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ORIGINAL ARTICLE

Health literacy of professionals enrolled in a Multiprofessional Residency Program in Health

Letramento em saúde dos profissionais de um Programa de Residência Multiprofissional em Saúde

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ABSTRACT

Objective: To evaluate health literacy conditions among professionals enrolled in a Multiprofessional Residency Program in Health. **Method:** Analytical cross-sectional study, conducted with 88 resident professionals, using the Brazilian version of the Health Literacy Questionnaire. The reliability of the mean scores on the scales and their correlation with sociodemographic variables were evaluated. **Results:** The results indicate that women take better care of their health and have better social support. The younger residents find it easier to interact with healthcare personnel and navigate the healthcare system. The strengths identified were the capacity to identify reliable sources of information, and being "information explorers". The limitations are related to not being involved with their own health care and not using the healthcare system. **Conclusion:** The study collaborates to spread the theme among resident professionals, enabling reflection on the necessary competencies and abilities in healthcare.

Descriptors: Health Literacy; Internship, Nonmedical; Health Personnel; Professional Training; Patient Care Team.

RESUMO

Objetivo: avaliar as condições do letramento em saúde de profissionais inseridos em Programa de Residência Multiprofissional em Saúde. **Método:** Estudo transversal analítico, realizado com 88 profissionais residentes, utilizando a versão brasileira do *Health Literacy Questionnaire*. Foi avaliada a confiabilidade e a correlação das médias dos escores das escalas com as variáveis sociodemográficas. **Resultados:** os resultados indicam que as mulheres cuidam mais da saúde e têm melhor suporte social. Os mais jovens têm facilidade de interagir com os profissionais de saúde e de navegar no sistema de saúde. As potencialidades identificadas foram a capacidade de identificar confiáveis fontes de informação e serem "exploradores de informação". As limitações estão relacionadas ao não envolvimento com os próprios cuidados de saúde e a não usarem o sistema de saúde. **Conclusão:** O estudo colabora para divulgar a temática entre os profissionais residentes, possibilitando a reflexão sobre as competências e habilidades necessárias no cuidado em saúde.

Descritores: Letramento em Saúde; Internato não Médico; Pessoal de Saúde; Capacitação Profissional; Equipe de Assistência ao Paciente.

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INTRODUCTION

The term health literacy first appeared in the United States of America in the 1970s. It was translated in Brazil as *letramento em saúde* and has become widespread in the various health education contexts in the country[1].

Health literacy is directly related to health promotion and disease prevention, and international studies have shown that insufficient health literacy contributes to inadequate use of healthcare services and negatively affects health[2]. It is also associated with high rates of hospitalization, adverse effects in care transition, increased prevalence of chronic diseases, lower use of preventive methods and lower adherence to treatment[2,3].

Among the most widespread definitions of health literacy (HL) is that of the World Health Organization, which refers to it as being the "cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health"[4]. It is related to the use of skills that improve people's ability to act, with information that promotes healthier lives[5].

The principles of HL collaborate with health promotion and preventive care, as well as being strong allies in communication between healthcare providers and patients[2,3,6,7]. Despite being related, health literacy and health communication are distinct. While HL is the use of skills, communication is the process of exchanging information[5].

Even people with a high degree of instruction may present inadequate HL; literacy is associated, but not dependent on, the individual's level of education[7]. It is considered an individual-level construct and goes beyond "knowing how to read and write", including how the individual is capable of applying these skills in healthcare, when making decisions, promoting health, and accessing and navigating the healthcare system[1,7].

In general, considering HL as a care tool enables healthcare providers to identify user limitations in understanding information and accessing healthcare services, and consequently adjust the way in which this information is communicated, enabling better care outcomes[8].

Most studies on literacy have been dedicated to aspects related to patients, putting little emphasis on the abilities and skills of professionals to meet the distinct conditions of HL, thus underestimating its role[5,6]. Moreover, little research has been developed in respect to the perception of healthcare providers on the importance of HL in their professional performance[9,10].

Healthcare providers have limited understanding of the importance of HL from a personal perspective and in professional practice, as well as impaired capacity to treat people with inadequate HL. They are also unable to perceive health risk behaviors among both practitioners and patients resulting from limited HL in the context of the healthcare environment and the transition of care to the home[10,11].

It needs to be emphasized, however, that the World Health Organization considers health literacy a social determinant in health, and that professionals are an important source of information and orientation for patients[9,12].

Those who interact with patients, their families, and communities through oral and written communication, should have basic competence in the principles of health literacy[6]. Healthcare providers can be facilitators of HL, exposing information in a manner that provides understanding and enables people to act on it[5].

The absence of such involvement may create barriers to communication with patients. An example is the use of unknown terminology; or information being supplied quickly and in an unclear manner, without checking that the content of the information was understood[9,13,14]. This may occur because there is a gap in the training of healthcare providers on the importance of the use of HL principles in professional practice[6,8,10]. This type of preparation is therefore needed during training.

Studies have indicated the necessity to implement training programs to improve the health literacy of professionals, with the aim of improving quality in the provision of care[6,9,12]. The need for the observation of HL of people who are in professional training, applies to those that are seeking professional development in Specializations and Residency Programs in the health area. Little is known on the training of resident professionals to communicate effectively with people who have HL limitations[11].

Institutions that offer Multiprofessional Residency Programs in Health are responsible for the organization of their pedagogical projects. Specific nuclei of knowledge and practice of each profession are inserted in these programs, and the interaction of these nuclei generally occurs through transversal axis[15]. It is a great opportunity to learn to work in a team, getting to know and respect the knowledge of others.

It has been recommended that residency programs develop curriculums to address HL competence[11]. As a pedagogical action, it is therefore necessary to know the health literacy of resident professionals, so as to understand their limitations, their strengths and if there is the consequent expected evolution in the time of the two-year course. This identification can signal important aspects for the improvement of the course's pedagogical project.

If the resident professional has difficulty in the understanding of information related to their own healthcare, inadequate health literacy may interfere in their care duties[7]. It may influence their behavior, communication with users, safety in the health environment, professional practice and the quality of care provided[5].

The importance of the development of professional competencies using the principles of health literacy has been discussed in other countries[9,10]. In Brazil, this is the first study that has proposed researching the HL conditions of health professionals. Directing attention to the issue may assist in raising awareness of the problem and stimulate its inclusion in

curricula, promoting the development of competencies and abilities to deal with people with inadequate HL.

Thus, the present study aimed to answer the following guiding questions: What are the health literacy conditions among the professionals enrolled in a Multiprofissional Residency in Health? Is there a difference between the HL conditions of resident professionals in the first and second year?

The aim of this study was to evaluate the health literacy conditions among professionals in a Multiprofessional Residency Program in Health.

METHODS

This is an analytical cross-sectional study, carried out at a teaching hospital in the Central-West region of Brazil, which has developed a Multiprofessional Residency Program in Health. All of the 95 professionals enrolled in the first and second years of the Multiprofessional Residency Programs in Health were approached. These professionals included 24 nurses, 15 nutritionists, 12 speech therapists, 11 psychologists, nine social workers, eight biomedical technicians, eight pharmacists and eight physiotherapists. Of this total, 88 of the resident professionals participated in the study. Five professionals that were on medical leave during the period of data collection were excluded; two others refused to participate in the study.

Sociodemographic characteristics of the group were identified: age, sex, area of study, year of undergraduate graduation, current year of residence, marital status, parents' level of education, who raised them, if they live alone, previous employment, and if they have the financial support of the family as well as the residency grant.

The Brazilian version of the Australian Health Literacy Questionnaire, or HLQ-Br, validated in 2018 in Brazil, was applied to identify the HL of the resident professionals[16,17].

The HLQ is a multidimensional instrument that can be self-administered or applied through interviews. It contains 44 items presented on nine scales[16,17]: feeling understood and supported by healthcare providers (four items); having sufficient information to manage my health (four items); actively managing my health (five items); social support for health (five items); appraisal of health information (five items); ability to actively engage with healthcare providers (five items); navigating the healthcare system (six items); ability to find good healthcare information (five items); and understand health information well enough to know what to do (five items).

In the First Part of the instrument, the responses are distributed on a Likert scale with four options — "strongly disagree, disagree, agree and strongly agree". In the Second Part, the responses have five options — "Cannot do or always difficult, usually difficult, sometimes difficult, usually easy and always easy".

Data collection was carried out at the end of regular classes of the Multiprofessional Residency Program in Health, in August 2019. After clarifying the objectives of the study and signing of the Informed Consent Form, the resident professionals completed the questionnaire.

To analyze the sociodemographic data, simple descriptive statistics were applied and the mean of each of the nine HLQ-Br scales was calculated separately, as this instrument does not establish an overall HL score. Thus, it is possible to identify the strengths and limitations of each person in relation to their health literacy[16].

The Shapiro-Wilk normality test was used, and reliability was evaluated using Cronbach's alpha indicators and composite reliability. The Mann Whitney, Kruskal-Wallis and Nemenyi tests were used for comparisons of the scores with variables, when applicable. Spearman's correlation was used to relate the scores to the variables. Effect size (ES) was also calculated using Cohen's d, with the interpretation: "small" ES>0.20-0.50; "medium" ES 0.50-0.80; and "large" ES>0.80. Values were considered statistically significant with $p<0.05$.

The study followed the ethical precepts of the current legislation, having been approved by the Research and Ethics Committee of the Hospital in which the study was conducted under CAAE no. 06642818.3.0000.5078. Permission to use the Brazilian version was requested from the authors of the HLQ instrument in Australia (e-mail hl-info@swin.edu.au).

RESULTS

Profile of the participants

The mean age of the resident professionals was 26.22±3.27 years (range 24–30), 51.14% (45) were in the first year and 48.86% (43) in the second year of the Multiprofessional Residency. Mean time since graduation of the resident professionals was 3.11±1.46 years, with 95.45% enrolled on a residency program for the first time. The majority of the participants were female (82.95%), from the professions of nursing (25.0%) and nutrition (17.05%) and born in the state where the study was conducted (69.32%).

The resident professionals were predominantly raised by their parents (70.45%), who, in turn, had completed more than 12 years of study (56.63%). The majority did not have a partner (75.0%) but lived with someone (67.05%); did not work prior to joining the residency program (65.91%); and the residency grant was their only source of income (65.12%).

The mean application time of the HLQ-Br questionnaire was seven minutes. The Cronbach's alpha of Part 1, Part 2 and of the nine scales of the questionnaire were 0.84, 0.91 and 0.83 respectively. Composite reliability was 0.84, 0.90 and 0.83, respectively.

Mean score of the scales on the Health Literacy Questionnaire

Mean scores of the scales on the HLQ-Br and the respective questions with the best and worst performance in each of the scales are presented in Table 1.

Year of Residency did not influence any of the means of the scales, nor did Cohen's d have a large effect size.

The significant association and the effect size (Cohen's d) between the mean scores of the scales on *Part 1* of the HLQ-Br, with the sociodemographic variables of the 88 resident professionals are presented in Table 2.

A difference was shown between the mean scores of the *professions* on scale 1 "Feeling understood and supported by healthcare providers", despite it not having been possible to identify a significant difference between any of the professions through multiple comparisons (Table 2).

There was also a difference between the *sexes* on scale 2 "Having sufficient information to manage my health", and scale 4 "Social support for health", whereby the mean of the

Table 1. Mean scores of each scale on the Health Literacy Questionnaire, with the respective questions with the best and worst performance, of 88 professionals enrolled in a Multiprofessional Residency Program in Health. Brazil, 2019.

Scales and Questions of the Health Literacy Questionnaire	Mean±SD
Part 1 (Scores 1–4)	
1 - Feeling understood and supported by healthcare providers	**2.93±0.54**
Q22 – I can rely on at least one healthcare provider	3.01±0.60
Q17 – I have the healthcare providers I need to help me work out what I need to do	2.82±0.64
2 - Having sufficient information to manage my health	**2.78±0.49**
Q01 – I feel I have good information about health	3.15±0.47
Q14 – I am sure I have all the information I need to manage my health effectively	2.52±0.69
3 - Actively managing my health	**2.55±0.51**
Q09 – I make plans for what I need to do to be healthy	2.91±0.72
Q06 – I spend quite a lot of time actively managing my health	2.08±0.76
4 - Social support for health	3.02±0.52
Q19 – I have strong support from family or friends	3.39±0.63
Q05 – When I feel ill, the people around me really understand what I am going through	2.67±0.74
5 - Appraisal of health information	**3.18±0.35**
Q07 – When I see new information about health, I check up on whether it is true or not	3.35±0.57
Q20 – I ask healthcare providers about the quality of the health information I find	2.98±0.64
Part 2 (Scores 1–5)	
6 - Ability to actively engage with healthcare providers	**3.41±0.69**
Q20 – Ask healthcare providers questions to get the health information you need	3.72±0.74
Q07 – Have good discussions about your health with doctors	3.10±1.12
7 - Navigating the healthcare system	**3.38±0.66**
Q11 – Decide which healthcare provider you need to see	3.75±0.83
Q08 – Get to see the healthcare providers you need to	3.05±1.03
8 - Ability to find good healthcare information	**3.80±0.52**
Q14 – Get health information in words you understand	3.88±0.60
Q18 – Get health information by yourself	3.73±0.72
9 - Understand health information well enough to know what to do	**3.79±0.55**
Q05 – Confidently fill medical forms in the correct way	4.00±0.79
Q09 – Accurately follow instructions from healthcare providers	3.41±0.89

Q: Question; SD: Standard Deviation.

scale for females tends to be higher, with a medium effect size on Cohen's d (Table 2)

The significant association and the effect size (Cohen's d) between the mean scores of the scales on *Part 2* of the HLQ-Br with the sociodemographic variables of the 88 resident professionals are presented in Table 3.

There was a difference between the *type of school* attended in primary education on scale 6 "Ability to actively engage with healthcare providers" and scale 7 "Navigating the healthcare system", whereby those who went to a private school tend to have a higher mean (Table 3).

The mean score for scale 8 "Ability to find good healthcare information" was higher for those born in the *state where the study was conducted*. Equally, those who *live with someone* have a higher score on scale 9 "Understand health information well enough to know what to do" (Table 3).

Table 2. Association and effect size between the scales on Part 1 of the Health Literacy Questionnaire with the sociodemographic and clinical variables of 88 members of a Multiprofessional Residency Program in Health. Brazil, 2019.

Variable (n)		Scale 1		Scale 2		Scale 3		Scale 4		Scale 5	
		Mean (SE)	d[a]	Mean (SE)	d[a]	Mean (SE)	d[a]	Mean (SE)	d[a]	Mean (SE)	d[a]
Profession	Biomedicine (8)	2.91 (0.10)	–	2.56 (0.11)	–	2.53 (0.26)	–	2.98 (0.17)	–	3.10 (0.15)	–
	Nursing (22)	2.81 (0.12)	0.20	2.73 (0.12)	0.32	2.41 (0.13)	0.18	2.86 (0.11)	0.22	3.12 (0.07)	0.05
	Pharmacy (8)	2.63 (0.22)	0.57	2.66 (0.12)	0.29	2.60 (0.11)	0.13	3.08 (0.12)	0.24	3.23 (0.14)	0.30
	Physiotherapy (8)	2.91 (0.18)	0.00	3.0 (0.16)	**1.10***	2.30 (0.18)	0.35	2.95 (0.19)	0.05	3.15 (0.11)	0.14
	Speech Therapy (10)	3.15 (0.19)	0.49	2.93 (0.13)	**0.95***	2.66 (0.11)	0.24	3.26 (0.16)	0.57	3.16 (0.12)	0.15
	Nutrition (15)	3.17 (0.08)	**0.83***	2.80 (0.15)	0.46	2.67 (0.11)	0.26	2.91 (0.11)	0.16	3.23 (0.09)	0.34
	Psychology (10)	3.15 (0.17)	0.54	2.90 (0.10)	**1.06***	2.86 (0.14)	0.57	3.36 (0.17)	0.75	3.30 (0.05)	0.66
	Social Services (7)	2.61 (0.24)	0.61	2.71 (0.26)	0.29	2.46 (0.14)	0.11	3.0 (0.30)	0.04	3.23 (0.19)	0.28
p-value[b]		**0.048***		0.492		0.275		0.219		0.671	
Sex	Female (73)	2.94 (0.07)	–	2.84 (0.06)	–	2.57 (0.06)	–	3.07 (0.06)	–	3.19 (0.04)	–
	Male (15)	2.88 (0.11)	0.11	2.50 (0.08)	**0.72***	2.49 (0.14)	0.15	2.77 (0.13)	**0.58***	3.15 (0.09)	0.12
p-value[c]		0.658		**0.012***		0.704		0.052		0.652	
Raised by	Grandparents (10)	3.15 (0.15)	–	2.83 (0.19)	–	2.82 (0.17)	–	3.24 (0.17)	–	3.2 (0.09)	–
	Siblings (1)	3.0 (–)	–	2.50 (–)	–	2.20 (–)	–	3.0 (–)	–	3.0 (–)	–
	Mother (13)	2.94 (0.14)	0.43	2.75 (0.13)	0.14	2.72 (0.13)	0.19	2.97 (0.13)	0.55	3.31 (0.12)	0.28
	Mother and father (62)	2.92 (0.07)	0.43	2.8 (0.06)	0.04	2.49 (0.06)	0.65	3.0 (0.07)	0.44	3.16 (0.04)	0.11
	Uncles (2)	2.25 (0.25)	**1.94***	2.38 (0.13)	0.78	2.30 (0.1)	**1.00***	2.90 (0.3)	0.64	2.90 (0.1)	**1.10***
p-value[b]		0.327		0.734		0.182		0.818		0.322	

a: Cohen's d; b: Kruskal-Wallis Test c: Mann Whitney Test; SE: Standard Error; * significant values and/or medium or large effect size.

Table 4 shows that a negative correlation was found between the **age** of the resident professionals and *scales 1, 6* and *7* of the HLQ-Br.

No correlation was found between time since graduation of the resident professionals and the scales on the HLQ-Br.

DISCUSSION

The reliability obtained on the scales of the instrument confirms the good psychometric properties, as do those obtained on the study validating the instrument in the country[16]. This also indicates the appropriate choice of instrument for evaluating the strengths and limitations of the resident professionals in relation to their health literacy.

Researchers have suggested that higher education institutions measure HL as an early intervention tool to improve the knowledge, abilities, resources and services necessary to create health and education environments for the health of both undergraduate[17] and resident[11] students. This enables the development of HL skills, that is, they learn to deal with situations that involve inadequate HL — a learned behavior.

Table 3. Association and effect size between the scales on Part 2 of the Health Literacy Questionnaire with the sociodemographic and clinical variables of 88 members of a Multiprofessional Residency Program in Health. Brazil, 20191.

Variable (n)		Scale 6		Scale 7		Scale 8		Scale 9	
		Mean (SE)	d[a]	Mean (SE)	d[a]	Mean (SE)	d[a]	Mean (SE)	d[a]
Place of birth	Goiás (61)	3.41 (0.09)	–	3.41 (0.08)	–	3.88 (0.06)	–	3.82 (0.07)	–
	Other states (27)	3.41 (0.13)	0.01	3.32 (0.14)	0.15	3.64 (0.1)	0.48	3.73 (0.12)	0.17
p-value[b]		0.757		0.313		**0.013***		0.366	
Raised by	Grandparents (10)	3.54 (0.16)	–	3.42 (0.17)	–	3.84 (0.15)	–	3.74 (0.19)	–
	Siblings (1)	3.80 (–)	–	3 (–)	–	3.80 (–)	–	4.40 (–)	–
	Mother (13)	3.34 (0.21)	0.31	3.30 (0.23)	0.17	3.77 (0.17)	0.12	3.94 (0.2)	0.29
	Mother and father (62)	3.41 (0.09)	0.19	3.41 (0.08)	0.00	3.81 (0.07)	0.05	3.77 (0.06)	0.07
	Uncle and Aunt (2)	3.20 (0.2)	0.72	3.0 (0)	**0.81***	3.60 (0.2)	0.51	3.30 (0.1)	0.76
p-value[c]		0.806		0.546		0.927		0.182	
Live alone	No (59)	3.45 (0.1)	–	3.43 (0.1)	–	3.85 (0.07)	–	3.91 (0.07)	–
	Yes (29)	3.34 (0.1)	0.16	3.29 (0.08)	0.20	3.71 (0.08)	0.27	3.56 (0.08)	0.66
p-value[b]		0.228		0.194		0.206		**0.003***	
Primary education	Private school (27)	3.62 (0.13)	–	3.57 (0.14)	–	3.88 (0.08)	–	3.7 (0.09)	–
	State school (37)	3.16 (0.1)	0.71	3.14 (0.1)	0.64	3.65 (0.09)	0.47	3.74 (0.1)	0.07
	Mixed (23)	3.50 (0.14)	0.19	3.49 (0.09)	0.13	3.91 (0.1)	0.07	3.94 (0.1)	0.50
p-value[c]		**0.024***		**0.043***		0.067		0.315	
Higher education	Private school (40)	3.48 (0.1)	–	3.37 (0.1)	–	3.74 (0.09)	–	3.80 (0.09)	–
	State school (46)	3.34 (0.11)	0.19	3.42 (0.1)	0.08	3.87 (0.07)	0.26	3.76 (0.08)	0.07
	Mixed (2)	3.70 (0.3)	0.35	2.92 (0.92)	0.66	3.70 (0.1)	0.07	4.50 (0.5)	**1.28***
p-value[c]		0.714		0.776		0.251		0.223	

a: Cohen's d; b: Mann Whitney Test; c: Kruskal-Wallis Test; SE: Standard Error; * significant values and/or medium or large effect size.

The assumption that the time spent in residency (being in the first or second year) could have influenced the HL of the resident professionals was not confirmed. This therefore reaffirms the findings of international studies that professionals do not have adequate HL for what is expected of those working in the healthcare scenario with people with various levels of HL and endorses the need for training of professionals[11,18].

Healthcare providers are an important source of information and training of patients and their families[8,14], meaning that they should have the confidence to identify and interact better in different HL contexts.

If HL is related to the personal training and educational course of professionals, it makes sense for the HL development of professionals in training to be accompanied over time[19]. There seems, however, to be a need for reflection on the inclusion of HL assumptions in pedagogical projects of Residency Programs, Specialization Courses and Undergraduate Courses, as suggested by the Calgary Charter on health literacy[5].

This charter presents general principles that suggest an integrated approach of social, cultural, political, economic and environmental health determinants in the development of curricula, as well as diverse pedagogical practices, so as to provide support to people and systems in accessing healthcare[5].

When compared by sex, women obtained better scores on aspects that indicate that they are confident and have more information for living, taking care of their health, making decisions and having social support. This difference was also covered in a study that reflected on the need for training in HL for male university students; it questioned how universities could increase the interest of male students in identifying the health information they seek and if it is accurate and useful[18].

As in the example of the results of the present study, in regard to age influencing the ability to actively interact with healthcare professionals, it has been recorded that the HL of older people has a higher risk of being inadequate[8]. This indicates that young people interact with healthcare providers more easily.

The literature also recognizes the influence of family education on improving HL, which was not shown in this study. The level of instruction of those responsible for education in the family affects the HL of individuals; generally, parents with higher levels of education tend to have greater ease in accessing information on health and probably better guide their children[18,20,21].

Sharing needs and weaknesses, as well as having a support network in healthcare favors better results in HL. This was shown in aspects related to the understanding of information on health and knowing what to do, of resident professionals that lived with someone. Analogously, coming from another state of the federation made it difficult to get information on health. Living in a known environment seems to facilitate the obtaining of information from different places.

The result that the resident professionals are not involved in their own health care may have occurred due to difficulty in administrating their time, even if they make plans to be healthier. Residency is highly demanding, as it is "education and work at the same time"[22]. However, there are already warnings that healthcare should not be neglected, since resident professionals are exposed to stress from the beginning of their career. Stressors have negative consequences on learning, quality of life and the care provided[22].

Table 4. Association between the mean scores of the scales on the Health Literacy Questionnaire with the age variable of members of a Multiprofessional Residency Program in Health. Brazil, 2019.

Scale/Variable/Age	r*	p-Value
1. Feeling understood and supported by healthcare providers	**-0.25**	**0.021**
2. Having sufficient information to manage my health	-0.10	0.358
3. Actively managing my health	-0.06	0.558
4. Social support for health	-0.18	0.092
5. Appraisal of health information	-0.07	0.495
6. Ability to actively engage with healthcare providers	**-0.39**	**<0.001**
7. Navigating the healthcare system	**-0.21**	**0.047**
8. Ability to find good healthcare information	-0.17	0.116
9. Understand health information well enough to know what to do	-0.20	0.067

*: Spearman correlation.

The resident professionals also consider that there are gaps in their knowledge and that they don't have the information they need to live and manage their health concerns, demonstrating a limitation in their own literacy. They are not certain about the availability of all the information they need to take care of their health[22].

If HL applies to individuals and healthcare systems, they all need to have the same abilities and skills necessary to find and use information, be it as a user, or as a professional or healthcare system[5]. Improving HL, whatever the context, can contribute to informed choices for all; appropriate navigating of the healthcare system; less iniquities in health; better prevention and well-being; security and less risks to health; qualified treatment; and improved quality of life[5].

When the ability to navigate the healthcare system was observed, limitations of the resident professionals were found, corroborating the results of studies with university students[23]. It is difficult for them to make an appointment with the healthcare provider they need and to find the appropriate healthcare service. This may reflect the difficulty in being treated through the Unified Health System, which is a reality for most Brazilians.

Another limitation was identified on the scale "Ability to actively engage with healthcare providers", which indicates that they are not certain that their problems are correctly understood; and that they don't talk to healthcare providers until understanding everything they need to know. This confirms the results of other studies[9,13,14], which found that, in treating people, there is a lack of knowledge and abilities necessary for effective communication; and a lack of validation as to whether the content of the information was understood.

Once again, the assumptions of literacy are not put into practice, even when it comes to treating resident professionals as users of healthcare services. It seems to be necessary to remember that it is not the patient that has the obligation to understand, but it is the one who sees the patient that should explain and guarantee understanding[8].

Looking from another perspective, it is necessary to consider that the residents may accept what is offered by the professionals that attend them, possibly because they recently graduated and have little care experience; after all, they are at a moment of academic-professional transition, and are filled with insecurities[22].

The strengths of the resident professionals in relation to HL are associated with exploration for information, as they actively use diverse sources to find up-to-date information. This is to be expected of a group that comes across new situations on a daily basis, as they deal with a multitude of factors that involve human care[24].

The discussion of the results was limited both by the descriptive design of the present study and by the scarcity of literature evaluating the HL conditions of the selected group. It is not possible to make further inferences as to the aspects that influence the HL of resident professionals.

CONCLUSION

This is a pioneering study in the evaluation of health literacy among professionals enrolled in a Brazilian Program of Multiprofessional Residency in Health, and, to that end, it applied, the first multidimensional instrument that has been translated in the country. It brings to light reflections on the insertion of HL assumptions into pedagogical projects of Residency Programs in the country and seeks to collaborate in spreading the theme of HL among professionals as a tool in the communication and care of their own health.

The resident professionals that were interviewed were mainly female, and predominantly nurses or nutritionists. They were young, recently graduated, doing their first residency and did not have formal employment experience.

The women in the group took more care of their health and had the social support they needed; the younger professionals had greater facility in interacting with and navigating the healthcare system. The length of time in the residency program did not influence the scores on the scales of the HLQ-Br.

Verification of the HL conditions showed the strengths of the resident professionals in aspects related to the ability to identify good, reliable sources of information and the fact of being "information explorers". The limitations were related to not being involved in their own healthcare and not being able to use the system to resolve their health needs.

Further studies exploring the causes of the limitations in HL shown in this study are suggested, enabling the proposition of specific interventions.

It is necessary to ascertain, in due course, how much the inclusion of HL principles on school curricula and the increase in practices that assist in dealing with situations involving inadequate HL are influencing the clinical outcomes in healthcare in Brazil.

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