Original Research

WALDEN UNIVERSITY

Critical Education in Community Health Literacy for Brazilian Nurses: A Course Evaluation

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Abstract

This article presents an immediate evaluation of a professional development course in community health literacy for Brazilian nurses. An evaluation based on an applied thematic analysis of the accounts of 63 attendees in three Brazilian cities (January 2020) was guided by the following themes: (a) expansion of understanding about community health literacy as a pillar for planning and providing health care; (b) encouragement of innovation in research and/or practice; and (c) plans to incorporate the information shared in the course into professional projects. The evaluation disclosed the complexity of social contexts for health

literacy, which is intertwined with ethnocultural diversity and deep socioeconomic disparities, such as restricted access to essential public health services for socially deprived and vulnerable individuals. Expanded understanding about community health literacy is a pillar for care planning and delivery, as well as innovation in research and practice projects. Participants' evaluations revealed ideas to improve nurses' practice in promoting community health literacy and empowerment, as well as quality of life and social well-being. Future knowledge dissemination may impact nurses' clinical practice and management actions, bringing changes in various areas of practice to redesign more socially inclusive actions for clientele.

Introduction

International collaborative work among educators allows them to respond together to the responsibility of investing in professional development, enhancing international relations, and arousing engagement in diverse socioeducational contexts, with reflexive capacity beyond national borders. This type of collaboration promotes varied perspectives in the approach to complex problems, with immersion in impactful research themes, including distinctions among and peculiarities of the social contexts of various populations' health and the services provided to them. These perspectives comply with precepts of reciprocity, respect, and mutual benefit (Yarmoshuk et al., 2020). Within the scope of the Brazil–Canada partnership, ties of scientific cooperation, education, innovation, and technology were formed (Ministério da Saúde, 2010), with emphasis on health promotion and protection, from the perspective of health and citizenship (Contandriopoulos et al., 2009). The initiative reported on in this paper added to Canada and Brazil's collaborative partnership in nursing education (Zanchetta, Santos, Felipe et al., 2020).

Health education is an example of a government's investments and beliefs in the potential for the intellectual, emotional, and material development of citizens. It operationalizes recent definitions of health by the World Health Organization (WHO, 2010), as health, due to its political, economic, and diplomatic implications, has become an undeniable component in world agendas that seek to mitigate humanitarian crises by highlighting conditions of survival and looking to a better future (Friedman & Gostin, 2015; United Nations, 2016; Widdows, 2015). The most recent definitions of health are intertwined with macro-conditions related to trade, social development, and technological–industrial power and extend to the health of the planet itself, due to the damage to the planet caused by human political, administrative, commercial, and productive actions (Gill & Benatar, 2019).

Health education is critical to an expanded perspective on health that is characterized by complexity and interconnected factors concerning health organizations' and their professionals' responsiveness to population health literacy profiles (Pleasant et al., 2016). There is an undeniable force in one of the central concepts in this perspective on health promotion: the social determinants of health (SDH; WHO, 2010). These determinants are the subject of a political statement by the WHO (2011) recognizing SDH as complex factors of political, economic, cultural, and social order. SDH include individual factors (education, sex, gender, beliefs and religion, genetic structure, psychological coping mechanisms, health literacy), factors related to physical and social environments (work environment, housing conditions, geographical location of housing),

and social infrastructure factors (access to transportation, access to health services, social support network) (WHO, 2010, 2011).

The complexity of SDH is found within the context of global health. It is particularly relevant to Brazil, whose very recent movement regarding SDH (Comissão Nacional Sobre Determinantes Sociais da Saúde, 2008) Academic, research, and practice movements in SDH (2008) has demonstrated that it is an international partner and recipient of investments in this area. Health literacy (HL) (Pleasant et al., 2016) is of interest as a SDH that can be understood as a multidimensional concept addressing both sides of an exchange: an individual's health skills and the demands and complexities of the health system (Pleasant et al., 2016). It is important to emphasize that in the context of a community, community health literacy (CHL; WHO, 2016) is intertwined with the effects of other SDH, the sub-dimensions of which (such as digital, scientific, numeracy, etc.) make CHL one of the more complex SDH. This encourages its incorporation into initiatives of international cooperation for the promotion of global health and equity in health. Knowledge of CHL from a multidisciplinary perspective was identified as an important knowledge gap among Brazilian nurses, justifying the need for a professional development course.

Literature review

In the last twenty years, HL has been internationally understood in several ways (Nutbeam, 2000): (a) as functional literacy, regarding navigation to the interior of a health system; (b) as communicative/interactive literacy in health, which includes the individual's abilities to apply new health information to different situations; and (c) as critical literacy, combining functional and interactive skills with personal and community empowerment, resulting from greater capacity to have control over life situations.

Due to the multiple definitions proposed for HL in international literature, it can be affirmed that these definitions permeate dimensions of health sciences, education, and sociology. HL can be defined as multiple abilities that the individual can demonstrate. Such skills include the ability to (Zanchetta et al., 2013): (a) access, read, or listen to, process, and evaluate health-related information in graphic, textual, or numerical form; (b) build new meanings from health information; (c) understand health messages and communicate them in social environments; (d) navigate the health system; (e) use health information in graphical, textual, or numerical form for informed and conscious decision-making; (f) reduce health risks and raise quality of life; (g) use health information to access health care in a medical culture that requires self-defense and health surveillance; (h) evaluate and communicate health information to improve personal health and that of family members; (i) solve health problems through multiple forms of language (written, oral, visual, and tactile) at various levels (individual, family, community, global) and in various contexts (at home, at work, at school); and (j) use all family, school, social, cultural, and professional assets obtained through continuing education (formal or informal) due to regular contact with information, knowledge, attitudes, and health behaviours in all aspects of life.

Purpose

In the context of international literature on the subject, an HL knowledge transfer initiative was designed by a Canadian nursing faculty to serve as a professional development course for updating Brazilian nurses' knowledge of HL. The course design was based on a definition of knowledge transfer as an interactive and dynamic process, consisting of synthesizing, exchanging, disseminating, and applying knowledge to make improvements in health and care delivery and to strengthen the healthcare system (Straus et al., 2009). The course considered that nurses, once equipped with knowledge in CHL, could envision changes in various areas of practice to redesign more socially inclusive actions for clientele. This article is relevant for those interested

in the professional development of healthcare workers, and its significance is demonstrated in the critical review of a professional development course in CHL for Brazilian nurses.

Conceptual Underpinning

The course was conceived by applying the concept of HL within the complexity perspective and delivered using Freire's pedagogy of critical awareness, including the use of evocative objects (Freire, 2005). According to Freire's pedagogy, education is a practice of collective work to resignify academic teaching and the educators' actions. With dialogue as its main characteristic, this approach to education claims that individuals are physical, emotional, psychological, sexual, social, intellectual, and spiritual beings, with the potential of being fully realized by their own efforts (Rodrigues, 2006). The relationship *awareness-world* is the basis of this teaching-learning process (Alencar, 2006) that has at its core a dialogue between who teaches and who learns. Awareness leads to denunciation, as it is a historical commitment to transforming reality, rejecting the old and cherishing the new reality, even if it dreams of the possibility of a permanent utopia. In fact, such awareness creates a context that welcomes humanization in intersubjectivity and the joint building of a just reality. A horizontal, egalitarian dialogue allows for the socialization of knowledge, personal encounters, and the exchange of lived experiences (Alencar, 2006). Freire's pedagogy (Freire, 2005) addresses the learner's reflexive practice and critical capacity-building, through the mobilization of learners' potentialities; this pedagogy was used to examine interchangeable roles between learners and educators during mutual collaborative processes of teaching–learning through critical dialogue (Shor & Freire, 1987).

Within a complexity perspective, understanding HL requires the consideration of the context, the system of social and institutional norms, as well as the expectations and regulations that influence the use of skills and configure the availability of resources (Pleasant et al., 2016). In this new way of understanding HL, health organizations, both individually and collectively, are charged with being responsive to demands for access to health information in a way that is inclusive and easily comprehended by all. Limitations in HL can manifest in each of the life spheres (work, dealing with diseases, adopting new health practices, etc.) in which individuals may have their own variation of skills, improved or diminished, which are influenced by the context.

The concept of HL is rooted in the science of education and in the intersection of other forms of literacy (Barton et al., 2000) by emphasizing that, like all human activity, literacy is essentially a social activity made up of interpersonal interactions. As an activity in the space between thought and *text* (through which one can read the world), literacy is a social practice. Health literacy translates as a multiplicity of skills that allows individuals to benefit from the social capital of the society to which they belong.

The course intention involved instilling Canadian values and ideas regarding social justice and inclusiveness about community health in Brazil and, in turn, having nurses mobilize their unique creativity to summon social and cultural capital to promote health. It was intended that gaining new knowledge about HL would help reshape existing ways of knowing through engagement with critical dialogues. The course used the process of planting seeds in fertile ground to build and strengthen the capacity of nurses as learners and educators in health disciplines to commit to social justice and human rights. Furthermore, culturally responsive teaching (Gay, 2010) was inspirational to a teaching–learning educational approach that emphasized mutual respect for social actors' cultural heritages, creating meaningful links between their sociocultural realities.

Ethical Considerations

The course evaluations did not collect attendees' sociodemographic information. Attendees provided the first and fourth authors with their oral consent in classrooms to use their evaluations as evidence for publication and academic purposes. As a course evaluation activity, it did not require review and approval by the Research Ethics Boards of the institutions involved.

Method

The course, Education in Community Health Literacy for Nurses, as a knowledge transfer initiative grounded in Canadian expertise on SDH, was implemented in January 2020 in three Brazilian federal universities that were already in emerging international collaboration with the Canadian university, two located in the Center-west region and one in the Northeast region. (See Table 1 for a course overview.) The course was supported by an agency of the Canadian government, which allowed the travel and stay of a Brazilian-Canadian faculty for actions to strengthen nursing graduate studies, research, and practice in the field of community health promotion.

The implementation of the course was made possible thanks to preestablished partnerships between Brazilian and Canadian universities and the Canadian-Brazilian faculty, whose knowledge made it possible to link the internationalization needs of academic production with the public interest of promoting scientific development and professional training (Santos et al., 2021). The course design, teaching approach, and learning resources were previously applied during professional development initiatives with Brazilian community health agents (Zanchetta, Maheu et al., 2014) and Canadian social services and health professionals (Zanchetta, Maheu et al., 2014), as well as in educational evaluation research with Canadian nursing students (Zanchetta et al., 2022).

The choice of Brazilian nurses as an exclusive clientele for the first very time is justified because nursing is a strategic profession in the consolidation of health systems, sanitary protection of communities, and economic growth (Newby et al., 2020), particularly in the Brazilian Unified Health System (SUS). The importance of nurses' social role in public health education, the promotion of self-care capacity by social groups, and the recognition of HL as an SDH is undeniable, as this must be intrinsic to critical-reflective maturation to promote collective health from the perspective of global health (Lasater et al., 2019). Invitations to enroll in this course were sent by local coordinators to teachers and students, with a limit of 30 attendees enrolled per city.

The 30-hour in-person course was taught intensively for one week at each of the sites, including an additional 10 hours for individual preparatory readings and targeted written work during the course period. The use of three documents translated from English to Portuguese (Dodson et al., 2015; Pleasant et al., 2016; WHO, 2016) to support the conceptual understanding of HL was a strategy adopted to deal with expected varying levels of knowledge of the English language by course attendees. The 63 attendees came from partner universities, as well as health and higher education organizations in the cities of Goiânia, Brasília, and Recife.

The course evaluation was of the immediate type (Rossi et al., 2018) that allowed us to explore the possible changes and impacts on attendees' thoughts and intentions provoked by their participation in the course. To ensure freedom of expression and anonymity, attendees in the last 30 minutes of the final session of the course were asked to answer two open-ended evaluation questions via an online form. The questions were:

1. How did this course increase your understanding of community health literacy as a pillar for health care planning and delivery?
2. How do you plan to incorporate the information shared in this course into your work/study plan?

The information collected was grouped into tables for integrated and reflective reading, inspired by the method of thematic analysis (Paillé & Muchielli, 2016). To identify the immediate impacts of the course, the answers were organized into three general themes: (a) expansion of understanding about CHL as a pillar for planning and providing health care, (b) encouragement of innovation in research and/or practice projects, and (c) plans to incorporate the information shared in the course into professional projects.

Table 1: *Course Overview*

Content	Pedagogical activities	Learning evaluation
Class #1: HL as a SDH: Roots in the Canadian Population Health Promotion Model	Lecture, video discussion: Oral health promotion program; exercise with Kahoot: Brainstorming experiential knowledge; case analysis: Vaccination literacy & media literacy	Self-reflection: How did this introductory class help me to update knowledge about HL?
Class # 2: Electronic health literacy (e-HL): Autonomous health consumers in times of abundant, controversial e-health information	Lecture; E-health information analysis: Web exploration; creation of a hypothetical health promotion online program; presentation of group's programs, with general appraisal and feedback on the programs	Simulation: Telenursing; self-reflection exercise: Which words best express your skills in using the internet as a work tool for health education in partnership with your clientele? Poll Everywhere word cloud; peer evaluation with oral feedback for further development of the proposed programs; short reaction paper: What would you like to do to improve your performance in health education?
Class # 3: From individual's abilities to health services' responsiveness to HL challenges	Lecture: Measurement in HL; discussion: Quantitative research tools; small group activities, use of evocative objects: (1) Ponder the relationship between given object and empirical information presented, considering your personal experience and the reality of lived community, or your student clinical experiences with clients of any age (2 min). (2) Disclose your thoughts about the object and identified area of promoting CHL (3 min). (3) Choose one area and develop a short-term plan of action that could be initiated within your communities of practice/life (15 min). (4) Present action plans (10 min) and (5) identify five key lessons learned from the workshop (2 min).	Self-appraisal: How did this class help you to expand your ideas about the HL issues linked to social inequities and social commitment?
Class #4: Concept clarification and analysis: Brazilian and international perspectives	Lecture; group activity: Construction of a conceptual map; individual activity: Draft a conceptual framework for your own nursing research; browse the scientific literature linking HL to your area of interest; individual and group consultation: Review of research projects, drafting scientific abstracts and creating outlines for scholarly manuscripts.	Review the appropriateness of a created conceptual framework to research proposal; self-reflection exercise: Which words best express your ideas about HL? Poll Everywhere word cloud.
Class #5: Prospective nursing and multi-professional actions to improve HL in the SUS	Lecture: Evidence-based health practice; debate: Possibilities, controversies, and challenges to work with evidence-based innovation HL; forum: How to follow up and evaluate professional interventions for the promotion and maintenance of HL of population groups?	Immediate, short-term learning evaluation.

Results

The 63 attendees independently identified themselves in the classroom during discussions and pedagogical activities in groups as (a) nursing faculty from universities and public and private colleges, (b) postdoctoral interns, (c) doctoral and master's students in nursing, (d) nurses with leading positions in the planning sector, hospital management, and administration of community health centers, and (e) nurses in clinical nursing training and nursing residency. The contents of 63 completed forms as well as their evaluation comments, which are compiled into themes, are presented in Tables 2 and 3. The contents indicate that the complex social contexts that permeate life in large urban centers are intertwined with ethno-cultural diversity and deep socioeconomic disparities faced by socially deprived and vulnerable individuals who have restricted access to essential public health services. The social inclusion of nurses' clients requires the reasonable and respectful accommodation of their cognitive, physical, and emotional priorities for the use of the social space of public health organizations (dos Santos et al., 2020).

In this scenario, to promote individual HL and CHL is to promote the fight against social inequities, through the recognition of existing obstacles to this process (i.e., cultural, cognitive, and personal interest issues). Due to the characteristics of restricted access faced by certain vulnerable groups, mutual collaboration with professionals and peers can result in overcoming limitations for self-care. With this collaboration, which aims to promote CHL in these groups, health professionals can apprehend the social dynamics of CHL and foresee challenges and opportunities to act. Therefore, collaboration means raising awareness about social, cognitive, and humanistic issues in the process of promoting critical CHL on possible limits, challenges, and opportunities.

The report on attendees' written comments uncovered signs of political awareness in their reflections on social responsibility during conceptual discussions of HL among peers. These discussions about awakening to transformative action were imbued with political power. The discussions unfolded in consonance with nurses' sense of perceiving themselves as capable of transforming the reality experienced by the clientele in order to inspire healthy and conscious behaviors. The attendees understood that nurses are transforming agents capable of influencing their own social reality within the scope of their professional performance. Attendees stated that, by fostering autonomy and decision-making capacity in health matters by individuals, families, and communities, nurses could thereby fill in social gaps and boost collective solidarity in health and social welfare issues.

The comments about areas of broadened understanding about CHL and its application as related to planning and implementation actions revealed that CHL was understood by the course's attendees as a complex social phenomenon, the impacts of which were perceived as multiple in terms of the dynamics of interprofessional and interpersonal relationships. Moreover, ideas for feasible activities to incorporate HL in the context of the SUS were presented by the course attendees (Zanchetta, Santos, Moraes et al., 2020), although with limited effects posited for the transformation of the status quo of responsiveness of health organizations affiliated to the SUS. Attendees also stated that these organizations do not consistently invest in professional development to promote emancipatory actions in collective health.

Table 2: *Broadened Understanding About Health Literacy as a Pillar for Planning and Care Practice in Community Health Literacy*

Planning the incorporation of HL in clinical practice

- Integrate HL as a diagnostic tool; include planning, implementation, and evaluation of achieved goals and results.
- Build HL networks.
- Conduct realistic diagnosis of community HL, exploring multiple perspectives on population's health profile.
- Decode new concepts and theoretical foundations related to HL.
- Develop expertise in HL to recognize problems, propose solutions, and evaluate related results.
- Draw from new theoretical constructs on HL.
- Encourage creativity in the proposition of solutions for social dimensions of CHL.
- Include CHL in the local action plan on SDH.
- Integrate CHL-related assumptions into SUS principles and guidelines.
- Promote professional skills in HL.
- Redefine research priorities on practice and professional improvement issues.
- Sustain professional and community empowerment based on HL for decision-making and efficient joint action.
- Use HL as an element for innovation in management, assistance, and evaluation of results.
- Use CHL as a multidimensional facilitator for health services access; tackle inequities and defend inclusive health.

Implementation of CHL in clinical educational practice

- Expand the use of simple technology, driven by the challenge inherent in individual and community HL.
- Harmonize CHL premises with comprehensive and equitable assistance, increasing quality indicators.
- Promote CHL as the clientele's right, ensuring their decision-making capacity.
- Recognize the clientele's potentialities and abilities to be improved as supported by CHL.
- Redesign methods of communication between professional and client to identify mutual needs for CHL promotion.
- Update professional tasks to include facilitation of CHL.

The understanding of CHL, both as a concept and in terms of its practical application, was valued by the attendees. Education responded to their individual demands for knowledge, suggesting the incorporation of CHL into nurses' educative practice. This understanding included perspectives on higher quality care for clientele and community, envisioned through the improvement in communicative and educational relationships. Ultimately, the aim would be the incorporation of health knowledge for a client's decision-making in a conscious and responsible way. The opportunity to share ideas about the stimulus for innovation revealed the plural nature of CHL as an appropriate tool for nurses' practice in the multiple dimensions of their role as health educators.

Proposals for innovative actions emerged in the social settings of research, care delivery, teaching, and university community outreach activities. The incorporation of CHL into attendees' work plans for education, management, and clinical educational practice indicated the possibilities of significant outcomes in the lives of their clients. When evaluating future areas for incorporating knowledge about CHL, the attendees revealed awareness of the potential to influence the social unfolding of actions, increasing connectivity and social solidarity in health issues. In fact, CHL was understood as a transversal axis and framework throughout planning health interventions (e.g., from the situational diagnosis to the evaluation of the results), thus corroborating the extent of the scope of CHL's conceptual dimensions and its applicability in education and practice.

Table 3 shows indicators related to the future contribution of CHL and to the practice of dissemination, translation, and transfer of knowledge in the academic and social context. These contributions unfold as forms of knowledge socialization and exchange among peers in academia. It is impossible to predict the impact of future results of attendees' suggested plans and projects related to the education and consolidation of nurses' skills as a new form of professional development in the Center-west and Northeast regions of Brazil, where the qualification of nurses remains a pressing need. These professionals can lead the reflection to imagine how such results will enable the development of skills and attitudes in their formation.

The evaluative comments led us to consider that perhaps the products of the transfer of CHL knowledge at regional levels could enhance its comprehensiveness, because it includes other social actors, such as the community of nurses and other health professionals, as well as clientele and students at different levels of education. The careful reading of Tables 2 and 3 allowed for the identification of some latent and concrete areas to innovate in social practice in health promotion. As agents provoking a social dialogue on CHL, nurses are expected to become engaged in the process of creating alliances with other members of the multidisciplinary team and with clientele. As they are in positions of social leadership, nurses promote the clientele's autonomy by harmonizing forms of popular and scientific health knowledge.

Although it is not indicated in the tables as evaluation evidence, classroom discussions and exercises were the setting for attendees' exchanges on the renewed profile of their clientele, due to the expansion and creation of public health programs. Among other components, these programs cater to the clientele's sexual orientation (e.g., lesbians and gay men) and gender identity (e.g., transgender men and women), which requires nurses to be knowledgeable about updated content and educational strategies, using equity, human rights, and sensitive approaches. Another unreported component was participants' awareness of the increasing complexity of newly emerging multicultural and multilinguistic particularities. In the context of classroom discussions, the urgency to recognize multicultural identities was introduced by the Canadian facilitator. In recent years, Brazil has become a host society for immigrants, refugees, and stateless individuals, who have the right to the SUS free health care services. The attendees confirmed the need for further professional education to support the design of nursing health promotion actions that respond to the previously unidentified problem of multilingualism and multiculturalism.

Table 3

Stimulus for Innovation in Research and Practice in Community Health Literacy

Innovation in research	Innovation in clinical educational practice	Innovation in university education/ community outreach
• Awake scientific interest by aligning CHL and practice. • Broaden understanding of the client's role as suggested by renewed conceptions of HL and reposition it in a research design. • Develop a research project focusing on CHL as technological innovation for teaching health. • Expand the theoretical-conceptual framework in HL to the analysis and interpretation of research results. • Identify a validated HL measurement instrument in Brazil for its evaluation. • Influence the redesign of methodological and conceptual approaches for research on HL. • Investigate CHL's relations with health promotion and education. • Integrate CHL among the relevant and innovative topics in public health research, addressing management, teaching, and services delivery. • Plan research with health education technologies on strategies for health behaviour changes. • Propose translation, adaptation, and validation of psychometric instruments for the Portuguese language. • Suggest HL for projects to be proposed during the selection processes in nursing graduate programs. • Transfer scientific updates on CHL grounded in national and international studies.	• Expand the use of a set of simple, accessible, and appropriate technological tools as effective to sustain CHL. • Promote critical reflection on CHL regarding planning and delivering of evidence-based health education interventions. • Promote strategies to operationalize learning about CHL as an SDH. • Review, within a macrosocial perspective, updates to the various concepts related to health promotion and population demands. • Review ways of designing simple and effective solutions for daily clinical demands. • Verify feasible possibilities for application of CHL and practices based on innovation (learned and proposed) in clinical practice.	• Create a community of practice with alumni of CHL continuing education courses to produce HL-related knowledge. • Educate clients to appraise and understand their own health conditions based on the promotion of autonomy supported by CHL. • Foster self-learning about CHL to improve professional skills. • Improve educational material by adopting basic CHL premises to specific vulnerable groups. • Incorporate CHL in teaching converging with Global Nursing trends. • Prioritize HL in building individual autonomy and promoting one's health. • Propose CHL as a topic for community action in university community-outreach projects. • Rethink actions for health education to achieve concrete and identifiable results. • Review theoretical concepts about HL that underpin the primary health care practice. • Subsidize social transformation based on CHL and educational demands. • Stimulate creativity in teaching-learning strategies about CHL in the curricular programs and extracurricular activities

Discussion

Through their teaching, educators help learners find their truth, becoming mediators for the learners' self-understanding and knowledge (Morin, 2011a) as they become committed members of society. The school aims to help learners learn how to live by teaching them about personal uncertainties, even if modern individualism promotes autonomy and accountability while degrading solidarity and augmenting loneliness (Morin, 2011a). The inherent complexity of social injustice, rooted in unequal access to education, is embedded in CHL. As a result of compromised democratic access to quality health information, interactions about these issues have great complexity, even more so in the nature of their general components and the arrangement of their relationships, as well as the richness of the complexity itself (Durand, 1979).

Recognizing CHL and acknowledging its complexity coincides with our limited understanding of it, which includes uncertainties, indeterminations, and other aleatory phenomena (Morin, 2005). As a result, an amalgamation of simplifications may occur (Morin, 2011b), leading to simple solutions for major, complex problems. Becoming a nurse who is CHL literate and can work as a health educator/promoter in Brazil is a complex phenomenon.

The findings of the immediate evaluation by the course attendees pointed to the possibilities of CHL's insertion in health services through redesigned actions for community health promotion (Zanchetta, Santos, Moraes et al., 2020). It is unquestionably a multidisciplinary team's responsibility to educate their clientele as citizens who could be aware and capable of making decisions about their own health; it is equally their responsibility to advocate for and act on the creation of social and political conditions for doing so.

It should be noted that in Brazil, e-HL can be a tool to advance digital health by democratizing access to health information, resulting in improvements in the health of populations. In the technological age, knowing how to use technological and writing resources in the digital environment provides social inclusion, increased knowledge, and new skills (Ministério da Saúde, n. d.), hence its importance for CHL. Within the scope of the SUS, one of the goals of the Guidelines for Telehealth in Brazil is "to overcome socioeconomic, cultural and, above all, geographical barriers, so that health services and information reach the entire population" (Ministério da Saúde, 2011), thus facilitating the development of skills for responsible self-care. Electronic HL benefits individuals, professionals, and organizations at technical, political, and commercial levels, and the latter are implicated in the growing importance of the electronic market for health products. In fact, the population is expected to learn how to deal with the health system, prevent diseases, and promote health (Azzopardi-Muscat & Sørensen, 2019).

Along with the difficulties of reaching out to all population groups, the promotion of CHL requires the expansion of cognitive and practical skills on the part of health clientele, as well as vigorous support for their motivation for learning. Therefore, CHL can be discussed as an essential component of professional development in nursing to promote social impacts in clinical, educational, research, and management practice in the health system (Zanchetta, Santos, Moraes et al., 2020). Current educational proposals for a new generation of nurses are focusing on global health, with an emphasis on the protection of socially vulnerable populations (Lasater et al., 2019). These educational initiatives can provide tools for nurses to excel as health educators, which in turn can potentially help them contribute to the achievement of the World Health Organization's Sustainable Development Goals (WHO, 2016), among which health is listed as a component of a multifactorial network for social development.

One of the most significant and easily detectable impacts of CHL is the level of collective knowledge appropriation it provides. For example, preventive behavior for COVID-19 recently adopted by individuals on a global scale reflected their level of scientific HL. COVID-19 raised awareness about the risks for individual

and group infections, as well as the importance of a sense of belonging to a collective to decide how to act together. The global focus of political and sanitary actions by authorities and managers has been the incorporation of HL in social spaces of discussion for the development of health policies and the implementation of community action (Paakkari & Okan, 2020). Individual and collective behaviors grounded in a level of HL have influenced the epidemiological course of the pandemic, revealing a collective responsibility to implement simple measures, based on the ability of communities to process information and decide how best to preserve their individual and community health. A community with high levels of HL remains free of the interests of political and governmental leaders, whose underlying intentions may not be consistent with global health efforts (Paakkari & Okan, 2020).

In other words, CHL implies social responsibility on the part of social groups and communities for the well-being of populations, anchored by their ability to evaluate information, as well as to disseminate and use it for their own quality of life and health (Sentell et al., 2020). In such a global context, the transforming force of the nursing profession is expressed in its innovative capacity, management skills, leadership, and teamwork, as well as its capacity for social transformation. These are crucial attributes in the face of urgent requirements for human resources development and management, for more materials and advanced processes, and for continuing education to promote community preventive measures in a pandemic (Newby et al., 2020), measures that include mechanisms by which clientele can process information and assess the veracity and credibility of sources.

In the perspective of CHL, as conveyed in the course, the clientele of the Brazilian SUS was seen as autonomous allies who could become responsible for their own choices and behaviors. In the sociocommunity perspective discussed previously, which corroborated the understanding of the course attendees, CHL as an SDH challenges the reconstruction of knowledge in health promotion, prioritizing equity in health and the democratization of scientific health knowledge. In this way, CHL is part of a global movement to involve citizens as coresponsible partners in the construction of the ideals of justice, equity, and health for all.

Implications and Contributions

For the cities where the course was delivered, attendees will become, in their professional settings, disseminators of the acquired knowledge. Such knowledge can be a catalyst for change in perspectives on health promotion, yielding fruitful partnerships aimed at the systemic impact of CHL. This dissemination of knowledge about CHL in nursing graduate programs and other settings for nursing education is important, with direct impacts on nursing clinical practice and management. The incorporation of CHL in nurses' professional training, in-service, and continuing education, so that nurses can become skilled in supporting their clientele's exercise of citizenship in health matters, was shown to be a priority by the attendees who completed the evaluation accounts.

This article contributes to the field of extracurricular education and professional development by showcasing the appropriateness of critical, participatory education in the evaluation's positive results. The success of the course was demonstrated by the enhanced consciousness of expanded skills to be mastered and participants' intentions to apply new knowledge to renew their professional practice. As an international knowledge transfer initiative, the evaluated course contributed to the array of low-cost initiatives among global academics that could be implemented by diaspora faculty in their native countries. This project also contributed to the consolidation of more intellectual partnerships and planted seeds for a more robust educational evaluation. Educational evaluative research is being developed to document the social impact of the knowledge acquired in the course, such as changes, innovations, and achievements in the attendees' practices to increase community scientific and vaccine literacy during the COVID-19 pandemic. It is worth noting that the timeframe for the course evaluation began 6 weeks after the course completion, concomitant with the start of the COVID-19 pandemic (Zanchetta, 2022-2023).

Conclusion

Nurses' knowledge about CHL is embedded in the potential to contribute to a more critical and self-responsible society in the face of the challenges posed by the excess of information conveyed by all communication channels. Nurses' intentions to incorporate CHL into their practices by creating more socially inclusive activities for their clientele aim for concrete results, with the primary objective of increasing CHL, especially among socially vulnerable groups. International partnerships in professional development can inspire new adaptations for the redesign of the professional-client dyad, through the motivation, reflection, and engagement that encourage collective empowerment.

The course attendees' substantial contributions to our understanding of potential actions for CHL was based on their reflections in groups while pondering feasible interventions and actions in CHL in the face of real health problems. Their critical thinking in problem-solving considered the professional potential of those involved in social responsibility for CHL and its consequences. Thus, this successful experience reinforced the relevance of such professional development for other Brazilian regions, extending to other social services and health professionals and nurses in the scope of South American partnerships. The scholarly dissemination of diverse field initiatives and the outcomes of their educational evaluation exemplified in this initiative contribute profoundly to dialogue among multidisciplinary educators. Such work motivates educators who are interested in designing interesting, meaningful professional development to mobilize and celebrate the expertise of practitioners.

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