bring the expected result in texts focused precisely on the desired content. The author rejected many items by selecting only the proper studies. Third, the author included only studies written in English and Polish in the literature analysis. Such an approach to the problem significantly narrows the research area and may distort the conclusions and practical implications. The author points out that the site of health competencies regarding the behavior of patients in contact with medical personnel requires further in-depth analysis, with particular emphasis on territorial and cultural diversity.

8. Conclusions

Patients with a low understanding of medical information are much more burdensome for public finances due to more frequent visits to medical entities due to incorrect dosing of prescribed drugs or less frequent use of preventive examinations. In addition, there is the quality of historical health information, which refers to the language of books or science. Finally, we are dealing with a lack of educational skills, both for patients and doctors themselves, in the context of increasing public health awareness.

The key to building the doctor-patient relationship is cooperation based on mutual respect and maintaining one's subjectivity. Good, effective communication, based on trust, empathy, mutual listening, and adequate responses, is the basis of an effective diagnosis and treatment process. It is essential in the treatment of chronic diseases. The physician's creation of a platform for a safe, trustful relationship with the patient helps the patient's attitude and commitment and the health competencies he has acquired and their current level.

Technical and technological progress in medicine, resulting in changes in health systems, has resulted in a significant distance between patients and medical professionals. The rapid development of computerization and communication techniques determined many improvements in the field of diagnosis and treatment of patients, but at the same time limited the time and scope of interpersonal contacts, which hurt relational communication with the patient. Conscious, educated patients, having the internet, social media, and various communicators at their disposal, began to use these tools efficiently, thus acquiring health competencies and reaching their following levels.

Health literacy is a concept that is gaining more and more importance. Critical skills are necessary as health systems become more complex, solutions become more precise, and information sources more diverse. Knowledge is a prerequisite for strengthening the patient in the health system; therefore, a holistic approach in patient-centred care should accompany improved health awareness. A growing body of evidence shows that better health awareness goes hand in hand with shaping good relational communication with the patient, financial profitability in health care, and achieving better health outcomes.

According to the Author, developing health competencies is the key to effective and efficient relational communication with the patient, thus supporting the functioning of health care and providing societies with a high health culture. The level of health competencies and their development is significant from various perspectives: health promotion, disease prevention, and treatment. For medical professionals, it should be essential to know the ways and benefits of improving health competencies and understanding the effects of a low level of competencies.

The study of literature and concepts allowed the author to define future research directions. According to the Author, the following areas would require refinement:

- 1. ICT solutions: e-visit, teleconferences.
- 2. Conscious health management: mHealth (various mobile applications), self-monitoring (including use in treating chronic diseases).
- 3. The development of narrative medicine in the context of openness to the humanistic aspects of the disease.

Therefore, according to the author, there is a need to consider health literacy in various areas of medicine. The best approach to their use and communication in contact with patients would be mixed, i.e., digital, and traditional.

References:

- Baska, A., Śliż, D. 2020. Health literacy scientific statement from the American Heart Association (10 July 2018) with a commentary. Folia Cardiologica, 15(1), 34-41. DOI: 10.5603/FC.2020.0006.
- Benkenstein, M., Uhrich, S. 2010. Dienstleistungsbeziehungen im Gesundheitswesen Ein Überblick zum Konzept "Shared Decision Making"in der Arzt-Patienten-Interaktion. In Georgi, D., Hadwich, K. (Eds.), Management von Kundenbeziehungen (431-451).
 DOI: 10.1007/978-3-8349-8745-7_19.
- Biesaga, T. 2004. Patient's good as the goal of medicine and basis of medical ethics. Studia Philosophiae Christianae, 40(1), 153-165.
- Biesaga, T. 2005. The autonomy of the doctor and the patient and the goal of medicine. Practical Medicine. 6, 20-24.
- Brainard, J., Loke, Y., Salter, C., Koós, T., Csizmadia, P., Makai, A., Gács, B., Szepes, M. 2016. On behalf of the Irohla Consortium. Healthy aging in Europe: prioritizing interventions to improve health literacy. BMC Research Notes, 9(270). DOI: 10.1186/s13104-016-2056-9.
- Brega, A., Barnard, J., Mabachi, N.M., Weiss, B.D., DeWalt, D.A., Brach, C., Cifuentes, M., Albright, K., West, D.R. 2015. AHRQ Health Literacy Universal Precautions Toolkit, Second Edition. Prepared by Colorado Health Outcomes Program, University of Colorado Anschutz Medical Campus under Contract No. HHSA290200710008, TO#10. AHRQ Publication No. 15-0023-EF. Rockville: Agency for Healthcare Research and Quality.
- Brody, H. 1987. The physician-patient relationship: models and criticisms. Theoretical Medicine, 8(2), 205-220. DOI: 10.1007/BF00539756.
- Buccoliero, L., Bellio, E., Mazzola, M., Solinas, E. 2015. A marketing perspective to "delight" the "patient 2.0": new and challenging expectations for the healthcare provider. BMC Health Services Research, 16(47). DOI: 10.1186/s12913-016-1285-x.
- Burgoon, J.K., Hale, J.L. 1984. The fundamental topoi of relational communication. Communication Monographs, 51(3), 193-214. DOI: 10.1080/03637758409390195.
- Burgoon, J.K., Hale, J.L. 1987. Validation and measurement of the fundamental themes of relational communication. Communication Monographs, 54(1), 19-41. DOI: 10.1080/03637758709390214.
- Cylkowska-Nowak, M. 2008. Health literacy and its role in education and health promotion. In Cylkowska-Nowak, M. (Eds.), Health education. Possibilities, problems, limitations. Poznań: Scientific Publishing House of the K. Marcinkowski Medical University.
- Czerska, I. 2016. The Physician-Patient Relationship and the Selected Theoretical Models of the Relationship in the Context of Dehumanisation of Medicine. Handel Wewnętrzny, 5(364), 37-45.
- DeWalt, D.A., Callahan, L.F., Hawk, V.H., Broucksou, K.A., Hink, A., Rudd, R., Brach, C. 2010. Health Literacy Universal Precautions Toolkit. Prepared by North Carolina Network Consortium, The Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, under Contract No. HHSA290200710014. AHRQ Publication No. 10-0046-EF. Rockville: Agency for Healthcare Research and Quality.

- De Wit, L., Fenenga, C., Giammarchi, C., di Furia, L., Hutter, I., de Winter, A., Meijering, L. 2018. Community-based initiatives improving critical health literacy: a systematic review and meta-synthesis of qualitative evidence. BMC Public Health, 18(40). DOI: 10.1186/s12889-017-4570-7.
- Edwards, M., Wood, F., Davies, M., Edwards, A. 2012. The development of health literacy in patients with a long-term health condition: the health literacy pathway model. BMC Public Health, 12(130). DOI: 10.1186/1471-2458-12-130.
- Freedman, D.A., Bess, K.D., Tucker, H.A., Boyd, D.L., Tuchman, A.M., Wallston, K.A. 2009. Public health literacy defined. American Journal of Preventive Medicine, 36(5), 446-451. DOI: 10.1016/j.amepre.2009.02.001.
- Gallagher, T.J., Hartung, P.J., Gregory, S.W. 2001. Assessment of a measure of relational communication for doctor-patient interactions. Patient Education and Counselling, 45(3), 211-218. DOI: 10.1016/S0738-3991(01)00126-4.
- Gałuszka, M. 2012. New phenomena in the relationship between physician and patient in the context of the development of the internet. Sociological Review, 61(2), 118-150.
- Hermans, L., Van den Broucke, S., Gisle, L., Demarest, S., Charafeddine, R. 2021. Mental health, compliance with measures and health prospects during the COVID-19 epidemic: the role of health literacy. BMC Public Health, 21(1365). DOI: 10.1186/s12889-021-11437-w.
- Hui, E.C. 2005. The contractual model of the patient-physician relationship and the demise of medical professionalism. Hong Kong Medical Journal, 11(5), 420-422.
- Iwanowicz, E. 2009. Health literacy as one of the contemporary public health challenges. Occupational Medicine, 60(5), 427-437.
- Jacennik, B. 2014. Communicating doctors with patients macro processes in a micro perspective. In Goban-Klas, T. (Eds.), Communication in health care interpersonal, organizational and media (63-77). Warsaw, Wolters Kluwer Polska Publishing House.
- Jacobson, K.L., Parker, R.M. 2014a. Health Literacy Principles Checklist. Available online: http://centerforhealthguidance.org/health-literacy-principles-checklist.pdf.
- Jacobson, K.L., Parker, R.M. 2014b. Health Literacy Principles: Guidance for Making Information Understandable, Useful, and Navigable. The National Academy of Sciences.
- Jovanić, M., Zdravković, M., Stanisavljević, D., Jović Vraneš, A. 2018. Exploring the Importance of Health Literacy for the Quality of Life in Patients with Heart Failure. International Journal of Environmental Research and Public Health, 15(8), 1761. DOI: 10.3390/ijerph15081761.
- Kaba, R., Sooriakumaran, P. 2007. The evolution of the doctor-patient relationship. International Journal of Surgery, 5(1), 57-65. DOI: 10.1016/j.ijsu.2006.01.005.
- Karski, J. 2011. Practice and theory of health promotion, 5th ed. Warsaw, CeDeWu Publishing House.
- Kickbusch, I., Pelikan, J.M., Apfel, F., Tsouros, A.D. (Eds.). 2013. Health literacy. The solid facts. World Health Organization.
- Kim, H., Xie, B. 2017. Health literacy in the eHealth era: A systematic review of the literature. Patient Education and Counselling, 100(6), 1073-1082. DOI: 10.1016/j.pec.2017.01.015.
- Kosycarz, E., Walendowicz, K. 2018. Health Literacy as Key Determinant of the Health of Society. Journal of Management and Financial Sciences, 165, 79-94.
- Kowalska, M.E., Kalinowski, P., Bojakowska, U. 2017a. Elements of health literacy as a tool for health promotion. Journal of Education, Health and Sport, 7(9), 439-445. DOI: 10.5281/zenodo.1002050.

- Kowalska, M.E., Kalinowski, P., Bojakowska, U. 2017b. The concept of health literacy in health promotion. Journal of Education, Health and Sport, 7(9), 394-402. DOI: 10.5281/zenodo.1001789.
- Krajewska-Kułak, E., Wróblewska, K., Kruszewa, R., Szpakow, A., Kułak, W., Baranowska, A., Jankowiak, B., Krajewska-Ferishah, K., Kondzior, D., Lewko, J., Łukaszuk, C., Rolka, H., Klimaszewska, K., Kowalczuk, K., Sierakowska, M., Szyszko-Perłowska, A., Van Damme-Ostapowicz, K., Jaszewski, M., Kowalewska, B., Chilińska, J., Gołębiewska, A. 2008. The assessment of patient physician trust using Anderson and Dedrick's scale. Problemy Higieny i Epidemiologii, 89(3), 414-418.
- Krot, K., Rudawska, I. 2017. Communication in the Relation between the Doctor and the Patient and Building Confidence. Handel Wewnetrzny, 2(367), 201-213.
- Liu, C., Wang, D., Liu, C., Jiang, J., Wang, X., Chen, H., Ju, X., Zhang, X. 2020. What is the meaning of health literacy? A systematic review and qualitative synthesis. Family Medicine and Community Health, 8:e000351. DOI: 10.1136/fmch-2020-000351.
- Martin, L.T., Ruder, T., Escarce, J.J., Ghosh-Dastidar, B., Sherman, D., Elliott, M., Bird, C.E., Fremont, A., Gasper, C., Culbert, A., Lurie, N. 2009. Developing predictive models of health literacy. Journal of General Internal Medicine, 24(11), 1211-1216. DOI: 10.1007/s11606-009-1105-7.
- Mirczak, A. 2017. Health literacy level among elderly and chronic disease self-management. Journal of Education, Health and Sport, 7(3), 72-85. DOI: 10.5281/zenodo.265641.
- Moczydłowska, A., Krajewska-Kułak, E., Kózka, M., Bielski, K. 2014. Patients' expectations towards medical staff. Hygeia Public Health, 49(1), 142-151.
- Nazarko-Ludwiczak, E. Patients of the Empowered times. Available online: https://www.termedia.pl/f/f/b8b56aef86c348909e95b9739bb91a2c.pdf.
- Niedorys, B., Chrzan-Rodak, A., Bartoszek, A., Ślusarska, B. 2019. Competence of health (Health Literacy) a review of research using the European Health Competence Questionnaire (HLS-EU-Q47) in 2010-2018. Hygeia Public Health, 54(2), 105-113.
- Nutbeam, D. 2000. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. Health Promotion International, 15(3), 259-267. DOI: 10.1093/heapro/15.3.259.
- Nutbeam, D., Lloyd, J.E. 2021. Understanding and Responding to Health Literacy as a Social Determinant of Health. Annual Review of Public Health, 42, 159-173. DOI: 10.1146/annurev-publhealth-090419-102529.
- Olejniczak, D. 2016a. Practical use of health literacy as a tool for achieving health goals. Journal of Education, Health and Sport, 6(2), 238-243. DOI: 10.5281/zenodo.46654.
- Olejniczak, D. 2016b. The role of health literacy in health promotion. Medium, 5(310), 4-5.
- Osmólska-Bogucka, A. 2014. In search of a universal schematic presentation of the patient-doctor and doctor-patient relationship review of the literature. Dental Magazine, 12, 128-132.
- Pace, R. 2020. What is Relational Communication? Principals and Theory Explained. Available online: https://www.marriage.com/advice/relationship/relational-communication/.
- Palumbo, R. 2017. The Role of Health Literacy in Empowering Patients. In Palumbo, R. (Eds.), The Bright Side and the Dark Side of Patient Empowerment, 63-78. Springer Briefs in Public Health. Cham: Springer. DOI: 10.1007/978-3-319-58344-0_4.
- Piekot, T. 2021. The simpler the Polish language of medics, the better treatment effects. Medium, 6(370), 7-8.
- Quigley, C. 2019. Health Literacy: What It Is and How to Improve It. Available online: https://www.jumohealth.com/news/health-literacy.

- Ratzan, S.C. 2001. Health literacy: Communication for the public good. Health Promotion International, 16(2), 207-214. DOI: 10.1093/heapro/16.2.207.
- Roberts, J. 2015. Local action on health inequalities: Improving health literacy to reduce health inequalities. Report 9. London: Public Health England, Wellington House. Available online: https://www.instituteofhealthequity.org/resources-reports/local-action-on-health-inequalities-health-literacy-to-reduce-health-inequalities.
- Rogala, A. 2020. The challenges of implementing patient empowerment approach in the context of patient competencies. E-mentor, 3(85), 41-49. DOI: 10.15219/em85.1473.
- Rowlands, G., Whitney, D., Moon, G. 2018. Developing and Applying Geographical Synthetic Estimates of Health Literacy in GP Clinical Systems. International Journal of Environmental Research and Public Health, 15(8), 1709. DOI: 10.3390/ijerph15081709.
- Sørensen, K., Pelikan, J.M., Röthlin, F., Ganahl, K., Slonska, Z., Doyle, G., Fullam, J., Kondilis, B., Agrafiotis, D., Uiters, E., Falcon, M., Mensing, M., Tchamov, K., van den Broucke, S., Brand, H., on behalf of the HLS-EU Consortium. 2015. Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU). European Journal of Public Health, 25(6), 1053-1058. DOI: 10.1093/eurpub/ckv043.
- Sørensen, K. 2019. Defining health literacy: Exploring differences and commonalities. In: Okan, O., Bauer, U., Levin-Zamir, D., Pinheiro, P., Sørensen, K. (Eds.), International handbook of health literacy. Research, practice, and policy across the lifespan, 5-20. Bristol, Policy Press.
- Sukkar, E. 2021. Health literacy around the world: policy approaches to wellbeing through knowledge and empowerment. The Economist Intelligence Unit Limited.
- Szasz, T.S., Hollender, M.H. 1956. A contribution to the philosophy of medicine: the basic models of the doctor-patient relationship. AMA Archives of Internal Medicine, 97(5), 585-592. DOI: 10.1001/archinte.1956.00250230079008.
- Vaz de Almeida, C., Belim, C. 2019. Good Steps to Safety: Guidelines for Communication and Health Literacy. Patient Safety & Quality Healthcare (PSQH).
- Veatch, R.M. 1972. Models for Ethical Medicine in a Revolutionary Age. The Hastings Center Report 2(3), 5-7. DOI: 10.2307/3560825.
- Weiss, B.D. 2008. Health Literacy: A Manual for Clinicians. Part of an educational program about health literacy. American Medical Association Foundation and American Medical Association.
- Wittink, H., Oosterhaven, J. 2018. Patient education and health literacy. Musculoskeletal Science and Practice, 38, 120-127. DOI: 10.1016/j.msksp.2018.06.004.
- Zagożdżon, P. 2017. The relation between two paradigms the religious psychiatrist. Philosophy and Science. Philosophical and Interdisciplinary Studies, 5, 311-322.
- Zarcadoolas, C., Pleasant, A., Greer, D.S. 2005. Understanding health literacy: an expanded model. Health Promotion International, 20(2), 195-203. DOI: 10.1093/heapro/dah609.
- Zembala, A. 2015. Communication model in the doctor-patient relationship. Scientific Journals of the Society of Doctoral Students of the Jagiellonian University. Science, 11(2), 35-50.