Including the Discipline Health Literacy in a Collective Health Postgraduate Program of a Public Institution: An Experience in Northeastern Brazil

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ABSTRACT

Background and Objectives: Health literacy encompasses skills and competences that allow users to understand health care. The knowledge gap was identified in the Post-Graduate Health Programs. The aim of the current article was to describe the process focused on including the Health Literacy discipline in a Postgraduate Program in Collective Health of a Public Institution.
Materials and methods: Descriptive study, carried out from the identification of the existing gap in the disciplinary matrix of postgraduate courses, starting from the assessment of needs, establishment of goals and objectives, as well as educational strategies to achieve them, from the implementation of a health literacy discipline with 30 hours, divided into eight meetings, later formally evaluated by the students.
Results: The course content allowed students to enter the epistemological field of health literacy, through reflections and discussions related to health literacy strategies in their professional practice, improving health communication and qualifying health decision-making by the user.
Conclusion: The discipline based on health literacy is of paramount importance to the matrix, as it allows health professionals to identify new paths in their practices, as well as improving the health professional/patient relationship.
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Introduction

Health Literacy encompasses a range of cognitive and social skills, knowledge, motivations and competences that together enable individuals to have access to, understand, evaluate and implement healthcare based on the health promotion perspective (1).

Discussions about health literacy have broadened in recent years and the interpretation of such concept has also changed. Previously, the concept of health literacy was limited to functional skills, i.e., to reading and counting skills; however, nowadays, it is a multidimensional concept (1-4).

Such multidimensionality comprises dimensions that go beyond individual competences and medical contexts. According to this perspective, several concepts have already tried to encompass other aspects that comprehended the whole topic. Freedman et al. (5) have highlighted the role played by society. Huang et al. (6) have emphasized that health literacy is the ability to access and apply health information; however, it depends on individual skills, as well as on the health system and on society itself (e.g., health policies, public health and health values). The recognition that health literacy is related to the individual, but also to organizations, is present in the current definition of health literacy adopted in the United States (7) and by the World Health Organization (8).

In addition, access to information, communication technology and the Internet are also essential to help improving health literacy (3). Recently, the discussion highlighted the importance of initiating the improvement of health literacy in the school environment, directing actions to children and adolescents. A recent systematic review, which investigated the health literacy of students aged 6-18 years old, pointed to the influence of aspects related to parents' education, culture, family income, environment and communication channels on health literacy skills (9).

Despite the relevance of the topic and the adequate knowledge about the fundamentals of health literacy in health professionals' practice, which can be translated into population empowerment towards healthcare, few institutions incorporate health literacy courses in their academic curriculum. The health literacy topic is not included in the Brazilian national guidelines - Law of Directives and Bases of National Education (LDB), n. 9.394/96 (10) - and, according to it, there is no such a discipline as health literacy, at least not institutionally implemented as compulsory or optional discipline in the curriculum of Brazilian undergraduate courses.

The gap remains in master's and doctorate programs in public health; Brazil has 87 postgraduate courses in this field, but only the Postgraduate Program in Collective Health (PPSAC) of Ceará State University (UECE - Universidade Estadual do Ceará; Northeastern Brazil) has Health Literacy as optional discipline in its Master and Doctorate courses. With respect to strictu sensu postgraduate programs in other fields, the discipline called 'Health Literacy - Why Does It Matter?' was found as optional discipline within the Advanced Research Topics (ART) category in the Postgraduate Program in Nursing of the Nursing School of Federal University of Goiás.

Our research group got interested in the Health Literacy subject in 2009, when we first had access to a Brazilian study focused on assessing the health literacy of a group of patients treated in the public health system in Southeastern Brazil (11). Subsequently, we adopted the theoretical framework based on Zarcadoolas et al. (12), Mayer and Villaire (13)

and Rudd et al. (14). From 2009 to 2011, we finished research on health literacy, which was supported by national funding agencies (15). The aforementioned research highlighted the large number of individuals presenting inadequate health literacy in the investigated community.

Therefore, the interest in including Health Literacy as optional discipline in the Postgraduate Program (Master and Doctorate) in Collective Health of Ceará State University has emerged from the high demand for a healthcare program capable of promoting health literacy and from the fact that this topic is not the focus of professional training programs. This postgraduate program was selected because authors of the current study are linked to it and due to the relevance of having such a discipline in a program that involves professionals from different health fields focused on public health. The discipline was included in the program in 2012; the current article describes its teaching project.

Methods

This is a descriptive and analytical study, of the experience report type. Ceará State University is a public institution that comprises 8 campuses in Ceará State, Northeastern Brazil. The Institution has 06 undergraduate courses in the health field (Biological Sciences, Physical Education, Nursing, Medicine, Nutrition, Occupational Therapy) and 40 postgraduate programs at master and doctorate level (7 of them are in the health field). The Postgraduate Program in Collective Health (PPSAC - Programa de pós-Graduação em Saúde Coletiva), which operates in Fortaleza campus, was launched in 1994. In total, 439 master and 29 doctorate students enrolled in this program have concluded their courses by July 2019; the program welcomes 25 master and 18 doctorate students per year, on average.

The students who enter in the PPSAC are selected through scientific production, a foreign language test (English) and an interview to defend the pre-project to be developed. Based on these indicators, students are classified in descending order and enter sequentially until the end of vacancies.

The process to develop this discipline resulted from the need of filling the gap in the discipline matrix of master and doctorate courses at PPSAC concerning the health literacy topic, until then absent in the Program. The methodology adopted to elaborate the discipline at that time followed the guidelines by Kern et al. (13), as described in the next section.

Results

The 6 stages proposed by Kern et al. (16) for the creation of the discipline.

Stage 1: Identifying the problem and assessing general needs

The problem was identified based on information about health literacy available in the literature and by taking into consideration its importance to the treatment of chronic diseases, mainly to the design of prevention and health-promotion actions. There was high prevalence of chronic diseases in Brazil when this information was in the mainstream, as well as high mortality rates resulting from such diseases (17). This scenario was not different in Ceará State, where circulatory diseases accounted for 54.6% of mortality cases in 2007; they were followed by neoplasms (28.6%), diabetes (7.3%) and by other chronic diseases that together accounted for 9.5% of mortality cases. (18). Thus, according to PPSAC, it was essential subsidizing public health professionals by developing a basic discipline matrix that also included the topic in question. Such inclusion would allow the emergence of in-depth discussions focused on healthcare practices and on studies in this field, mainly

on the ones addressing intervention projects.

Stage 2: Evaluating specific needs

This study stage followed a qualitative approach based on statements made by students and health professionals at different data collection procedures, as well as on conversations with the group of PPSAC students who did not know what health literacy was and its application back when they discussed about this research line. Discussions were focused on categorizing and systematizing aspects of individuals' speeches, as well as on interpreting them based on the technique by Bardin (19). These interpretations enabled listing particularities capable of improving contents at discipline elaboration time. Participants' speeches during conversations revealed noticeable uneasiness about the "growing concern with patients' difficulty in understanding information and instructions" and about "the interest in investigating and finding new strategies".

The production of articles, dissertations and theses on health literacy in Ceará State was incipient until 2012; therefore, the health literacy discipline plays a key role in discussions about the topic, since it raises individuals' interest in it and motivates them to implement new investigations in this scientific knowledge field.

Stage 3: Measurable, and specific, goals and objectives

This study stage focused on finding theoretical references to help identifying aims to cover all content details. Bloom's Taxonomy (revised in 2001) was the reference of choice, since it is a compatible tool to be used in postgraduate studies and classifies targets in an orderly manner - from the simplest to the most complex ones - in order to help organizing the discipline (20).

General and specific aims defined for the health literacy discipline were described as follows:

1) General aim: Proposing the introduction of a new indicator - i.e., the health literacy - for the health professionals' context in order to give them different scenarios for their practice, mainly in the Unified Health System;
2) Specific aims: - Understanding the meaning of health literacy;
   - Identifying instruments for the diagnosis of Health Literacy;
   - Mastering operational health literacy strategies at all healthcare levels;
   - Learning how to contribute to develop health literacy organizations;
   - Developing projects focused on incorporating health literacy fundamentals.

Stage 4: Educational strategies

The aim was to apply meaningful learning (21) to value students' previous knowledge and experiences, i.e., the reality associated with their practical experience. Thus, it is important developing pedagogical practices to enable students to develop critical and reflective autonomy in their learning process.

The active methodology was adopted in the discipline, based on directed studies, conversation circles, plenary sessions and group discussions. It also includes expository lectures, whenever there is the need of synthesizing and closing some topics. Different authors highlighted the role played by higher education institutions (HEIs) in facilitating the acquisition of theoretical and practical knowledge, as well as the role they play in the health field, since they help improving determinant factors associated with the health-disease process (22).

Table 1 presents the structure of the discipline, the program content and its methodology according to each of its aims.

Table 1: Aims, program content and methodology of the Health Literacy (HL) discipline in a Postgraduate Program in Collective Health (Ceará State University, Brazil).

Aims	Program Content	Methodology
Understanding the meaning of FHL.	Introduction to the topic; FHL: historical-conceptual background and interdisciplinary; FHL Epidemiology and Scenarios; Results of international, national and local studies, including diagnostic and intervention studies.	Brainstorming on the topic; Expository lecture; Group discussion; Plenary discussion.
Identifying FHL diagnostic instruments.	FHL diagnostic instruments: description, applicability and limitations.	Directed study and plenary discussion
Mastering operational FHL strategies at all healthcare levels.	Operational Health Literacy Strategies: Oral Communication, Written Communication, Graphic Resources and Technological Innovation in FHL; Motivational interview, the use of teach-back and ask me 3; Preparation and technical evaluation of written educational materials; Preparation and technical evaluation of digital educational materials.	Expository lecture; Directed Study; Exercises focused on assessing educational materials.
Learning how to contribute to develop health literacy organizations.	Building health literacy organizations; emphasis on the manager.	Seminars and plenary discussion.
Developing projects focused on incorporating health literacy fundamentals.	Project design	Conversation circles: Presentation of projects prepared by students.

Stage 5: Implementation

The academic load of the discipline comprises 30 hours of classroom lessons - divided into 8 meetings of 4 hours/class, each. It is an optional module offered to master (in the first semester) and doctorate's (in the second semester) students on a yearly basis.

There are no exclusion criteria for enrolling in the discipline. Just an interest in learning about the subject. The student's dissertation or thesis is not required to be directly linked to health literacy. Up to 30 places are open, in order to avoid an excess of students that could make it difficult to operate the discipline.

The theoretical framework supporting the discipline has been updated as knowledge improves, although the classic texts that opened room for debates on the subject remain in the recommended literature. From 2017 on, emphasis was given on the development of health literacy organizations (23). The content was broadened in the PhD discipline, since it focuses on the analysis of written educational instruments used in different practices. Based on such analysis, students suggested changes according to health literacy parameters.

Stage 6: Evaluation

The discipline was formally assessed in 2019, after the PPSAC coordination developed an assessment tool to be used by the students. Before 2019, the assessment was based on conversation circles, which were carried out after the completion of each semester. It was done in order to measure students' satisfaction level and to gather suggestions to improve the health literacy course. Based on results from all conversation circles, students were satisfied

with the acquired theoretical knowledge and with its potential applicability. More specifically, the formal digital assessment carried out in 2019 also showed that the discipline enabled associating theoretical basis with practices in work environment.

About the student's progress, this is approved in the subject with a minimum grade of 7.0, on a scale from 0 to 10. The final grade corresponds to the average of the grades obtained in individual and group activities, represented by discussion of the content of directed studies and elaboration of educational materials literate in health

Discussion

The aim of the current article was to describe the process focused on including the Health Literacy discipline in a Postgraduate Program in Collective Health of a Public Institution. Given the relevance of the topic, it is possible saying that the aforementioned discipline is of paramount importance to the discipline matrix of such a program, since it allows health professionals to identify new paths in their practices, as well as improves the health professional/patient relationship.

According to students who participated in a survey conducted in Germany focused on describing students' perceptions about health literacy through the evaluation of an online health literacy course, the initiative was innovative, promising and very positive within the university scope. The proposed activities, personal reflections and attributions helped improving students' knowledge and raised their awareness of the role played by health literacy as integral part of the learning process (24).

The discipline content allowed students to step into the epistemological field of health literacy, since texts on the subject enabled reflections and discussions about the role it plays within the health context. The theoretical framework was based on studies that have positive impact on the evolution of this field (1, 3, 25, 26-28).

Another relevant aspect of this research field lies on the new practices encouraged by the discipline, since they enable students to achieve health literacy in their professional experience. Autors point out that effectiveness likely takes place when professionals use and identify ways to use pedagogical practices in daily activities at work. According to the aforementioned study, discipline matrix, pedagogical content and students' knowledge are fundamental factors for the quality of practical experiences (29).

In addition, professionals' initiative to identify the necessary resources and mechanisms to facilitate and enable the implementation of health communication actions and, consequently, to help users make decisions about how to improve their health conditions (not only as spectators in the process, but as managers of actions) aimed at improving users' health. Findings in qualitative research confirmed that the quality of communication between health professionals and patients has strong influence on healthcare effectiveness. Thus, the combined use of assertiveness, clarity (language) and positivity play a key role in optimizing health literacy and clinical practices (30).

The six-step approach was the methodology adopted in the current study, since it is a health field-related discipline that involves professionals from different fields (16), this methodology can be useful in planning similar educational programs for public health students, since it was originally developed to meet the demands of medical students (31). That evaluation is timely and that it should be meticulously conducted. Students' performance in health literacy must be assessed based on their participation in group discussions and in the development of directed studies and seminars (32), procedures that were adopted in the discipline offered in the PPSAC.

It is possible stating that the herein described experience has been simultaneously enriching and challenging because health literacy is an innovative knowledge field and, above all, because health literacy studies in Brazil remain incipient in comparison to countries known by their tradition in addressing this topic. In addition, Brazil lacks a national survey on population's health literacy condition – this survey was already carried out in several countries (33-35).

The lack of intervention studies focused on addressing health literacy as theoretical reference also hinders knowledge advancements in this field. However, based on research focused on mapping the Brazilian scientific literature (dissertations and theses) about health literacy, the number of health literacy research in Brazil has already grown and Ceará State University has contributed to such increase. The number of publications in this field has increased between 2014 and 2016. Based on the results, these studies derive from research conducted in 37 postgraduate programs of 27 Brazilian institutions, for instance, Ceará State University (n = 10), Oswaldo Cruz Foundation (n = 8) and State University of Montes Claros (n = 5), among others (27, 36).

Future projects lie on expanding the workload of this discipline to drive more debates, as well as on including more relevant aspects of the subject in it by combining face-to-face and online classes. It is demanding to encourage students who work as university professors to include the health literacy topic in undergraduate health education disciplines.

The limitation of the present study is the realization of the proposal based on the authors' experience with health literacy and the lack of discussion of the topic within the University. In addition, the assessment of the discipline can be improved with the inclusion of formal instruments to assess satisfaction and learning, as only conversation circles were held. Ind addition, the minimum grade of 7.0 (on a scale of 0 to 10), for approval, ensures adequate learning of the content.

The scarcity of similar initiatives in Brazil also makes it impossible to compare with other centers in terms of similar content and methodological strategies. The experience of the Postgraduate Program in Nursing of the Nursing School of Federal University of Goiás (Health Literacy - Why Does It Matter?), already mentioned, is not yet an inclusion of Health Literacy as an isolated discipline, but as part of an Advanced Research Topics (ART), which also limits the comparison with the present experience.

Furthermore, international publications on the subject are also scarces. These authors recently reported the experience of including the teaching of health literacy in the form of an introductory approach and an optional workshop in a medical course in the city of San Antonio, Texas, United States, involving the first two years of the course, through the Medicine, Behavior, and Society (MBS) preclinical module. The authors' focus was not a comprehensive inclusion of health literacy, but a discussion of conceptual aspects and more appropriate and literate forms of communication in health, involving theoretical explanations and practical demonstrations. These authors considered the experience successful and that it should be institutionalized (37).

The gap in publications on the topic is confirmed in a systematic review on health literacy training in health professional training courses, which found only 28 eligible studies (38). The authors found publications carried out with students of Pharmacy, Medicine, Nursing, Nutrition, Dentistry, Public Health, Administration and Physiotherapy. The authors detected, in all studies, a lack of details about the content, but they were able to identify the performance of activities aimed at the best practices of health literacy. The most frequent teaching strategy

was the classroom, with didactic sessions and interactive activities, such as discussions, role play and case studies. The workload presented in the publications was very varied, the maximum reaching 20 hours. The proposals of these authors, based on the publications reviewed, coincide with the strategies presented here.

We strongly recommend that undergraduate and graduate courses in different areas of health have the mandatory subject Health Literacy, of at least 30 hours, in their curriculum. The 30-hour proposal is based on the experience reported here, which showed that this workload makes it possible to focus on the main aspects of health literacy, that is, concepts, measurement instruments, oral, written and digital communication strategies, in addition to participation of the individual as an active subject in the construction of a health care organization literate in health.

Conclusion: The experience of including the Health Literacy discipline in the PPSAC at the UECE, presented here, can be applied in different countries and courses, considering the detailing of the stages developed, which can contribute to the formation of health professionals, prepared for successful communication with the population.

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Authors' participation: Both authors participated in the design, writing and critical analysis of the study.

References

1. Sorensen K, Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, et al. Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health 2012; 12(80):1-13. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-80. https://doi.org/10.1186/1471-2458-12-80 PMid:22276600 PMCid:PMC3292515
2. Peerson A, Saunders M. Health literacy revisited: What do we mean and why does it matter? Health Promot Int. 2009; 24(3):285-96. https://doi.org/10.1093/heapro/dap014. https://doi.org/10.1093/heapro/dap014 PMid:19372101
3. World Health Organization. HealthInSDGs Policy brief 4 : Health literacy. 9th Glob Conf Heal Promot 2016. 2016; 1-9. Available at: http://policy.nl.go.kr/cmmn/FileDown.do?atchFileId=155572&fileSn=34811.
4. Batterham RW, Hawkins M, Collins PA, Buchbinder R, Osborne RH. Health literacy: Applying current concepts to improve health services and reduce health inequalities. Public Health 2016; 132:3-12. http://dx.doi.org/10.1016/j.puhe.2016.01.001. https://doi.org/10.1016/j.puhe.2016.01.001 PMid:26872738
5. Freedman DA, Bess KD, Tucker HA, Boyd DL, Tuchman AM, Wallston KA. Public Health Literacy Defined. Am J Prev Med 2009; 36(5):446-51. http://dx.doi.org/10.1016/j.amepre.2009.02.001 https://doi.org/10.1016/j.amepre.2009.02.001 PMid:19362698
6. Huang YJ, Lin GH, Lu WS, Tam KW, Chen C, Hou WH, et al. Validation of the European Health Literacy Survey Questionnaire in Women with Breast Cancer. Cancer Nurs. 2017; 1-9. https://doi.org/10.1097/ncc.0000000000000475. https://doi.org/10.1097/NCC.0000000000000475 PMid:28221213
7. Santana S, Brach C, Harris L, Ochiai E, Blakey C, Bevington F, et al. Updating Health Literacy for Healthy People 2030: Defining Its Importance for a New Decade in Public Health. J Public Health Manag Pract. 2021; 27(Suppl 6): S258-S264. doi: 10.1097/PHH.0000000000001324. https://doi.org/10.1097/PHH.0000000000001324 PMid:33729194 PMCid:PMC8435055
8. World Health Organization. Health promotion glossary of terms 2021. Geneva: World Health Organization; 2021.
9. Jafari A, Tavakoly SBS, Peyman N. The Status of Health Literacy in Students Aged 6 to 18 Old Years: A Systematic Review Study. Iran J Public Health. 2021; 50(3):448-458. https://doi.org/10.18502%2Fijph.v50i3.5584. https://doi.org/10.18502/ijph.v50i3.5584
10. Brasil. Lei nº 9.394, de 20 de dezembro de 1996: estabelece as diretrizes e bases da educação nacional. 13a. Diário Oficial da União; 2016. Available at: http://www.planalto.gov.br/ccivil_03/leis/l9394.htm.
11. Carthery-Goulart MT, Anghinah R, Areza-Fegyveres R, Bahia VS, Dozzi Brucki SM, Damin A, et al. Performance of a Brazilian population on the test of functional health literacy in adults. Rev Saude Publica. 2009; 43(4):631-8. https://doi.org/10.1590/S0034-89102009005000031. https://doi.org/10.1590/S0034-89102009005000031 PMid:19488667
12. Zarcadoolas C, Pleasant A, Greer DS. Understanding health literacy : an expanded model SUMMARY. Health Promot Int. 2005;20(2):195-203.10.1093/heapro/dah609. https://doi.org/10.1093/heapro/dah609 PMid:15788526
13. Mayer G, Villaire M. Health Literacy in primare care: a clinician's guide.New York-USA. WA Springer Publishing Company, LLC. 2007. Available at: https://www.amazon.ca/Health-Literacy-Primary-Care-Clinicians/dp/0826102298
14. Rudd RE, Renzulli D, Pereira A, Daltroy L. Literacy Demands in Health Care Settings: The Patient Perspective. In Schwartzberg JG, VanGeest JB, Wang CC. Understanding Health Literacy. Implications for Medicine and Public Health. American Medical Association; 2003.

15. Sampaio HAC, Sabry MOD, Passamai MPB, Soares NT, Bezerra JAB, Coelho MAM. PLANO ALFANUTRI: um novo paradigma, a alfabetização nutricional, para promoção da alimentação saudável e prática regular de atividade física na prevenção e controle de doenças crônicas. 2012. Available at: http://www.uece.br/nutrindo/index.php/arquivos/doc_view/185?tmpl=component&format=raw
16. Kern DE, Thomas PA, Hughes MT. Curriculum Development for Medical Education: A SixStep Approach. Baltimore: Johns Hopkins University Press; 2009.
17. Brasil. Doenças Crônicas Não Transmissíveis: Estratégias de Controle e Desafios e para os Sistemas Únicos de Saúde. Organização Pan-Americana da Saúde. Organização Mundial da Saúde. Ministério da Saúde; 2011.
18. Ceará. Doenças crônicas não transmissíveis. Secretaria Estadual de Saúde do Ceará; 2018.
19. Bardin L. Análise de conteúdo. 4 ed. Edições70; 2010.
20. Ferraz APCM, Belhot RV. Bloom's taxonomy and its adequacy to define instructional objective in order to obtain excellence in teaching. Gestão Produção 2010; 17(2):421-31. https://doi.org/10.1590/S0104-530X2010000200015. https://doi.org/10.1590/S0104-530X2010000200015
21. Ausubel DPA. Aprendizagem Significativa: a teoria de David Ausubel. Moraes; 1982.
22. Costa RKS, Miranda FAN. Opinion of the nursing graduate student on the formation of nurses for sus: an analysis of FAEN/UERN. Esc Anna Nery 2010; 14(1):39-47. https://doi.org/10.1590/S1414-81452010000100007. https://doi.org/10.1590/S1414-81452010000100007
23. Abrams MA, Kurtz-Rossi S, Riffenburgh A, Savage B. Building Health Literate Organizations: A Guidebook to Achieving Organizational Change. 2014. Available at: http://www.unitypoint.org/filesimages/ Literacy/Health%20Literacy%20Guidebook.pdf
24. Vamos S, Yeung P, Schaal S, Schlüter K. Developing an online health literacy curriculum for two German universities: a key stakeholder approach. Glob Health Promot. 2018;25(3):43-51. 10.1177/1757975916676958. https://doi.org/10.1177/1757975916676958 PMid:28059615
25. Doak CC, Doak LG, Root JH. Teaching patients with low literacy skills. 2 ed. Lippincott; 1996. https://doi.org/10.1097/00000446-199612000-00022
26. Nutbeam D. Health literacy as a public health goal. Health Promot Int. 2006; 15(3):259-67. https://doi.org/10.1093/heapro/15.3.259. https://doi.org/10.1093/heapro/15.3.259
27. Institute of Medicine. Health Literacy. Improving health, health systems, and health policy around the world. Workshop summary. The National Academies Press; 2013.
28. Osborne RH, Batterham RW, Elsworth GR, Hawkins M, Buchbinder R. The grounded psychometric development and initial validation of the Health Literacy Questionnaire (HLQ). BMC Public Health. 2013;13(1):1-17. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-13-658. https://doi.org/10.1186/1471-2458-13-658 PMid:23855504 PMCid:PMC3718659
29. Billett S. Learning through health care work: Premises, contributions and practices. Med Educ. 2016; 50(1):124-31. Available at: https://doi.org/10.1111/medu.12848. https://doi.org/10.1111/medu.12848 PMid:26695472
30. Belim C, Almeida CV. Communication Competences are the Key! A Model of Communication for the Health Professional to Optimize the Health Literacy - Assertiveness, Clear Language and Positivity. J Healthc Commun. 2018; 3(3):1-13. Available at: https://www.primescholars.com/articles/communication-competences-are-the-keya-model-of-communication-for-the-healthprofessional-to-optimize-the-health-literacy-96326.html. https://doi.org/10.4172/2472-1654.100141
31. Oommen AM, Vyas R, Faith M, Selvakumar D, George K. Curriculum development for a module on noncommunicable diseases for the master of public health program. Educ Health 2017; 30:236-9. 10.4103/efh.EfH_148_15. https://doi.org/10.4103/efh.EfH_148_15 PMid:29786027
32. Perissé G. O valor do professor. Autêntica; 2011.
33. National Assessment of Adult Literacy. A first look at the literacy of America's adults in the 21st century. NCES Natl Cent Educ Stat. 2005;1-26. Available at: http://nces.ed.gov/naal/pdf/2006470.pdf
34. Murray S, Hagey J, Willms D, Shillington R, Desjardins R. Health Literacy in Canada: A Healthy Understanding. Www.Ccl-Cca.Ca. 2008; 1-38 p. Available at: http://en.copian.ca/library/research/ccl/health/health.pdf
35. Sørensen K, Pelikan JM, Röthlin F, Ganahl K, Slonska Z, Doyle G, et al. Health literacy in Europe: Comparative results of the European health literacy survey (HLS-EU). Eur J Public Health. 2015; 25(6):1053-8. https://doi.org/10.1093/eurpub/ckv043. https://doi.org/10.1093/eurpub/ckv043 PMid:25843827 PMCid:PMC4668324
36. Rigolin CCD, Bastos Júnior JC, Mello LC, Carvalho CCB. A produção científica brasileira de teses e dissertações sobre health literacy. Rev Tecnol e Soc. 2018; 14(34): 178-95. http://dx.doi.org/10.3895/rts.v14n34.7599. https://doi.org/10.3895/rts.v14n34.7599
37. Stone M, Bazaldua O, Morrow J. Developing Health Literacy Communication Practices for Medical Students. MedEdPORTAL. 2021; 17:11091. 10.15766/mep_2374-8265.11091. https://doi.org/10.15766/mep_2374-8265.11091 PMid:33537408 PMCid:PMC7842086
38. Saunders C, Palesy D, Lewis J. Systematic Review and Conceptual Framework for Health Literacy Training in Health Professions Education. Health Professions Education. 2019; 5(1):13-29. https://doi.org/10.1016/j.hpe.2018.03.003 https://doi.org/10.1016/j.hpe.2018.03.003