POPULAR EDUCATION IN HEALTH, CRITICAL THINKING AND THE SEVEN TYPE OF KNOWLEDGE

EDUCAÇÃO POPULAR EM SAÚDE, PENSAMENTO CRÍTICO E OS SETE SABERES

EDUCACIÓN POPULAR EN SALUD, PENSAMIENTO CRÍTICO Y LOS SIETE SABERES

Antonio Jorge Silva Correa Júnior¹, Thais Cristina Flexa Souza², Yasmin Martins de Sousa³, Sandra Helena Isse Polaro⁴, Mary Elizabeth de Santana⁵, Silvio Éder Dias da Silva⁶, Jacira Nunes Carvalho⁷

ABSTRACT

Objective: to analyze the insertion of critical thinking and seven types of knowledge in Popular Education in Health. **Method:** this is a qualitative, descriptive study, reflective analysis, guided by a narrative review of the literature. **Results:** Edgar Morin's seven types of knowledge are uniformly oriented towards popular education in health based on the valorization of the user/student as homo-complexus: referring it to ontological questions and solving world problems (knowledge 3 and 4), seeing it comprehensively as it confers freedom and diversity of expression (knowledge 6 and 7) and the confrontation of uncertainties and error and illusion in the context of dialogical construction of relevant knowledge (knowledge 1, 2 and 5). **Conclusion:** it corroborates for a totalizing and human professional posture, in a popular education in co-participative and sensitive health to the conscience of the users. The theoretical implications are related to the involvement of nursing in critical-complex thinking, through qualitative-participant work and in combating misconceptions about popular health education from academia. **Descriptors:** Education; Education Nursing; Health Education; Population Education; Community Participation; Holistic Nursing.

RESUMO

Objetivo: analisar sobre a inserção do pensamento crítico e dos sete saberes na Educação Popular em Saúde. **Método:** estudo qualitativo, descritivo, de análise reflexiva, guiado por revisão narrativa da literatura. **Resultados:** os sete saberes de Edgar Morin estão uniformemente voltados para a educação popular em saúde pautada na valorização do usuário/educando como *homo complexus*: remetendo-o para questões ontológicas e solução de problemas mundiais (saberes 3 e 4), enxergando-o compreensivamente na medida em que lhe confere liberdade e diversidade de expressão (saberes 6 e 7) e o enfrentamento das incertezas e do erro e ilusão em contexto de construção dialógica do conhecimento pertinente (saberes 1, 2 e 5). **Conclusão:** corrobora-se para uma postura profissional totalizante e humana, em uma educação popular em saúde coparticipativa e sensível à consciência dos usuários. As implicações teóricas são concernentes ao envolvimento da enfermagem no pensamento crítico-complexo por intermédio de trabalho qualitativo-participante e no combate de conceitos errôneos sobre educação popular em saúde desde a academia. **Descritores:** Educação; Educação em Enfermagem; Educação em Saúde; Educação da População; Participação da Comunidade; Enfermagem Holística.

RESUMEN

Objetivo: analizar sobre la inserción del pensamiento crítico y de los siete saberes en la Educación Popular en Salud. **Método:** estudio cualitativo, descriptivo, de análisis reflexiva, guiado por revisión narrativa de la literatura. **Resultados:** los siete saberes de Edgar Morin están uniformemente dirigidos para la educación popular en salud pautada en la valorización del usuario/educando como *homo-complexus*: remetiéndolo para cuestiones ontológicas y solución de problemas mundiales (saberes 3 y 4), viéndolo comprensivamente a medida que le confiere libertad y diversidad de expresión (saberes 6 y 7) y el enfrentamiento de las incertezas y del error e ilusión en contexto de construcción dialógica del conocimiento pertinente (saberes 1, 2 y 5). **Conclusión:** se corrobora para una postura profesional totalizante y humana, en una educación popular en salud coparticipativa y sensible a la conciencia de los usuarios. Las implicaciones teóricas son concernientes al involucramiento de la enfermería en el pensamiento crítico-complejo, por intermedio de trabajo cualitativo-participante y en el combate de conceptos erróneos sobre educación popular en salud desde la academia. **Descriptores:** Educación; Educación en Enfermería; Educación en Salud; Educación de la Población; Participación de la Comunidad; Enfermería Holística.

^{1,2,3}Master degree students, Graduate Program in Nursing/PPGENF, Federal University of Pará/UFPA. Belém (PA), Brazil. E-mails: juniorjorge_94@hotmail.com ORCID iD: <http://orcid.org/0000-0003-1665-1521>; thaisflexxa@gmail.com ORCID iD: <http://orcid.org/0000-0002-7296-0380>; yasminmartinsdesousa@hotmail.com ORCID iD: <http://orcid.org/0000-0003-3744-920X>; ^{4,5,6,7}Ph.D., Graduate Program in Nursing/PPGENF, Federal University of Pará/UFPA. Belém (PA), Brazil. E-mail: sandra.polaro@pq.cnpq.br ORCID iD: <http://orcid.org/0000-0001-5026-5080>; betemary@terra.com.br ORCID iD: <http://orcid.org/0000-0002-3629-8932>; silvioeder2003@yahoo.com.br ORCID iD: <http://orcid.org/0000-0003-3848-0348>; jacirancarvalho@gmail.com ORCID iD: <http://orcid.org/0000-0002-5464-2434>

INTRODUCTION

Over the years, the society has undergone formative changes, moving from content formation to the valuation of individuals in constant learning, updating and adaptive capacity, assuming different positions regarding work production. This transition was feasible from the technological advent and emergence of new sectors and working conditions.¹ With this new need, new methodological approaches appeared that sought to encourage the emergence of an individual with critical reasoning, to weave arguments based on different contexts. In other words, to develop critical thinking.

But after all, what is critical thinking? Critical thinking goes beyond just being aware of an isolated fact, and it is considered to be involved in complexity with analytical aspects. The ability to study, develop cognitive abilities, and properly evaluate arguments, building them, is characterized as critical thinking. This process includes the ability to visualize in a text the arguments and separate them from several parts without the use of memorization techniques.²

During the development of critical thinking, it is essential to be impartial, to apply evidence, to solve problems, to produce intelligible thoughts.³ To think critically is not to always analyze negatively, but to evaluate positive and negative points.²

Critical thinking diverges depending on the "How?" and "Why?" is involved in thinking.⁴ Individual understandings vary depending on disciplinary contexts and practices, so fragmented discourses on critical thinking are reflections of epistemological and normative beliefs. This is similar to other assertions, in which although subjectivity and individual creativity of thought are emphasized, there are links to a constructivist epistemology, translated in the social context in which the individual thinks and constructs his/her forms of knowledge.³

When bringing critical thinking to health, thinking critically professional with an objective purpose is corroborated. In nursing, a nurse who thinks critically acts with evidence base instead of assumptions⁵, it is emphasized that critical thinking encompasses characteristics of the clinical reasoning. In this way, the nurse will achieve efficient clinical decision-making and will achieve effective results in the interventions of Nursing provided.⁶

One of the forms of construction of critical knowledge is through participatory health education, being transversal to all practices

developed in the health area, including in nursing. In this sense, the Popular Education in Health (EPS) is presented as a social participation and of enhancing theoretical and methodological possibilities for the critical thinking of the professional, transforming their traditional practices of education into pedagogical practices that lead to the overcoming of situations.⁷

Similarly, Complex Thought parallels the interdisciplinarity and self-organization prescribed by nursing, going beyond critical thinking by considering mythical-symbolic and rational-logical-scientific notions as inextricable of care and health relationships as complex phenomena.⁸ The Seven types of Knowledge are: 1) blind knowledge (error and illusion), 2) relevant knowledge, 3) teaching of the human condition, 4) earthly identity, 5) facing uncertainties, 6) understanding and 7) human ethics.⁹ They are constructs epistemologically interesting to be connected with ideological notions of EPS and critical nursing thinking.

OBJECTIVE

- To analyze on the insertion of critical thinking and the seven types of knowledge in Popular Education in Health.

METHOD

This is a qualitative, descriptive study of reflexive analysis, guided by a narrative review of the literature.

The narrative review describes the results of articles without the obligation to disclose the selection stages, subsidizing the execution of general debates between previous studies and the current knowledge with the inference of the reviewers. In the discussion, key points are defined, discussed and summarized.¹⁰ Therefore, the guiding question for the search and the technique for the material registration was: "How to think critically in Popular Health Education considering the Seven Necessary types of knowledge of Edgar Morin's education?"

Because of the conviction that thinkers are references by the fundamentals of their theories, the theoretical support chosen was offered by the book: "The Seven types of Knowledge Necessary for Education of the Future" for 2011. Edgar Morin is a philosopher, sociologist, and anthropologist born in France. He is a philosopher, sociologist, and anthropologist born in France, idealizer of the theory that aggregates a free, rational and multidimensional thinking: complex thinking. Among his notable influences, there are Heraclitus, Jesus,

Descartes, Marx, Adorno, Horkheimer, Heidegger, Piaget, Husserl, among others. Given its transdisciplinary constitution, his theory is not forbidden, since it appropriates and (re) constitutes information of several sciences and as it channels its object in man, with the potential to metamorphose itself.¹¹

In this study, the analysis of the theoretical matrix found occurred in three stages as in CA: pre-analysis after the narrative review in which the articles and books to be used in the reflection was chosen based on the research objectives; (b) exploitation of the material, in which the technique of registration was applied; (c) and treatment of results and interpretations.¹²

RESULTS

The author of the book "Seven types of Knowledge Necessary to the Education of the Future" begins a hybrid and cosmological vision of his homo-complexus, because he believes man is the conclusive factor of education to treat it under the prism of paradoxality, such as: rational and irrational, measured and excessive, tender and violent, being of love and hate, which mixes what would be objective with subjective, finally the homo-demens (delirious) and homo-sapiens (rational), the education of the future has to capture the fate of the human species.⁹ In the EPS, the construction of knowledge is done in a group and dialogically, collaborating in the construction of the autonomy and emancipation of individuals, since the power in the processes is shared the concept of participatory management integrates several people into the pedagogical policy to be developed.⁷

The participatory management, according to the National Policy of Strategic and Participatory Management in SUS, is a transversal strategy present in the management processes, enabling the workers involved in the social control process to participate in both the formulation and the deliberation processes. Participatory management requires the adoption of practices and mechanisms that effect the participation of health professionals and the community.¹³

By aggregating these individuals, it is expected that the EPS will seek to associate the complexity of the homo-complexus by expressing it in the field of education, considering the **teaching of the human condition (knowledge 3)** in which the EPS must be a complex phenomenon that refers

the man to ontological questions: Who are we? Where are we? Where do we come from? Where are we going? To situate man in space and not suppress it, surely this would verify the roles and destinies of each being within the system.⁹

This destiny is not centered on the individual particularly, in line with the **Teaching of the terrestrial identity (knowledge 4)**, the globalization of knowledge becomes the "mainspring" of society. EPS has to find ways of not replicating and solving the deadly legacies of the twentieth century: nuclear weapons, the death of the environment, epidemics (such as the Human Immunodeficiency Virus), and everything else that concerns the exhaustion of modernity.⁹

Adding to the disastrous legacies that modern knowledge must propose to solve, EPS must imbue itself with another challenge: the knowledge that can be an **illusion error (knowing 1)** knowing that it is very difficult to recognize them. They threaten knowledge, which cannot be considered finalized, since it is in constant construction and in the course of this construction, errors such as the interpretation of knowledge persevere. Because of this, it is necessary to study the characteristics (mental, cultural) of the individual, as well as the processes leading to error and illusion.⁹ The educator is forced daily to **face uncertainties (knowing 5)**, knowing that knowledge is an uncertain adventure that permanently entails the risk of illusion and error.

It is emphasized, then, that the critical thinking of health professionals comes up against an epistemological problem arising from this "Era of uncertainties": the impossibility of understanding the users using disjunctive and insular thinking. As the profession subdivides its corpus of knowledge and fragments users, it seems that ignorance about unity is aggravated. Consequently, this division of knowledge is problematized when they are questioned by the **Principles of relevant knowledge (knowledge 2)**. Although today's knowledge is fragmented, categorized and disunited, realities or problems are increasingly multidisciplinary and transversal, knowledge needs global perspectives considering factors such as the multidimensionality of the human being.⁹

Such a holistic perspective, according to the philosopher, can be obtained by engaging in countercurrents (Figure 1) in order to invigorate hope in the human race.

Figure 1. Contemporary countercurrents.⁹ Belém (PA), Brazil, 2017.

In this sense, the phenomena unveiled under the qualitative approach (in this reflection focus of the EPS), besides allowing to offer the world a different view of the quantitative and Cartesian, little interested in the contextual subjectivity of the beings, go against the dominant interests.⁹ Assistentially working and/or researching in the area of the EPS undoubtedly is part of the conceptual universe of countercurrent, in favor of the qualitative perspective, versus tyranny and in favor of emancipation and the culture of peace and ethics, given that it consolidates social participation and affinity of users with their rights and with their world, striving to understand their vulnerabilities.¹⁴

In this context, it is important to **teach understanding (knowledge 6)**, because communication alone does not guarantee to understand. If the information is well transmitted and understood, it brings intelligibility, the first, but not sufficient, condition for understanding. The explanation is, of course, necessary for intellectual-objective understanding, for human understanding goes beyond explanation. The explanation is enough for the intellectual or objective understanding of anonymous or material things, but it is insufficient for human understanding.⁹ It is necessary to engage culturally to improve mutual understanding of care, to understand and sometimes control divergent views, conflicts and different explanatory models and perceptions of diseases in a kind of "cultural consultation" mainly with vulnerable users.¹⁵

To conjecture the education of the future is to sow an ideal double: humanity must not erase its socio-cultural diversity, and synchronously, socio-cultural diversity should not negate the unity of the species, for true education illustrates both. The man has individual (genetic) domain, social domain (language, culture, and society).⁹ None of these aspects is remembered without proper cultural correspondence at the locus of action,¹³ cultural observance is an eminently ethical marker of attention to health. However, those who observe cultural diversity

tend to underestimate human unity, while those who value human unity assume culture as something secondary to the cultural expression of the other.⁹

This is connected with the **ethics of the human race (knowledge 7)**, which advocates that subjects have the right to freedom of expression in their care as the EPS advocates since democracy supposes and nourishes the diversity of interests and ideas. Respect for diversity means that democracy is not the dictatorship of the majority of minorities because it has the right of minorities and contenders to existence and expression, still allowing expressions of heretical and deviant ideas.⁹

As this knowledge of EPS approaches, it is inferred that it is based on a position that places the dialogue and the shared construction of knowledge among the social actors involved as a precept. It is possible to listen to the individuals involved in the process, causing them to bring and collaborate with a vision rich in the knowledge and practices of their groups.⁷ The meeting between popular and scientific knowledge provides a knowledge about the multidimensionality of social actors, something placed as important for the relevance of knowledge.

DISCUSSION

Promoting health is a commitment to people, highlighting participatory, sustainable and community models: encouraging health knowledge, stimulating a healthy lifestyle, ensuring multisectoral government actions with government, mapping stakeholders and factors that affect health promotion.¹⁷

The socio-political, philosophical and cultural dimensions delineate an intricate path of EPS since it invariably lacks consistent environmental and instrumental support.¹⁶ Stimulating participatory management through EPS is attempting to transform the historical abyss of political-social-economic exclusion where the Brazilian population since colonization. The repercussion of this is directly in education and health that currently

end up partially covering the population plunged in neoliberal policies in unemployment, underemployment, functional illiteracy and without health care. Then, it is important for the state to create and expand social policies so groups and movements question their rights to health, a privilege that (sadly) is seen only in the richest layers of society.¹⁸

The hegemonic model of health education related to the control of pathologies is shared by some professionals, where the mere sharing of information does not fully cover the educative conception. Banking education is still hegemonic, built on a vertical model of knowledge transfer, in which the learner is passive and the authoritarian educator.¹⁶

In services, it is commonplace to think of the authoritarianism of scientific power materialized in the figure of the professional, persevering in disregarding the context for formulating care.¹⁶ Paulo Freire and his critique of banking education, which implies false visions on the part of man, of his ontological search for the truth and humanization of himself and of the other, as he proclaims **knowledge 3** the teaching of the human condition. Looking at it as a deposit of information, the homo complexus of the world is dissociated from the subsidy to self-indulgence and hindering its authentic thinking; verbalist classes, memorization, methods, and practices of domination. Reconciling politics and education prevent the subjects from suffering from their fictional impossibilities of revolutionizing, resulting in means for insurgency, cognoscence and problematizing education.²⁰

As an example of research guided by EPS, to discuss systemically the health conditions of fishermen - in a sociocultural context of economic misery (experiencing the degradation of their ecosystem, and the margin of any concern of the public power); it allows to conclude that the political stagnation and overload of the labor that they experience are factors pertaining to capitalism, unfair and competitive. Fostering the potential of subjects after immersion in the field and detecting their vulnerabilities allows the professional to direct his/her care actions towards the collective search by resolving or slowing down what affects them.²¹ In order to understand a situation evidenced by EPS, it is necessary to appropriate the context of situations, knowing the influencing dimensions and passing them on to users as the teaching of understanding, **knowing 6** suggests.

Obviously, traditional educational trends do not provide an explanation for the aspects of health phenomena, understood as complex and covered by unpredictable connections: between State and Health policies instituted, workers and users and educators and students. Nursing care, on the other hand, must constantly think of the "I" of the professional category and of the "We" as part of the system.⁸ Speaking systemically, one strives for the connection between State, education, health, environment and society with the homo complexus and its phenomena. Therefore, such complexity and dynamism allow us to admit that health and education feedback, condition and determine one another.¹⁸

Thus, how should nursing act in this construct? The EPS is considered as a possibility of innovation of care to the users to be mainstreamed in the Single Health System (SUS) and in educational actions.¹⁸ The professional should be able to standardize two types of knowledge (scientific and popular) merging them into their resolute actions and constructing them daily without the conviction that they are exhausted.²²

Difficulties and the material and immaterial burdens must be recognized to cope with any countercurrents in health, but it is encouraging to confront the uncertainties of knowledge (**knowledge 5**), considering that all evolution is the result of successful diversion where the development of the system transforms the system in which it was born: it disorganizes the system, reorganizing it.⁹ Thus, during the execution of the EPS, ideas about popular knowledge that comes together with the scientific arise, this construction is a disorder in the (dominant) system enriching both for who is the educator of this discussion, and who is the educator.

Certainly, there are inclinations to the EPS in the situations in which the nursing is ascribed, necessitating of theoretical foundation like the one offered by the seven knowledge. Then, it is necessary to implement changes in the communities, forming bonds of trust and supplying health needs. The Culture Circle is a dynamic problem-solving strategy for exchange of knowledge.¹⁷ Involvement, participation, emancipation, and dialogue on autonomy are components pronounced by this methodology educational.^{16,19,23}

Knowing that there is integration of multiple actors in these processes, the possibility of error and illusion (**knowledge 1**) can be both diminished - since several people will have the same objective and will contribute to minimizing them; or the fact

that it is a group construction can also be harmful, since the production of this interaction will have inferences of the subjectivity of several people, and can thus be affected by errors and illusions.

In view of the urgent context of popular participation in the SUS, nurses are imbued with their political role when they certainly understand the concepts adjacent to participatory management and do not understand the concept as synonymous with coopting more users to join health services and educational groups.²⁴ Combating misconceptions about EPS should occur in the preludes of academic life. Erroneous views on the part of students must be countered: the organization of educational action occurs without the student, the thought that the educator holds all understandings, disbelief in the transforming role of actions, and finally, the belief that approaches reduce complex scientific knowledge in a more accessible language.²⁵

The premise is that to be valid the knowledge brought by these actions must be globalizing, that is, to make sense and have relevance to the lives of students/users and respecting the principles of relevant knowledge, **knowledge 2**. Emphasis is placed on inefficiencies as factors that encourage the promotion of changes by nursing, leaving it at the mercy of work without co-participation.²⁵

The EPS encompasses feelings, interaction, and criticism, and stimulates self-care²³, emphasizing university extension and experiences in stages as moments to work these skills.^{19,23,26} The activities of university extension are part of the educational process that articulates the teaching and research, making possible transformative meetings and dialogues with exchanges between scientific and popular knowledge.²⁷ Often, the motivations that lead nursing students to get involved are remuneration, training and work experience, skills development interaction and curiosity in dialogue with users.²⁸

The extensionist within the scope of the EPS is shaped interdisciplinarily when visualizing its curricular matrix, mainly connected to Basic Care, dialoguing on fears, lifestyle, God, work, among others, composing

a personal, affective and professional growth of the future workers of the Cheers. Another point is that it becomes imperative to work in a group, problematizing whenever possible daily learning²⁶, as well as the knowledge that the democratic expression of the subjects bestows, the ethics of the human race (**knowledge 7**), understanding that each one has a system of values and attitudes.

On the other hand, technological expansion may have erased in part the recognition of earthly identity (**knowledge 4**) in education, to consider that technology has globalized knowledge about the evil and beneficial potential of man's actions, accelerated the lives of those who they find themselves in the scientific world and the production rhythm has scarcely taken time for reflection and for the establishment of teachers' ties with students. In health, this embarrassment deepens, since it does not account for leaving the biomechanical-curative model, education becomes fragmented from the "tip" with an increase in the number of courses and educational institutions without the focus on the quality of training.¹⁸ Criticism and complexity offer ways of (re) thinking contemporary standards, worn out by lack of time and communication.

It is worth co-opting scholars for the popular way of looking at health, making education add to its scope the Earthly Consciousness, enabling academic, professional, and spiritual advancement. Recognize the multiple diversities and ways of life (anthropological awareness), recognize man's conviviality with the environment and Earth (ecological consciousness), recognize responsibility and cordiality with the other (earthly civic consciousness) and recognize the complexity of life, thinking, self-critical and inter-understanding (spiritual consciousness of the human condition).⁹

Figure 2. Integrating Earthly Consciousness in Work with EPS. Belém (PA), Brazil, 2017.

Ideally, critical-complex thinking should sensitize each health worker to assign his/her care identity to at least one of these consciousnesses of the seven type of knowledge, helping EPS to collectively deploy all the potentialities of individuals by exercising holistic faculties in co-participatory health.

The limitations of the study emphasize the non-approach to other bases of complex thinking (such as operators of complexity and dialogue), considering that the author's own complexity comprises constant metamorphoses in education following the path of postmodern society.

CONCLUSION

Thinking critically in the EPS is to face oneself and the other (user of the health service or not) like homo-complexus, in its cultural context still relying on terrestrial consciences. The EPS is the tool to solve or unveil problems and potentialities that even if micro-localized make the subjects understand state and individual roles. Later, the study contributes theoretically to the researchers in qualitative-participant work in agreement with the author's second countercurrent and in the discussion and in the fight against erroneous concepts from the academy, with emphasis on university extension actions and projects.

A noxious blockage is accentuated by the implementation of EPS according to the theoretical-conceptual support adopted: the historical exclusion of a large part of the population from the participative management of SUS services. Another point is

the hegemonic context introduced by the philosopher, advising the engagement in countercurrent, against the fragmentation of human and terrestrial unity repeatedly perceived by health, distorted practical-conceptual visions about EPS and the contingency of error and illusion in collective constructions.

Nursing is directly involved in the care performed with scientificity and popularity embraced in critical-complex thinking. The understanding of the interdisciplinary and transdisciplinary forms of articulation of the seven types of knowledge, as well as of the dialogue among those involved, means that the goal of EPS is achieved: the valorization of previous knowledge of the population and integration of socio-cultural reality for the production of new knowledge and complexities.

The production of reflections about this theme is essential to awaken the health team and especially nurses in breaking their paradigms and personal, social and cultural stigmas for a better reception of the user in EPS.

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Corresponding Address

Antonio Jorge Silva Correa Júnior
Rodovia Augusto Montenegro
Residencial João Coelho, 11200, Bloco 13, Apt 303
CEP: 66820-000 – Belém (PA), Brasil